Widening and sustaining postgraduate taught (PGT) STEM study in the UK: a collaborative project

Creating change through understanding expectations and attitudes towards PGT study, experiences and post-study outcomes from the perspective of applicants, students, universities and employers.

Analysed and written by Michelle Morgan and Ines Direito
Edited by Michelle Morgan

Postgraduate experience project
Understanding today
for a better tomorrow

PEP
Understanding Today to Create Tomorrow

HIGHER EDUCATION hefce FUNDING COUNCIL FOR ENGLAND

Kingston University London

Contents

Foreword

There has been a dramatic expansion in postgraduate taught study (PGT) in the UK in recent years, but this is now faltering, especially amongst UK domiciled students and those undertaking part-time study. As a result, sustaining the participation required to meet national skill needs as well as the PGT market in the UK has become a pressing challenge. Although there is a growing body of evidence looking at the postgraduate student experience, there is still a paucity of research exploring participation barriers, understanding students' and employers' expectations of PGT study, progression and retention, and post-study outcomes.

The UK government is committed to the continued expansion of the postgraduate taught student body, particularly in STEM subjects, in order to improve the UK's industrial and educational competitive global position. HEFCE understand that these are important areas to research if long-term approaches to stimulating and sustaining full-time and part-time PGT study in England (and other areas in the UK) are to be achieved.

With the recent changes in the UK higher education landscape, the aim of this multi-institutional and stakeholder project was to provide valuable contributions in understanding, shaping and helping to sustain the PGT sector, at both institutional and national level. This project has addressed many of the neglected research areas mentioned above.

This report details the key findings and suggests approaches to how PGT study can be stimulated, sustained, be inclusive and equitable in terms of participants, and meet the skill requirements of business and industry, and considers how institutional and national strategies can be developed in growing and sustaining the PGT market in the UK.

David Mackintosh
Senior Deputy Vice-Chancellor
Kingston University

Foreword

The PEP project was born out of a long history of practical research I have undertaken over the years to improve the postgraduate taught student experience at the coal face as well as institutional strategy and policy. That research has been informed and shaped over the past decade by the work of organisations such as the Higher Education Policy Institute, UK Graduate Council for Education and the Higher Education Academy, as well as the individuals such as Dr Paul Wakeling, a key commentator and leader in the field, renowned widening participation champions such as Professor Sir David Watson, Professor Sir Peter Scott and Professors Mary Stuart and Geoff Layer, and Professors Sally Brown and Phil Race who have developed learning and teaching approaches at postgraduate level.

My motivation in constructing the aims and objectives of the PEP project was to obtain a base line of data from a significant number of universities across the UK that provided a map of knowledge in understanding the attitudes, expectations, barriers and expected outcomes of applicants, students, university staff and employers in, through and out of the postgraduate taught STEM study cycle. The outcomes were to use the findings to help inform and shape institutional and national initiatives, strategies and policy in supporting, widening and importantly, sustaining PGT study in the UK.

The aims and objectives have been achieved as a result of the senior university managers, project institutional key links, researchers and other key colleagues in all of the universities and business and industry involved in PEP being committed, engaged and dedicated to the achieving them. The project has already generated immediate outcomes, with the universities in PEP using the findings to enhance their internal processes such as admissions and marketing, learning and teaching and non-academic support services. Some of the practical initiatives specifically developed and implemented as a direct result of the project can be found in the Good Practice Guide document. Many of the findings have already contributed to national debates and activities such as the discussion on student loans, a comprehensive and effective admissions process at PGT level and the development of a national PGT expectations survey on entry. There is one stage of the project currently being completed and that is examining the destination outcomes of the PEP scholarship recipients. The findings will be published in Briefing Paper on the project website.

This report has been written so readers can easily dip in and out of the different themed chapters. Hopefully, as you read through the chapters of this report, you will also see the complexity of issues and challenges that applicants, students, university staff and employers at PGT-level study face, which became evident to the project partners as the findings emerged. Although the findings in this project are for STEM disciplines only, many of the findings could easily be applicable to students in different disciplines and across other institutions.

PEP has highlighted that in order to obtain a full understanding of the challenges facing us as individual educators and senior managers at both institutional and national level in improving, widening and sustaining PGT study requires not only further research across many more institutions in the UK, but also on an international level in order to understand competing markets, motivations and barriers facing EU and overseas applicants and students coming to the UK.

Michelle Morgan
Principal Investigator and Project Lead
Postgraduate Experience Project

Dedication

The right to learn throughout life is a human right

Professor Sir David Watson
1949 - 2015

Acknowledgments

The Postgraduate Experience Project would like to thank a number of people who helped make the project possible. These include:

- the Higher Education Funding Council for England (HEFCE) for initiating the Postgraduate Support Scheme in England and making a difference to so many lives;
- Brooke Storer-Church, Paul Wakeling and Chris Millward for all their support and advice to PEP;
- all of the senior managers at the institutions who agreed to participate in PEP due to their determination to help shape and support the widening of postgraduate taught STEM participation;
- all of the academic and professional staff across the 11 participating institutions who helped implement the project;
- colleagues at Kingston University for their hard work in helping to shape the project's ethical and delivery approaches;
- the PEP Institutional Key Links and Researchers, who worked so hard to collect the data to help inform our understanding of the postgraduate landscape in order to make a difference;
- the Lead Researcher for the Project, for understanding and embracing the aims of the project and helping to deliver it;
- all of the business and industry and educational specialist advisers who gave their time for free to the project; and lastly,
- all the applicants and students who participated in the project, without whom the research would not have been possible.

Michelle Morgan
Principal Investigator and Project Lead

List of Key Links and Institutional Researchers from the participating partners

University of Brighton

Andrew Lloyd	Key Link
Rachel Bowden	Key Link
Matthew Chell	Institutional Researcher

Coventry University

Phillip Lewis	Key Link
Natalie Tyldesley	Institutional Researcher

University of Edinburgh

Sue Rigby	Key Link
Hazel Marzetti	Institutional Researcher

Kingston University

Michelle Morgan	Principal Investigator and Project Manager
Ines Direito	Lead Researcher

University of Lincoln

Andrea Abbas	Key Link
Rachel Spacey	Institutional Researcher

Manchester Metropolitan University

David Lambrick	Key Link
Yvette Solomon	Key Link
James Duggan	Institutional Researcher

University of Portsmouth

Carolyne Jacobs	Key Link
Melita Sidiropoulou	Institutional Researcher

Plymouth University

Debby Cotton	Key Link
Mick Fuller	Key Link
Karen Gresty	Key Link
Patricia Nash	Institutional Researcher

Teesside University

Diane Nutt	Key Link
Cath Nixon	Institutional Researcher

University of South Wales

Jo Smedley	Key Link
Lynsey Muir	Institutional Researcher

University of Wolverhampton

Gina Masters	Key Link
Rachel Spacey	Institutional Researcher

Business, industry and educational advisers

Deborah Anderson	Employer Insight, Kingston University
Jane Artess	Higher Educations Careers Services Unit, Director of Research
Graeme Atherton	Head, AccessHE, London Higher
Julian Braybrook	LGC
Sally Brown	Independent adviser and PG Student Experience/Learning and Teaching Specialist, Emeritus Professor, Leeds Beckett University
James Denholm-Price	Critical Friend, Faculty of Science, Engineering and Computing, Kingston University
Ray Farmer	Chair of the PEP Think Tank, Associate Dean, Coventry University
Mick Fuller	Chair of UK Council for Graduate Education
Juan Guerra	Student Funder
Mike Lister	Marketing Specialist and Visiting Professor, University of Southampton
Jules Morgan	KPM Marine Limited
David Pollard	Federation for Small Businesses
Emma Pollard	Senior Researcher, Institute of Employment Studies
Richard Robinson	Barclays Bank (Student Funding)
Andrew Teverson	Chair of the Research Working Group, Kingston
Adam Wright	Research and Policy Adviser, National Union of Students

Diagrams, figures and tables by chapter

Abbreviations and acronyms

Below are the common abbreviations and acronyms used in this report.

9E group: The nine English universities participating in the Postgraduate Experience Project (PEP).

Academic feedback: Comments, advice and guidance given to students for their assessed and non-assessed academic work.

Aggregate sample: Total number of respondents of a survey under analysis. The aggregate sample creates a dataset.

Alumni discount: A discount given to students by a university from which the student has graduated.

Assessment (assessed and non-assessed work): Assessment refers to the wide variety of methods that educators use to evaluate, measure, and document the academic readiness, learning progress, and skill acquisition of students.

Briefing papers: The briefing papers for the project contain the headline findings of the different surveys and key discussion points, and can be viewed at: http://www.postgradexperience.org/briefing-papers/

CASCOT: Computer Assisted Structured Coding Tool which is a computer program designed to make the coding of text information to standard classifications simpler, quicker and more reliable. The software is capable of occupational coding and industrial coding to the UK standards developed by the UK Office for National Statistics, such as the Standard Occupational Classification (SOC).

CHERP Research Ethics Committee: Centre for Higher Education Research and Practice Research Ethics Committee at Kingston University that passed ethical approval for the surveys undertaken with the project.

Chi square tests: A test that explores the relationship between categorical variables (e.g. gender, discipline) by comparing the frequencies observed in certain categories to the frequencies expected to get in those categories by chance.

Contact hours/independent study hours: Contact hours are the hours where students have some form of contact with staff in the learning processes. Independent hours are hours where students are expected to study by themselves or with other students outside of the contact hour learning process.

Data legacy: The datasets will be used by the partners in the future to produce further research findings.

Dataset: A collection of related sets of information that is composed of separate elements and that can be manipulated as a unit by a computer. In this report, the different datasets correspond to different surveys.

Discipline: An academic discipline or field of study is a branch of knowledge that is taught

and researched as part of higher education. In this report it refers more broadly to science, technology, engineering and mathematics (STEM), and more specifically to HESA JAC codes (Biological Sciences, Physical Sciences, Mathematical Sciences, Engineering, Computer Sciences, and Technologies).

Domiciled status: The country where a student's permanent residence is when they are not studying. It can assume the following categories: United Kingdom (UK), other European Country (EU and Overseas (OS)).

Employers survey: The Employers survey consists of a long and short survey.

Entry to study survey: The survey that new incoming students into the academic year 2014/15 were invited to complete. It contained questions about their previous learning experiences, their PGT expectations and expected outcomes.

Ethnicity: The fact or state of belonging to a social group that has a common national or cultural tradition. In the surveys, the five broad ethnic groups were used: Asian, Black, Mixed, Other, White

Fee status (not necessarily domicile status): The tuition fees for which students are liable based on their status as a Home (UK) student, European Union (EU) student, Offshore student or International student.

Finance survey: The survey all PGT STEM students across the 9E group were invited to complete between March and May 2015. Questions related to how they were funding their studies, their financial experience whilst studying and their future financial expectations.

Focus groups: A focus group is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs, and attitudes about something. A semi-structured interview schedule was adopted in the project's focus groups based on the findings in the Entry to Study survey.

Generational status: A student whose parents (or guardians) have not been to university is described as a first generation student and those that have had one or both parents attend is known as second generation.

Governance structure: The system of rules, practices and processes by which the project is directed and controlled.

HEA: Higher Education Academy

HEFCE: Higher Education Funding Council for England

HESA: Higher Education Statistics Agency

HESA JAC codes: The Joint Academic Coding System (JACS) is owned and maintained by the Universities and Colleges Admissions Service (UCAS) and the Higher Education Statistics Agency (HESA) and is used for subject coding of provision across higher education in the UK.

Institutional partner: The name given to each of the 11 universities participating in the project.

Institutional researcher: The person appointed to analyse their institution's data and undertake other institutional project responsibilities.

Institutional Working Group (IWG): Responsible for the implementation and delivery of the processes and practices agreed by the Steering Group and Research Working Group in a local setting.

Integrated survey: The survey that integrated degree students across all levels of study were asked to complete. It contained questions about how they were funding their studies, motivations for undertaking an integrated degree and future study intentions.

Key Link: The main person at each institution involved in the project responsible for the management of the research within their university.

Lead Researcher: The project's main researcher based at Kingston University who managed the work of the institutional researchers.

Lead Institution: The Lead Institution (Kingston University) responsible for managing the project.

Memorandum of Collaboration: The legal document that describes a formal agreement between the parties in the project. It lays out the conduct and expected outcomes of all parties.

Methodology: The body of research methods, tools, guidelines, and processes designed and employed by the project.

Mode of study: This refers to the study load of the student, whether full-time or part-time. Mode of study can be defined by hours each week or credits being undertaken.

MSc: This is the acronym for master of science degree

National Dialogical Conference: The project's overall conference was held at Kingston University on 14 and 15 July 2015 and discussed in depth the key findings from the project.

Institutional Dialogical Conference: The institution's conference where their key findings were discussed.

Non-enrolment (A–D) survey: The survey enquirers and applicants who did not enrol were invited to complete.

NS-SEC: National Statistics Socio-Economic Classification, used to help determine social class.

Orientation period: This is another term to describe the 'induction' period and related to the first two weeks of the new academic year.

PEP: Postgraduate Experience Project

PEP scholarship: Students in receipt of a scholarship funded by PEP Project. The scholarships were for fees and the three levels were 100 %, 60% and £1000.

PG: Postgraduate

PGR: Postgraduate research

PGT: Postgraduate taught

Post-1992: Former polytechnics, central institutions or colleges of higher education that were given university status in 1992 through the Further and Higher Education Act 1992.

Postgraduate course/programme: Units of study that are combined to create a course (can also be called programme).

Practical PEP initiative: These are the initiatives created by each of the 9E participating universities as a result of their findings. They are funded by the PEP Practical Initiative Fund that each 9E university received as part of the project.

PR Hub: Principal Research Hub based at Kingston University that comprises the Principal Investigator and Lead Researcher.

Principal Investigator/Project Manager: The person designated by HEFCE as responsible for leading and managing the project.

Project timescale: The period of time required to complete the phases of the project and the overall project.

Project website: A set of pages explaining the project and containing its key documents. http://www.postgradexperience.org/

PSS: Postgraduate Support Scheme launched by HEFCE in July 2013 to test innovative activity and finance models to support progression to, and participation in, taught postgraduate education.

Qualification: A pass of an examination or an official completion of a course.

Qualitative: Qualitative methods are ways of collecting data that are concerned with describing meaning, rather than with drawing statistical inferences. They provide a more in-depth and rich description that statistical data.

Quantitative: The term quantitative data is used to describe a type of information that can be counted or expressed numerically. This type of data can be manipulated and statistically analysed, and is represented visually in graphs, histograms, tables and charts.

Research Working Group (RWG): The RWG is the ultimate decision-making body of the project and made up of the Key Link and Institutional Researchers of the 11 participating institutions.

Respondents: Completers of the surveys and focus groups (students and employers).

Route into study: Two questions of the Entry to Study survey were used to calculate this variable: 1) year of highest qualification; and 2) activity before commencing PG course. Students coming straight from university were the ones who completed their highest qualification in 2014. Students coming straight from work were the ones who completed their highest qualification before 2014 and were in full-time or part-time paid jobs in the few months immediately before starting their postgraduate courses. All the other cases were labelled as 'Other' route into study (e.g. on voluntary work).

The Russell Group: Self-selected association of 24 prestigious British public research universities. The University of Edinburgh is the only Russell Group university participating in PEP.

Significant: For the purpose of this report, 'significant' refers to a noticeable or substantive difference in the findings. It does not refer to 'statistical significance'.

SOC2010: The standard occupational classification 2010 (SOC2010) is a common classification of occupational information for the UK. It is used to help determine social class.

Social class: Social class is a set of concepts in the social sciences and political theory centred on models of social stratification in which people are grouped into a set of hierarchical social categories, the most common being the upper, middle, and lower social classes.

SPSS: SPSS is the acronym of Statistical Package for the Social Science. SPSS is one of the most popular statistical packages that can perform highly complex data manipulation and analysis with simple instructions.

Steering Group (SG): The Steering Group is the advisory body of the project and consist of members of the RWG and external stakeholders such as business and industry leaders, educationalists and critical friends.

STEM: This is the acronym for sciences, technology, engineering and mathematics.

SurveyMonkey: SurveyMonkey is a web-based survey tool that provides free, online and customisable surveys, as well as a suite of paid back-end programs that include data analysis, sample selection, bias elimination, and data representation tools. https://www.surveymonkey.com

Think Tank: Constructive forum for the exchange of ideas and information between the parties and other key stakeholders to the project.

Tools: Instruments used to collect data such as surveys and focus groups.

Undergraduate (UG): The term undergraduate refers to someone undertaking a first degree at university.

UK PEP: The term given to respondents in the report that received a PEP scholarship.

UK non-PEP: The term given to a respondent in the report that is UK domiciled, but not in receipt of a PEP scholarship.

Variables: A variable is defined as anything that has a quantity or quality that varies. The dependent variable is the variable a researcher is interested in and an independent variable is a variable believed to affect the dependent variable.

1. Introduction

a. Setting the postgraduate taught (PGT) scene

There are two major issues facing PGT study in the UK. Firstly, although the postgraduate taught market (known as PGT hereafter) has seen a dramatic expansion in the UK in the past 20 years, there has been a recent decline in growth in the overall PGT student numbers, most noticeably amongst UK and Overseas domiciled students (Millward and Creasey, 2013; HESA 2013a,b; Morgan 2013a; Morgan, 2014). The part-time study mode (traditionally dominated by UK domiciled students) and STEM disciplines have been greatly affected. Although intuitive reasons can be made to explain the decrease, including the lack of a viable funding scheme for students to fund their studies (Boorman et al., 2009; UUK, 2013), there is limited evidence to provide accurate explanations enabling the development of practical strategies to reverse this pattern. Secondly, although extensive research has been undertaken in the field of the student experience and learning and teaching at undergraduate level (e.g. Tinto, 1988; Woodrow, 1998; Thomas, 2002; Hatt et al., 2005; Morgan, 2011), there is limited, albeit a growing body of research, in the area of PGT study (Wakeling, 2005; Green, 2005; Stuart et al., 2008). This led to the Higher Education Commission commenting in 2012 that *postgraduate education is a forgotten part of the sector* (Higher Education Commission, 2012:17). The available research tends to concentrate on recording and assessing the PGT experience at the end of the course (e.g. the annual Postgraduate Taught Experience Survey (PTES) by the Higher Education Academy) rather than understanding motivations, expectations and transitions (e.g. Stuart et al., 2008; Tobell et al., 2008; Morgan and Jones, 2013; Morgan, 2013a). Although the Higher Education Statistics Agency (HESA) records student data, there is a lack of accurate and detailed retention data available (Millward and Creasey, 2013; Morgan, 2013a). The recent changes in higher education, as a result of the White Paper *Students at the Heart of the System* (Department of Business, Innovation and Skills, 2011), and the falling PGT numbers, has made research into identifying factors impacting on participation and successful progression very pressing. The UK government is committed to expanding PGT study to improve the UK's industrial competitive global position (DTI, 1998) as well as the UK's position in the global market of HE.

Concern has been expressed by a number of organisations about the future of postgraduate education including the Higher Education Commission, the 1994 Group, the Higher Education Policy Institute, the National Union of Students and the Sutton Trust, and they have called for further research to be undertaken. Wakeling and Hampden-Thompson's report entitled *Transition to higher degrees across the UK* was the first comprehensive research undertaken examining PG growth within the UK (Wakeling and Hampden-Thompson, 2013). In their report, they suggested that there are a number of avenues that require further research. These include studying institutional and subject differences, and having a better understanding of student transitions into and out of PGT study. Other valuable research includes that of Machin and Murphy who have been exploring the financial issues and implications of PG-level study for all stakeholders (Machin and Murphy, 2010). However, if higher education is to become sustainable through the delivery of high-quality teaching, research and knowledge exchange as well as supplying knowledge and skills to industry, professions and students, then future research undertaken and resulting action requires the input of a range of stakeholders. Postgraduate taught study is complex and differs in many respects to undergraduate study so not only is dedicated examination crucial, it is also essential to avoid a 'one size fits all' approach to the student experience at this level of study.

b. Rationale and outline of PSS Phase 1 funded by HEFCE

The UK government has stated that it is committed to the continued expansion of the postgraduate taught student body, particularly in STEM subjects, in order to improve the UK's industrial and educational competitive global position (Higher Education Commission, 2012). HEFCE has understood that the issues highlighted above are important areas to research if long-term approaches to stimulating and sustaining full-time and part-time PGT study in England (and other areas in the UK) are to be achieved. As a result, a number of activities are currently being undertaken including HEFCE funding a two-phase scheme to explore how postgraduate-level study can be sustained.

PSS Phase 1 (January 2014-August 2015)

HEFCE's Postgraduate Support Scheme (PSS) Phase 1 funded 20 projects from a £25 million publicly-funded programme. The aim of Phase 1 was to test ways to support the progression into taught postgraduate education in England by working with universities and employers to stimulate participation of applicants who would not have otherwise progressed to this level of study. The call was announced on 2 July 2013 with proposals required to be submitted by 16 September. The successful projects were officially announced early December, started on first January 2014 and reported to HEFCE by mid-August 2015. Overall, the 20 Phase 1 projects have supported more than 2,800 students and have involved a range of support activities including financial and pastoral support, mentoring and networking, curricula change, funded studentships, work placements and a variety of bursary and loan schemes. A requirement of the scheme was that the majority of the funding obtained from HEFCE by the successful projects must be delivered to students. The majority of the projects have now been completed and the findings can be accessed by going to: http://www.hefce.ac.uk/sas/PSS/Funded,projects/

PSS Phase 2 (November 2014-November 2015)

In its 2014 Autumn Statement, the government confirmed that HEFCE in its PSS Phase 2 Scheme would provide £50million to institutions during 2015–16. The funding would enable 10,000 masters students to each receive a £10,000 contribution towards the cost of their studies. The cost of each contribution would be equally divided between HEFCE and the institution. This aim was to build upon the PSS Phase 1 scheme, and to provide a bridge to the proposed implementation of an income-contingent loan scheme for masters students wishing to undertake a postgraduate taught masters in any subject from 2016–17 onwards. At the time of this report being published, it is uncertain as to the structure of the scheme.

2. Introduction to the Postgraduate Experience Project (PEP)

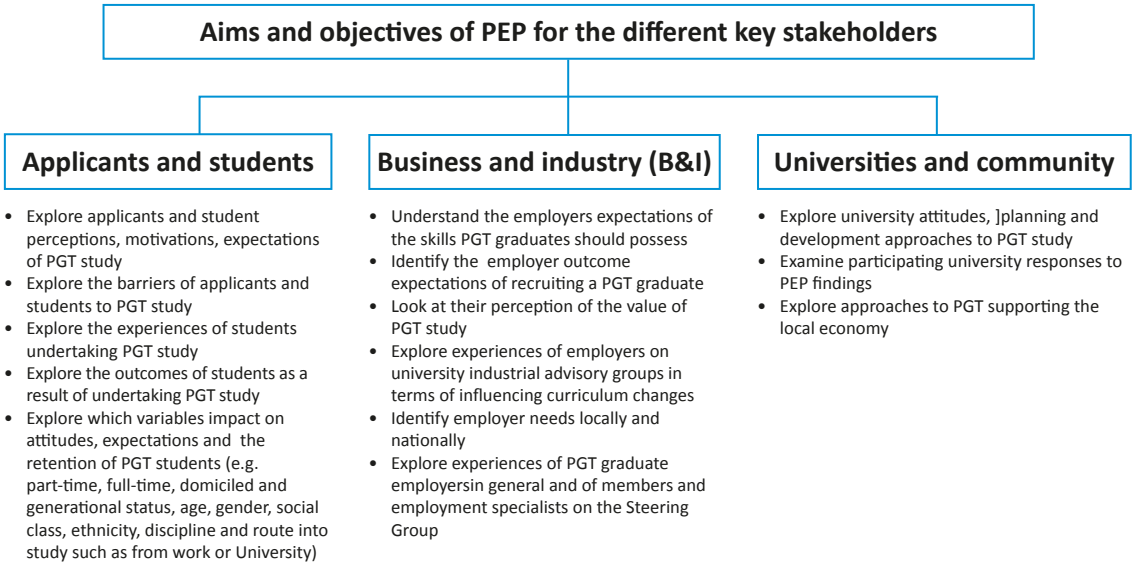
a. Background and rationale

The Postgraduate Experience Project (PEP) was one of 20 projects funded through HEFCE's £25million Phase 1 Postgraduate Support Scheme. PEP was the largest consortium funded by HEFCE and comprised 11 universities (nine English [9E Group], one Welsh and one Scottish), which are geographically dispersed across the UK. The collaborative partners included the universities of: Brighton, Coventry, Edinburgh, Lincoln, Manchester Metropolitan, Portsmouth, Plymouth, South Wales, Teesside and Wolverhampton. Business and industry leaders and higher educational specialists were also involved. The aim of the PEP was to explore the neglected research areas mentioned in Chapter 1 by looking at the expectations and attitudes towards postgraduate taught (PGT) science, technology, engineering and mathematics (STEM) study, and post-study outcomes from the perspective of students, universities and employers across a group of institutions diverse in student body and geography, and with the input of stakeholders from different sectors. With the recent changes in the UK higher education landscape, the intended outcome was that the findings would provide valuable contributions in shaping and helping to sustain the PGT sector, at both institutional and national level. The project originally entitled *Investigating the expectations and attitudes towards postgraduate taught (PGT) science, technology, engineering and mathematics (STEM) study, and post-study outcomes from the perspective of students, universities and employers to support and sustain PGT growth in the UK: A collaborative project*, started in January 2014 and reported the majority of its headline findings at a National Dialogical Conference at Kingston University on 14th and 15th July 2015.

b. Outline of aims, objectives and outcomes

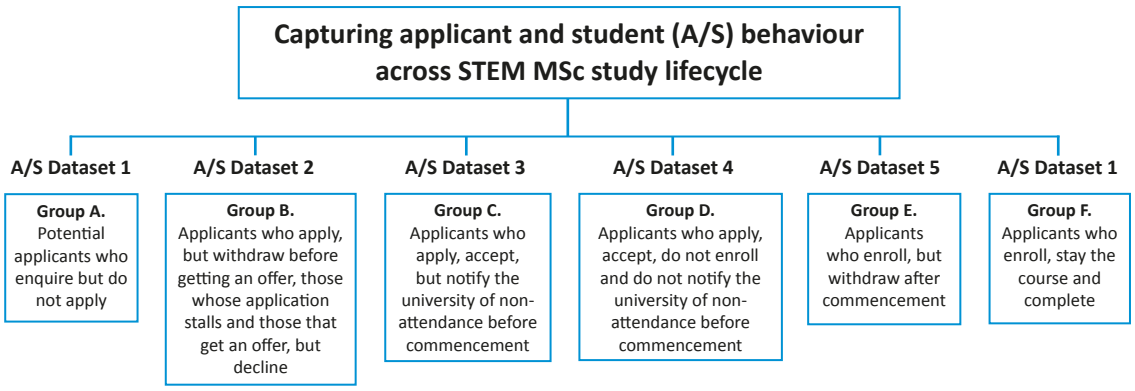
The project's overarching aims and objectives were constructed to maximise the sector's knowledge regarding the participation, progression and success of new PGT STEM students across the participating universities and non-institutional stakeholders. It aimed to provide an understanding of issues within each institution, and across the 9E Group, as well as giving a UK perspective through the participation of the Scottish and Welsh universities. PEP wanted to produce baseline data that would provide immediate insights into applicant and student behaviour as well as creating a template for other institutions wishing to undertake their own comparative research at a later date. Ultimately, the aim was to undertake practical research to provide practical outcomes that could help sustain the PGT market. The aims and objectives are highlighted in Diagram 1.

Diagram 1. Aims and objectives of PEP for the different key stakeholders



Applicant and student behaviour on STEM MSc courses was collected via the datasets highlighted in Diagram 2.

Diagram 2. Capturing applicant and student (A/S) behaviour across STEM MSc study lifecycle



The key outcomes/outputs were to:

- identify any similarities and differences between the institutions and student body, and determine what conclusions could be drawn from the research;
- identify any particular issues that appeared to impact on stimulating progression onto successful progression and engagement of PGT students and develop strategies to reduce them;
- provide immediate support and advice to new PGT students on an institutional level regarding their concerns arising out of the findings;
- identify employers' needs, and determine how to incorporate them into curriculum design and development;
- use the findings at a local level within each institution when developing and implementing local interventions or activities to manage student expectations and experiences;
- explore and identify how to effectively widen the PGT market in the UK;
- create a repository of sustainable and affordable good practice to be held on the project website for use by the sector;
- provide a large cross-institution dataset enabling each university to generate further research out of the dataset, thus enriching the knowledge for the sector in general (e.g. part-time, mature, differences in attitudes between students coming straight from work and university, generational, domiciled and gender differences, discipline differences); and
- contribute to the national funding model debate with the research findings, and determine the importance of different levels of fee support and their sustainability in generating PGT participation.

c. Delivery of aims, objectives and outcomes

The project's aims, objectives and outcomes were achieved through a number of activities including:

- the establishment of a Steering Group comprising stakeholders in higher education, business and industry and professional organisations to advise on data collection, their expectations and outcomes of HE, and the development of future strategies;
- collecting data on expectations of studying at PGT level of all new STEM students enrolling at the start of the academic year 2014/15 via a questionnaire delivered to a nationally representative sample of participating institutions;
- providing a range of fee scholarships (known as PEP scholarship hereafter) to underrepresented groups within each university and monitor their expectations, experiences and outcomes using questionnaires, focus groups and telephone interviews;
- comparing the data of PEP scholarship recipients against self-funding students to determine any substantive participation obstacles or barriers;
- tracking applicants and students who did not start their course and those who withdrew once enrolled to determine reasons for non-participation; dedicate funds to developing and implementing practical initiatives to support and aid progression at each institution;
- holding institutional conferences and a national dialogical conference (to discuss the findings and initiatives/strategies arising out of the data, feed into the national debate on the future of PGT study, manage student expectations and improve the experience of PGT students at each institution);
- setting up a project website to share the findings and good practice and continue the legacy of the pilot project by enabling each participating institution to use the data for further research (e.g. for staff undertaking EdD professional doctorates or masters courses).

d. Approach to the PEP report

This report has been written so readers can 'dip in and out' of the different themed chapters. The project contained a number of student surveys that asked similar questions in order to track any changes in attitudes, opinions, expectations and experiences. Where a similar or the same question has been asked across the different surveys, the responses have been reported together so the reader is better able to compare and contrast the findings. The various surveys, which were part of the data collection process, are described in more detail in the 'Approach to the research methodology' section directly below. The chapters are based around the key themes that came out of the research. The detailed findings are extensive and it is impossible to report them all fully in this report. Statistically significant testing has been extensively undertaken on the various datasets and they will be published later in upcoming research papers. The basic demographics for the surveys have been placed into a separate chapter in order to simplify the reporting of the findings in the themed chapters.

e. Approach to the research methodology

The research undertaken in this project to date has been carried out in different phases. The data collection involved questionnaires and focus groups. Responsibility for the project's ethical research requirements were undertaken by the Centre for Higher Education Policy and Research (CHERP) Research Ethics Committee at Kingston University. Participating universities were required to lodge the ethical approval for each survey with their own relevant committee. All the questionnaires were designed to be created and undertaken using SurveyMonkey (online survey software). The surveys were executed using rigorous ethical procedures as laid down by CHERP's Research Ethics Committee. Respondents had to provide their institutional email to complete the survey in order for the project's main research hub (known as PR Hub hereafter) to identify them as legitimate participants, as well as enabling them to randomly allocate the winners of the Amazon vouchers. All the non-eligible respondents and duplicates were excluded from the final sample. All survey data was cleaned and anonymised by the PR Hub before each institution's dataset was sent to them for local analysis. The universities of Edinburgh and South Wales only participated in the Entry to Study data collection process and were self-funding. The data collection tool (surveys) can be found in the appendices document.

f. Data collection processes

i. Data collection tools

Non-enrolment surveys Groups A–D

Aims and objectives: To understand the barriers as well as the motivations of enquirers and applicants in undertaking masters-level study. Four non-enrolment groups (see Diagram 2) and participants in each 9E university were identified. The groups were:

- Group A: potential applicants who enquire but do not apply;
- Group B: applicants who apply, get an offer but decline;
- Group C: applicants who apply, accept, but notify the university of non-attendance before commencement; and
- Group D: applicants who apply, accept, do not enrol and do not notify the university of non-attendance before commencement.

The surveys collected critical data as to why enquirers did not apply and why applicants chose not to enrol at MSc level. The anonymised findings for each university were given to their admissions units and course directors so they could consider them in their admission and marketing planning.

Structure: A slightly different survey was designed for each group in order to address their position in the admissions process.

- Group A survey: Group A had a longer survey compared to Groups B-D as basic demographic information on enquirers had to be collected. It comprised nine questions.
- Groups B-D survey: Surveys for Groups B and C consisted of four questions and Group D of five.

Procedure: Each group was sent a tailored email. This was to ensure that each group's data was captured separately and for each 9E university. The surveys were launched at the beginning of October 2014 and closed in early November. Each university had a total of £900 to purchase gifts to thank respondents for participating in the activity. The successful recipients of the gifts were randomly selected from those who had fully completed the survey. Each university decided on what gifts they wished to purchase, but it was suggested for consistency across the consortium that a combination of prizes, such as two IPOD Touch phones and the rest in £30–50 Amazon vouchers, be offered.

Data collection issues: There were a number of issues relating to the collection of data across Groups A–D amongst the nine English universities participating in this activity. Firstly, nearly all the universities did not collect and keep enquiry data on individuals. This was further complicated by course enquiries being undertaken by a range of different units within an institution, such as the faculties and departments, central marketing and the international office. Secondly, information on groups B–D is recorded differently by each university so making direct comparisons against the group definition proved problematic. The universities within the project do not operate customer relation management systems enabling an application to be tracked from first contact and beyond. This meant that the sample response was small and not reflective of the participating partners. This lack of data prevents an accurate understanding of motivations and drivers amongst these groups.

Entry to study survey

Aims and objectives: To collect demographic variables, information on prior feedback experiences, and the expectations of new PGT students relating to their upcoming academic studies. The objectives were: to identify any particular issues that appeared to affect successful engagement; and to determine what interventions or activities could be put in place to manage student expectations and improve the postgraduate taught student experience.

Structure: The survey comprised open and closed questions. It collected pertinent demographic data to check the representation of the sample and to provide detailed analysis of the questions asked with different student characteristics such as gender, domiciled status, generational status, entry route to study. It contained eight sections designed to obtain as much information as possible as to their prior experiences of higher education and their PGT expectations and aspirations. The sections were as follows: previous study qualifications; previous study experience; your current study information; motivations and challenges of postgraduate study, fees and funding; postgraduate study expectations; your current learning expectations; attitudes towards postgraduate study and biographical details. The sections were designed to make completion easy and to take respondents systematically through a logical

set of questions that would be of benefit to them as well as the project. The survey consisted of 92 questions, thus has provided a massive amount of information and an extensive dataset. It was developed from an existing survey that had already been implemented at the lead university and piloted within the project with 25 students.

Further analysis will continue in order to test a range of more specific variables that have been identified whilst analysing the dataset. The aims of this are twofold. Firstly, to maximise the output of the dataset and to create a data legacy of continuing pedagogic research beyond the project to further the sector's understanding of study at postgraduate taught level. Secondly, to report the significant statistical results of small sample sizes generated through the multi comparisons of variables. The intention is for colleagues at each of the partner institutions to select areas of interest and publish the findings via targeted journal articles and conference papers.

Procedure: All new PGT STEM students across all 11 participating universities were asked to complete the Entry to Study survey during the orientation period in September/October 2014. All students in receipt of a PEP Fee Scholarship were required to complete the questionnaire as part of their scholarship acceptance agreement. All students were informed about the purpose of the survey and that it was anonymous and voluntary. They were informed that the survey had two aims: firstly, to provide their university with data to contribute to understanding and improving their experience and, secondly, to act as a personal development activity for new PGT entrants, as they would be asked to reflect on how they had previously learnt and how they wanted to, or expected to, learn at postgraduate level.

All respondents were asked to provide their student ID when completing the survey, but their IDs remained confidential and only accessible by the PR Hub. The 9E Group each had 80 £30 Amazon vouchers to encourage engagement of their new STEM MSc enrollers (excluding PEP scholarship recipients) to complete the survey. The vouchers were randomly allocated and sent by email. Interestingly, the universities of Edinburgh and South Wales, who had no financial incentives, achieved substantial completion rates. Within six weeks of the orientation period, each university published a self-help sheet for their new students that contained some of their basic findings of the survey, along with advice and guidance in the areas students had highlighted as potential problems (see Appendix B in the appendices document for an example).

Data collection issues: The survey contained a high number of questions and respondents did not always complete the demographic section. These responses along with duplicates were removed from the sample thus reducing the aggregate sample size.

Withdrawal survey of enrollers

Aims and objectives: To collect detailed reasons for withdrawing from PGT study after enrolling.

Structure: The survey consisted of seven closed and open questions.

Procedure: Each member of the 9E Group identified STEM students who had formally withdrawn between enrolling in September/October 2014 and March 2015.

Data collection issues: Within a university, obtaining detailed withdrawal data can be problematic for a number of reasons, including withdrawal reason options being very generic and students having often left before their withdrawal has been formally identified thus no data is collected. This led to the withdrawal sample who were invited to complete the survey being quite small.

Focus groups

Aims and objectives: To further explore issues highlighted by respondents in the Entry to Study survey and the experiences and barriers to engaging in PGT study of current PGT students nine months into their studies.

Structure: A semi-structured interview schedule was designed consisting of the following five questions:

1. Why did you decide to undertake study at PG level? (Why in this university?)
2. Are you managing with your studies? If yes how? If not, why not? Is your PGT study experience similar or different to that of your undergraduate? (Feedback, managing work, etc.) What support has helped and what might have helped you?
3. Have you experienced any non-academic issues during your PG studies (money, coping with student life, travelling, other commitments, work, family)? What helped you and what might have helped you?
4. *Scholarship holders*: Has the scholarship made a difference to your ability to study at PGT level or none at all? *Non-scholarship holders*: If you had a scholarship, would it make a difference?
5. Is your course preparing you for the future? If yes, how? If not, should it and how could it be improved? (PhD, career prospects and employers expectations)

Procedure: The semi-structured interview schedule was tested on three PGT course representatives at the lead university to ensure that the questions and prompts used were appropriate. The focus groups were organised and undertaken by the institutional researchers at each 9E university. The focus groups sessions were undertaken in March and April 2015. One focus group consisted of those who had funded their own studies and the other groups comprised recipients in receipt of a PEP scholarship (a group consisted of participants with the same amount of scholarship received). Each non-scholarship participant received a £30 Amazon voucher and all participants were given lunch and refreshments during the session. The demographics of each participant were registered, but their identities kept anonymous. Qualitative approaches were adopted and shared by the institutional researchers to extract meaning from the data in common themes of the analysis.

Data collection issues: No significant issues arose, but the responses from students who could only participate via email resulted in less-detailed responses to the questions posed.

Integrated survey

The Integrated survey was not in the original proposal submitted to HEFCE. However, recent sector discussions about the motivations for undertaking integrated degrees resulted in the PEP's Research Working Group (RWG) deciding that it was an important area to examine and should be included in the overall project's activities. It was piloted at the lead university after receiving RWG and ethical approval. The results justified the rolling out of the survey across the other partner institutions. Only one university within the 9E Group did not participate in the survey due to insignificant integrated degree offerings.

Aims and objectives: To analyse motivations for undertaking an integrated degree and explore whether there are any key drivers behind the decision to undertake this type of degree (e.g. parental or career influences, funding mechanisms).

Structure: The survey comprised 15 closed and open questions. Integrated students at the lead university were invited to complete the survey, which acted as a pilot due to time pressures. The pilot resulted in the addition of one question.

Procedure: After the pilot at the lead university, the survey was sent to all STEM students at all levels who were undertaking an integrated degree at seven of the 9E Group (e.g. MPharm, MChem, MComp, MPharmSci, MEng, MMath, MPhys, MPsych, MSci, MChem, MBiol, MGeol etc.) and invited to complete it in January and February 2015. Each partner decided when it was the best time to ask students to complete the survey during this period (e.g. to avoid any semester exams at the end of the month). The eighth 9E partner had insufficient integrated students to make the survey viable for them. Each participating university received 14 £30 amazon vouchers for this activity and two IPOD Touch devices to randomly allocate amongst its respondents.

Data collection issues: Some courses had small numbers so the sample is not representative of the integrated student body within each participating university and the national integrated student body.

Finance survey

Aims and objectives: To understand PGT STEM students' financial concerns and anxieties in undertaking study at this level and to explore students' attitudes to various funding methods. The aim was for these findings to feed into the government's consultation on postgraduate funding, inform discussion on how to support students in Phase 2 of PSS in 2015–16 and to highlight issues that need to be considered when financially supporting future students.

Structure: The survey was constructed with advice and comments from key Steering Group members, the Key Links and Institutional Researchers and students. It comprised 46 questions.

Procedure: Full- (FT) and part-time (PT) (Years 1 and 2) STEM masters students across the 9E Group were invited to complete the Finance survey late May to mid-June. It was not piloted due to time constraints. The PEP scholarship students were required to complete it as part of the PEP scholarship acceptance process. The survey was only open for two weeks and each university was required to select a 10-day window within that period in which to ask their students to voluntarily complete the survey. Each university sent out the email request to complete the survey. Survey completers were randomly allocated to receive an Amazon voucher by the PR Hub. Each English university's allocation of 50 £30 Amazon vouchers was targeted at all PGT STEM students (excluding PEP scholarship recipients) to encourage participation. Although demographic data was collected, social class was not gathered. However, the PR Hub was able to compare the email IDs from the Entry to Study survey and marry up the social class with the findings of those who also completed the Finance survey. The sample size for this extra group was 396 and where appropriate, the findings have been reported.

Data collection issues: As with the Entry to Study survey, there were duplicate completers using the same and different email addresses. These, along with completers having non-valid email addresses, were excluded from the final survey, thus reducing the aggregate sample size. The Finance survey was originally intended only for the PEP Scholarship recipients, so it did not collect demographic data as that information was already recorded. However, at a late stage, the Research Working Group felt that the survey should be extended to all PGT students. As a result, detailed demographic analysis as undertaken in the Entry to Study survey was not possible.

Postgraduate Experience Taught Survey (PTES) 2015 (HEA)

Aims and objectives: To analyse the Postgraduate Taught Experience Survey (PTES) data collected by the Higher Education Academy via PTES for the STEM respondents within PEP's participating universities. This would allow the reported experience of these students to be included and compared to the previous findings within PEP without students having to undertake a further survey.

Structure: Respondents completed open and closed questions.

Procedure: PTES was undertaken between March and June 2015 across the sector. The Higher Education Academy cleaned and sent the dataset to the PR Hub in August 2015.

Data collection issues: Only 6 of the 11 participating PEP partners undertook PTES in 2015. Where relevant, the overall findings reported in the PTES 2014 Report are also highlighted for comparison.

Employers survey

Aims and objectives: The Employers survey aimed to:

- understand the employers' expectations of the skills PGT graduates should possess;
- identify the employer outcome expectations of recruiting a PGT graduate;
- look at their perception of the value of PGT study; and
- identify employer needs locally and nationally.

Structure: The survey comprised 40 questions organised in the following topics.

- Basic information about the company
- Current employees' backgrounds
- Importance of master qualification
- Attitudes towards recruitment practices
- Company collaboration and engagement with universities

Procedure: Support for circulating the survey was sought from the Federation of Small Business, and small to large businesses that operate within each area of the partner institutions were emailed using addresses purchased from Dun and Bradstreet (a world-leading source of business information and insight). Around 3000 emails were personalised and contained information about the survey and the survey link. Only one reminder email was sent to those who had not responded within two weeks of the initial request. As the completion rates of the survey were minimal, the PR Hub decided to create a short version of the survey, comprising of 12 questions including basic biographical data. The questions included: what is the ownership status of the company, in what sector is your business, how would you classify your organisation and do you employ masters-qualified employees?

The short survey was sent to the same Dun and Bradstreet list, as well as the link being posted on the Federation of Small Business Facebook site. The short survey was completed by 66 businesses. Three case studies were extracted from the long survey data and analysed to illustrate what might be happening in the STEM sector in the UK: one large company, one medium company, and one small company (see Chapter 8).

Data collection issues: There were poor engagement and response rates from employers. The small survey did increase engagement, but the result was still limited data. However, the data does provide themes for future investigation. The lack of engagement can be viewed as an important finding in terms of employers wishing to have engagement with the university sector.

ii. Data Analysis

Quantitative and qualitative survey analysis

The majority of the data collected was nominal. Nominal data consist of items/values/responses assigned to well-defined classes or labels (e.g. gender: female and male), and they are presented as a proportion or percentage of the total. Descriptive statistics plus a range of appropriate statistic tests were undertaken (mainly frequencies and Chi Square tests) using the Statistical Package for Social Sciences (SPSS) to compare the difference in percentage between groups.

The findings report different nominal variables such as mode of study (full-time and part- time), route into study (straight from work, straight from university, and other), discipline, generational status (first generation and second generation), domicile status (UK, EU and OS), age, gender, ethnicity and social class.

The quantitative findings throughout the report will take into account the differences between PEP scholarship and all other respondents (known as non-PEP respondents hereafter) wherever meaningful. This has been done in order to identify if the PEP scholarship responses are skewing the aggregate sample responses in regard to the analysis of certain variables such as attitudes towards the funding of fees. Throughout the surveys, there were options for making qualitative comments through open-ended questions. These comments have been analysed and reported, where appropriate, to enrich the quantitative findings.

Focus groups analysis

The respondents' answers in each group were transcribed and analysed by the Institutional Researchers (IR). When analysing the data, the IRs shared a common structure of themes and sub-themes to report the findings. Respondents' answers were analysed by scholarship allocation (100% scholarship, 60% scholarship, £1000 scholarship) and non-PEP status.

Approach to the social class analysis

The National Statistics Socio-economic Classification (often abbreviated to NS-SEC) is the primary social classification in the United Kingdom. It measures the employment relations and conditions of occupations, which aid in understanding the structure of socio-economic positions in the society. The version of the classification that is most commonly used in social research is the analytic version that has eight classes. These are shown in Table 1, along with the subdivision of class 1. Essentially, an NS-SEC category is assigned to a household based on which household member best defines that household's position. Although occupationally based, there are procedures for classifying non-employed people to the NS-SEC.

Table 1. NS-SEC analytical classes

1.1 - Large employers and higher managerial and administrative occupations
1.2 - Higher professional occupations
2 - Lower managerial, administrative and professional occupations
3 - Intermediate occupations
4 - Small employers and own account workers
5 - Lower supervisory and technical occupations
6 - Semi-routine occupations
7 - Routine occupations
8 - Never worked and long-term unemployed

In the Entry to Study survey, respondents were asked about their parents' occupation (including natural parents, adoptive parents, step-parents, carers or guardians who were most involved in their upbringing) when they were 14 years old. They were asked to describe their parents' occupations using one of the following options: employee, self-employed, unemployed, homemaker, other, don't know, prefer not to answer, and not applicable. Respondents were instructed to complete this information for up to three parental figures. The job descriptions were then coded into SOC2010 (Standards Occupational Classification) using CASCOT (Computer Assisted Structured Coding Tool). The NS-SEC code was then derived using the 'reduced method' which was developed to only require the SOC2010 unit group and employment status.

When analysing the job description provided by the respondents, a number of ambiguous occupations were found such as 'engineer'. In these cases, the SOC2010 was chosen after checking the generational status of the respondents (first generation is where the respondent's parents did not go to university and second generation is where they did). For first generation respondents, 'engineer' was classified under the social class 5 (lower supervisory and technical occupations), and for second generation respondents this was classified under the social class 3 (intermediate occupations). Generally, all the 'businessman' responses were classified under category 4 (small employers and own account workers). When in doubt about the most appropriate SOC2010 code, the most likely match was used when typing the text on the ONS Occupation Coding Tool (available at: http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dev3/ONS_SOC_occupation_coding_tool.html)

All the occupations that were inadequately described or not classifiable were excluded from the statistical analyses presented in this section of the report. For each respondent, the member with the highest social class was selected as the household reference person to stand for the whole household's position.

As part of the report, as well as social classes 1–7 being reported, some of the findings will be presented in the reduced three-category structure of higher managerial, administrative and professional occupations (social classes 1–2); intermediate occupations (social classes 3 and 4) and routine and manual occupations (social classes 5–7).

g. Associated project documents

Anthology of Scholarship Stories
This document consists of stories submitted by PEP scholarship recipients about the impact of the scholarship on their lives. The electronic copy is available from the project website: http://www.postgradexperience.org/

Appendices
The appendices contain all the project's surveys.

The Good Practice Guide
The Good Practice Guide contains an example of the Self-help Advice sheet each university generated within six weeks of the Entry to Study survey closing, some of the practical initiatives developed by some of the participating universities as a result of the findings, and journal style case studies of good practice developed by colleagues with employers from across the sector.

For information on the HEA's PTES survey, go to: https://www.heacademy.ac.uk/download/postgraduate-taught-experience-survey-ptes-2015-next-steps-participating-institutions

3. PEP scholarships

a. Key points

Applications

The domination of applications by males, due to the scholarships being for STEM subjects, was not realised. A higher number of eligible PEP scholarship applications were received by females than males. Each of the 9E Group received a substantially lower number of part-time applications than the scholarship allocation level resulting in the redirection to full-time applicants.

Allocation

Although half the scholarships were targeted and allocated to alumni, only 33 % were alumni of two years or older with the rest being direct from undergraduate study. Of the 374 eligible applications, 340 offers were made comprising 263 for full-time and 77 for part-time study. Of the offers, 305 were accepted and led to enrolment, which comprised 133 of females and 172 of males.

Decline of scholarship

The primary reasons for declining the PEP scholarship (100 %, 60 % and £1000 contribution towards fees) were not to do with the level of scholarship allocated, but were issues such as not meeting the academic requirements for the course, being unable to get time off work or being unable to meet the other costs associated with study.

Impact of scholarships

The PEP scholarships enabled a substantial number of individuals to participate in postgraduate-level study that would otherwise have not been possible.

b. Application and allocation process

i. Context of the scholarships in PEP

As outlined in the project aims and objectives chapter, one aim of the project was to understand the expectations and experiences of PGT STEM students through every stage of the student journey, including six months after completion. The PEP scholarships had three broad purposes:

- to enable essential research to be undertaken across a range of applicant/student progression points in the student journey within an institution and across a range of universities;
- to explore a range of issues in depth across a defined and large data set; and
- to provide an opportunity to support people who, ordinarily, may have been unable to undertake PGT study for financial issues.

ii. Type of PEP scholarships

The scholarships were for fee discounts rather than living costs so direct comparisons could be made more effectively between students in terms of identifying if and how the fee element (and different levels of fee support) contributed to participation, progression and success. The aim was to fund and allocate 360 scholarships of varying levels across the nine English universities (40 scholarships per institution), thus providing an adequate sample to obtain valid results. Each university received 15 100% scholarships (eight for full-time study; seven for part-time study), 15 60% fee scholarships (seven for full-time study; eight for part-time study) and ten £1000 scholarships.

iii. Eligibility for the scholarships

Due to the noticeable decline in PGT participation amongst UK domiciled and part-time enrolments in recent years, the scholarships were targeted at British citizens that were resident in the UK and who lived locally to the university to which they were applying. Applicants who already held a masters degree or higher were excluded. A clear, legal rationale was provided as part of the guidance notes to applicants by Kingston University's legal team, who were confident that it would stand up in a court of law if the scheme was challenged. The scholarships would be randomly allocated amongst the eligible applicants for fairness and transparency. The scholarships were equally targeted between alumni and non-alumni applicants.

The criteria for the PEP STEM scholarships were quite specific.

- The STEM courses selected for the scholarships in PEP used the HSEA JAC Codes C (excluding psychology), F, G, H, I, J. It was agreed to use the HESA rather than the HEA definitions so the data generated by HESA could be utilised.
- Applicants had to hold a British passport and demonstrate that they were resident in the UK and lived locally to the university to which they were applying.
- Local was defined as:
  - residents who wish to study locally (these could include final undergraduate students studying elsewhere but whose permanent address is local);
  - companies based locally wishing to put staff on a PGT course but whose staff do not necessarily live locally;
  - current final undergraduate students wishing to progress directly onto PGT study but whose permanent address is not local; and
  - each university decided on the radius they would use to define local.
- The applicant needed to possess at least a 2:2 or relevant professional work experience.
- Applicants must have applied and accepted a place on a selected course that had been allocated a PEP scholarship and be enrolling for a complete course (not already started) in September 2014.

iv. Course selection for PEP scholarships

The PEP scholarship recipients would be a constant group providing valid data across the study lifecycle. Their responses would be compared to those of the general student body. The information they provided would be used to help make positive and practical changes on the ground as well as contributing to providing a robust and accurate snapshot of the postgraduate taught landscape within each university.

To achieve this, each English university identified seven MSc courses they wished to target in accordance with PEP's guidelines. Courses at each of the 9E Group were selected on previous admissions figures. There was also concern that as the PEP scholarships were STEM based (excluding psychology) and traditionally male dominated, this could result in females not benefitting as greatly as males in the application and allocation process. In an attempt to reduce this concern and any impact gender domination could have on the research findings, the 9E Group were asked to select courses where a gender balance could be achieved as part of the process although there was acknowledgement that this could be problematic. If after the allocation of the sets of scholarships there was gender domination, then the non-set could be used to counter the balance. As a result, care and consideration was given when selecting courses and it was important to select courses that had recruited 'home' students in previous years as these should have a greater chance of attracting eligible applications.

Each course was allocated a set of scholarships (one 100% full-time; one 60 % fee full-time; one 100% part-time; one 60 % part-time; £1000 for FT) totalling 35. The remaining five scholarships would be randomly allocated across all seven courses. A set of scholarships across a course would provide valid and viable quantitative and qualitative data than if the 40 scholarships were randomly offered across the entire university's STEM offering.

For fairness, the applications that were eligible would be randomly selected to receive a scholarship. Once a course was populated, any further selection for that course would be put aside and combined with the other unsuccessful eligible applications. A further round of random allocation would occur for the remaining five scholarships.

It was acknowledged that each university could experience different advertising and recruitment issues. As a result, there was uncertainty as to how many applications would be received from the target group, thus flexibility was built into the process whilst being mindful of the research aims, objectives and outcomes. For example, in the event that a university was unable to allocate a full set of scholarships to a specific course due to insufficient applications, the university's Institutional Working Group could decide to:

- redistribute PEP scholarships from courses where they haven't been able to allocate scholarships to those where there have been a higher number of eligible applications received;
- combine £1000 PEP scholarships to create a 100% and a 60%;
- identify new courses in late August that have a substantial number of applicant acceptances that fulfil the scholarship eligibility criteria and ask them whether they would like to apply.

v. The recruitment process for the PEP scholarships and particular difficulties

The recruitment for the PEP scholarships proved to be an interesting experience as no one really knew what to expect due to the tight timeline and the environment of declining applications. The advertising and application templates were developed at the lead university and circulated to the PEP Think Tank and RWG for consultation. The materials included:

- hard copy and online applications;
- application guidance notes;
- scholarship terms and conditions; and
- advertising text for websites.

The rationale for this approach was to save work for the collaborative partners and to ensure that the scholarships were branded as PEP scholarships and not 'university-specific' scholarships. This was especially important where universities offered other forms of scholarships (such a VC Chancellor scholarship for alumni who obtained a first-class undergraduate degree) or where the alumni discount equalled that of the 60% scholarships and no activities were required for the discount. Recipients of PEP scholarships were required to participate in a range of activities (which were clearly advertised) in exchange for the scholarship, which other university scholarship recipients were not expected to do. Applicants were informed in the application materials that the PEP scholarships were part of a UK government-funded project looking at the PGT experience. The type of scholarships available, the eligibility criteria and allocation process were clearly advertised. A range of promotional activities were used to promote them. These included:

- university website general pages and course-specific pages;
- open and admissions days;
- targeted emails to alumni and companies known to the university to employ alumnus; and
- approaching final-year students.

Two universities were quite late in advertising their scholarships. For one institution, it did not appear to have a detrimental impact on the number of eligible applications received in comparison to those universities who started advertising much earlier. However, the second university took much longer to receive enough eligible applications so the allocation of the PEP scholarships took place quite late and they had the smallest number of scholarship acceptances. It is unclear whether the amount of eligible applications received was as a direct result of the project timeline, the late advertising and/or the courses selected.

Some courses did not receive any eligible scholarships applications. The reason why this occurred is unclear, but some of the courses may have naturally been on a cyclical downturn, thus impacting on admissions and scholarship applications whilst others were on the increase.

vi. Applications received

The gender scholarship domination as anticipated did not occur. This may have been due in part to the courses selected, but it was also as a result of a high rate of ineligible applications submitted by males. Across the 9E Group, 498 applications were received comprising 203 from females (40.8%) and 295 from males (59.2%). Of these, 124 (33 female=26.6%: 91 male=73.4 %) were ineligible because:

- applicants submitted a Residence Permit as proof of citizenship along with/without a foreign passport;
- applicants failed to submit proof of locality and British citizenship;
- applicants did not accept a place by the deadline date but had been offered one;
- applicants applied for a scholarship but not a course;
- applicants already held a masters or doctorate qualification; or
- applicants applied for a scholarship when the course was not a designated course.

The reasons provided above were the most commonly cited by the 9E Group for non-eligibility. There were 374 eligible applications and these applicants held either a conditional or unconditional offer. When examined by sex, 83.7% (170) of females submitted an eligible application compared to 69.1% (204) of males.

vii. Changes to scholarship funding levels and numbers

Each English university struggled to allocate the part-time scholarships due to poor application numbers. However, although this was anticipated, as part-time study has generally been decreasing year on year over the past two years, the continuing decline in part-time applications in the 2014/15 academic year was worrying. Only one university (the largest partner in the project) managed to almost allocate the project's target of seven part-time 100% and eight part-time 60% PEP scholarships. It does not appear that the choice of course chosen for the scholarships was the issue, but the general health of the part-time market in the UK. Originally, 135 100% and 60% PEP scholarships were targeted at part-time applicants, but only 71 were filled. The unallocated part-time scholarships were redirected at the full-time applicants in order to support as many students as possible.

Only three universities received enough applications to offer the £1000 PEP scholarships. The six other universities collapsed the £1000 PEP scholarships to create one full and one 60% PEP scholarship for allocation at either full- or part-time mode due to lack of applications. This meant that the official total number of PEP scholarships available across the consortium was 312 (six sets of 32 scholarships and three sets of 40) rather than the 360 originally planned (40 per 9E Group).

Only two universities did not remove the alumni discount if the student withdrew before completion of the course, thus these were the only universities who were able to create more scholarships by putting the discount into an 'alumni pot'. This was a requirement of the Memorandum of Collaboration. As a result of one university's generous 30% alumni discount, they were able to offer 10 extra scholarships on their 40, as well as raising their £1000 scholarship to £1500. Due to their 20% alumni discount, the other university were able to offer an extra six on their 32 scholarship offering.

c. Offers, acceptances and declines of PEP scholarships

i. Offers and acceptances

Of the 374 eligible applications received across the 9E Group, 340 offers were made, which comprised 263 for full-time and 77 for part-time courses. Of these, 305 were accepted and led to enrolment. This breaks down to 133 acceptances/enrolments by females (43.6%) and 172 by males (56.2%). The breakdown in scholarship for each mode of study is highlighted in Table 2.

Table 2. Type of PEP scholarships awarded

Type	Full-time 100%	Full-time 60%	Full-time £1000	Part-time 100%	Part-time 60%
Total	97	108	31	40	29

When examined by sex, of all female applicants, 71.4% led to enrolment compared to 58.3% of all male applicants. Proportionally, females fared much better in obtaining a PEP scholarship than men due to submitting more eligible applications. Of the 35 recipients who were offered, but declined a scholarship, 48.6% were female and 51.4% male. Proportionally more women declined their scholarship than males.

ii. Alumni students

It was hoped that the scheme would receive a substantial number of applications from applicants who were 'local' and alumni of more than three years, as well as non-alumni. The aim was to distribute the scholarships equally between alumni and non-alumni. Whether as a result of the timeline and/or advertising strategy, a few of the 9E Group were unsuccessful in receiving significant applications from this group. However, across the consortium the picture was better, with 142 non-alumni and 189 alumni being allocated PEP scholarships. However, of the 189 (57%) alumni who were randomly allocated a scholarship, 147 graduated in 2014, thus only 33.3% of alumni recipients across the consortium were 'old' alumni of more than two years.

iii. Reasons for decline of the scholarship

Within each 9E Group university, the PEP scholarships allocated and accepted per course had an acceptable number to make the research output valid and to enable practical initiatives to be developed, which was an aim of the project.

Of the 340 applicants offered a scholarship, 35 (10.3%) declined it across the 9E Group. Reasons provided included:

- deferral to January 2015 or September 2015 due to not meeting academic conditions;
- deferral due to personal issues;
- withdrawal or deferral due to being unable to get time off work;
- withdrawal or deferral due to being unable to fund the extra costs associated with study;
- withdrawal or deferral due to being unable to combine work and travel to the university with the academic timetable; and
- a small number did not responded to the award offer so it was withdrawn.

The level of scholarship that was declined was not a primary factor for the majority of recipients. Reasons provided included:

Part-time, 100% scholarship

I am writing to advise you that, regrettably, I will not be in a position to start the course that has been offered to me. I would like to thank you both for helping me, but having made several dummy runs to access the university, I have come to the conclusion that the reality of the travel distance, expectancy of the course workload and the fact I still have a day job will, in reality, be too much. I would rather that the sponsorship opportunity be afforded to someone else at the earliest opportunity. I apologise and sincerely regret any inconvenience that this has caused you.

Full-time, 100% scholarship

It is with a sad and heavy heart that I have to decline this amazing offer. I was hoping to have secured a part-time job, which would have enabled me to attend university, but unfortunately I have not been successful in finding employment. Thank you so much for giving me this opportunity and I am gutted that I am unable to continue in my university training.

Part-time, 60% scholarship

I was offered a full-time teaching assistant job at my university I just graduated from, supporting the lecturers on the sports therapy degree program. They will also put me through a PGCE at the same time and as I want to be a lecturer I felt this was the best decision. I still want to do the MSc and I have been informed it can be done part-time so I plan to reapply next year part-time with a view I can have a teaching career alongside my study.

Part-time, 100% scholarship

Unfortunately I am unable to accept my place on the PEP scholarship as I was unsuccessful in getting a student loan this year to cover living costs. As a result of this, I will be deferring my place on the Sports Performance masters course for one year.

£1,000 scholarship

It is with deep regret that I am unable to accept the £1,000 scholarship. My financial situation has changed recently and I am no longer able to fund the MSc course myself. I was hoping I may be lucky enough to receive one of the higher scholarships, however this wasn't the case and I am now unfortunately going to have to pull out of the course. I truly thank you for the offer of the £1,000 and feel that the scholarships are a fantastic opportunity, it is just unfortunate that I am not able to accept it. I hope someone will benefit from the scholarship in my place.

Part-time, 60% scholarship

This is very disappointing but I may have to withdraw from my scholarship. Work agreed to release me to complete the MSc, but now they are saying no. I will be speaking to my HR department and the FINAL DECISION will be made by end of this week. Is there any way I can start my degree/scholarship in 2015?? I will have a final decision by this FRIDAY so I will be contacting you with the decision. I am hoping they will let me continue this year.

Part-time, 100% scholarship

Before applying for the course, I specifically asked about timetabled course hours as I have a young baby and part-time work to work around. One week before induction week I was sent a timetable scheduling lots of essential activities that I hadn't been told about and this was very stressful trying to reorganise childcare. I couldn't cover everything and so wrote to the course director explaining the situation and asking what the totally essential activities were. I received a one-line email response saying something like 'well, you're going to have to make yourself available'. This was unhelpful and left me feeling even more stressed about the situation. I replied saying I couldn't change the situation and he replied being more accommodating, but by this point I'd started to stress and doubt my ability to fully commit myself to the course. If I couldn't even manage induction week, how many more extra activities there would be in the future that I couldn't manage.

iv. Withdrawal of recipients after enrolment

Of the 305 who enrolled onto masters-level study with a PEP scholarship, 12 went on to withdraw leaving 293 scholarship recipients on the course. Reasons cited for their withdrawal were generally related to financial issues (see Chapter 6 on Finance).

v. Enrolment outcome of unsuccessful eligible and non-eligible scholarship applications

Of the 158 applicants who were eligible, but not successful in being allocated a scholarship or were ineligible, 52 (33%) still went on to enrol. However, no data exists on these students' motivations and whether they intended going without any financial assistance or whether those who did not enrol went elsewhere. We are unable to track the movement of PGT applications as there is no effective and nationally used central admissions process as is in existence at undergraduate level.

d. Comment about the process

PEP took the approach of only offering the fee-based scholarships to British citizens who were resident in the UK because this is a main recruitment issue for UK HEIs. PEP was only one of two projects that took this stance. The lead university's legal team were confidant about the approach and each participating university's legal team concurred with the guidance when agreeing the Memorandum of Collaboration. The applicant's expectations and experience were carefully managed regarding this aspect of the project along with the application process. A clear, simple, concise and upfront explanation was provided which the entire 9E Group posted on their website. No challenge was received by any of the 9E Group. Another PSS Phase 1 project that utilised PEP's process, but which did not initially make available the legal rationale to applicants, resulted in three EU applicants complaining that it breached EU legislation. However, upon providing the legal rationale, the complaints were dropped.

Three universities within PEP each received a complaint about the scholarship process.

- One questioned the definition of local;
- Two questioned the fairness of the random allocation process.

The requirements of the project were that the allocation of the scholarships had to be transparent and made by a team at each university. As a result, the complaints were not valid. Key Links expressed the feeling that the applicants were complaining in the hope that they would be selected in fear of the complaint being escalated.

e. Comment on the PEP scholarship applications and enrolments

When the overall STEM application figures are compared between 2013/14 and 14/15 (PSS Phase 1) across the 9E Group, seven universities saw an increase in their overall PGT application figures, suggesting that the PEP scholarships may have assisted in this increase. When mode of study is examined, all saw an increase in their full-time applications but only 3 in their part-time figures. This finding is not a surprise and it reflects the national decline in part-time applications and enrolments.

When the overall STEM enrolment figures are compared between 2013/14 and 14/15, four universities reported a higher 'application to enrolment' conversion rate. However, five universities reported significant falls in their 'application to enrolment' conversation rates for part-time courses, which impacted on their overall enrolment figures.

Of the 9E Group:

- Five universities saw an increase in applications across the courses selected for the PEP scholarships;
- Six universities saw an increase in enrolments across the courses selected for the PEP scholarships;
- Four universities reported a higher 'application to enrolment' conversion for the PEP scholarships courses than the previous year; and
- the entire 9E Group managed to reach their PEP scholarship 'offer' targets, but due to their decliners, four did not reach their 'accepted' targets. This is a reflection of the issues raised above that applicants face in being able to participate in PGT study.

The level of 'application to enrolment conversion' statistics must not be looked at in isolation or viewed as a means of measuring the success of a university's application process as institutions cannot control the number and quality of the applications received. A more accurate measurement is the conversion from those applicants holding an 'unconditional 'offer to enrolment. Unfortunately, not all of the 9E Group could easily access this information so a comparison was not possible.

f. Comment on the impact of the PEP scholarships

The PEP scholarships have made it possible for many individuals to study at postgraduate level who would not have had the chance otherwise. The journey of some of the PEP scholarship recipients from across the 9E Group are available to read in the Anthology of Scholarship Stories document which can be accessed via the project's website. Below are some headline comments from them that highlight the difference the scheme has made to their lives. Names have been changed and their university regionalised.

Lucy, South-east Coast University 2, Part-time, 100% scholarship
My dad passed away when I was 15 and I was always brought up in a low-income family. I am so proud to be a postgraduate student, and my whole family are proud of me for making something of myself in the face of adversity.

Jasmine, London University, Full-time, 60% scholarship
This MSc will reinforce my application to the NHS STP and improve my job prospects. I didn't know where my life was going, but the balance has been restored and I have been given another chance.

Moshab, South-east Coast University 2, Full-time, 100% scholarship
The cost of tuition fees for undergraduate and postgraduate courses have hit badly those British students who come from very poor families or their household incomes are very low. ...I believe that without holding a PEP scholarship, I would have never, ever been able to afford the cost of my MSc course and my dream of obtaining a master degree would have perished forever.

Jeremy, North-east England University, Full-time, £1,000 scholarship
So many people have degrees today, and an MSc will put me a step ahead of them.

Diane, South-east Coast University 2, Full-time, 100% scholarship
Although I think I would have coped (just about), this has taken so much pressure off of my studies. I also feel that because I have been given this brilliant opportunity, I am going to work even harder to make sure that I achieve the absolute best I can with it.

Alicia, South-west England University, Part-time, 100% scholarship
I can honestly say that, had I not been awarded the PEP scholarship, I would not have been able to take up the opportunity to study.

John, North-west England University, Full-time, 100% scholarship
In the spring of 2014, I applied for in excess of 75 jobs, receiving interviews for about a third of them, but not getting any permanent career, so I decided to study a master's.

Michael, South-east Coast University 1, Full-time, 100% scholarship
This project was a lifeline, as without it I'm not even sure whether I would have been able to undertake further study.

Lily, East Coast University, Full-time, 60% scholarship
Even though the scholarships were randomly allocated, since I learned that I'd gotten the scholarship, I've felt happier and more confident in myself.

Erina, South-west England University, Full-time, 100% scholarship
I couldn't believe it when I got the scholarship!...I can work just one or two days a week and focus on my course without having to worry about balancing work and study. I can devote my time to my degree to do the very best I can do!

Matthew, South-west England University, Full-time, 60% scholarship
Before being awarded the scholarship, the thought of leaving a job to study on a course that I had no means to pay for was something of an unachievable target.

Emily, East Coast University, Part-time, 100% scholarship
You've given me the opportunity to do something that, realistically, I really wouldn't have been able to achieve by myself and for that I am forever grateful!

Isobel, South-east Coast University 2, Full-time, 60% scholarship
I am finally getting to where I want to be in life and hopefully be a role model to my son. I gratefully acknowledge receipt of the scholarship, without which I would not be able to achieve my dream.

4. Descriptives of the main surveys

Within this project, age, generational status, mode of study and social class have proven to be critical variables when looking at access, progression and expected outcomes. Although the overall respondents' demographics are listed below for the different surveys, the critical demographics will be reported on in more detail in the specific themed chapters, where appropriate. This section also contains data on respondents' previous study qualifications and work experience.

a. Non-enrolment Groups A–D

Only two universities collected Group A information, thus the survey request and response rate was quite small. A total of 387 email requests to complete the survey were sent, resulting in 16.5% (64) validated responses (using the email address held by the university) being received. There was representation from 21 countries. A total of 8,273 email requests across the 9E Group were sent for Groups B–D. Of these, 7.2% (594) survey responses were received, with 5.4% (446) being validated using the email address held by the university. There was representation from 78 countries. The data analysis for Groups B–D were combined as the questions asked were the same in order to provide a larger dataset, resulting in more meaningful and valid analysis.

In Group A, the EU responses reflected the number of EU enquirers asked to complete the survey. However, the OS respondents were overrepresented and the UK underrepresented in the responses of the enquirers. The domiciled responses in Groups B–D were representative of the domiciled composition of the applicants who were sent emails (see Table 3).

Table 3. Domiciled status responses of Groups A–D

Domiciled status	Group A (69)	Group B–D (446)
UK (103)	47.8%	15.7%
EU (67)	5.8%	14.2%
OS (344)	46.4%	70.1%

b. Entry to Study

The demographic data presented below for the Entry to Study survey is comprehensive as it was the project's main survey that was designed to take a snapshot of the characteristics of a specific cohort entering PGT STEM study. The aggregate sample across the 11 institutions comprised 1,226 valid respondents. Of these, 25% (305) were PEP scholarship recipients from the 9E group and 75% (921) were non-PEP students (other UK, EU and OS domiciled). Where possible, the sample's representation is compared with national statistics provided by HESA. It is important to note that some respondents did not answer all the demographic questions, thus the sample sizes when analysing the interactions between variables may slightly differ.

Subject discipline

All the courses were codified by the PR Hub according to HESA codes for STEM areas for consistency. Of the sample, 31.6% of the respondents were enrolled in engineering courses, 25.4% in physical sciences, 20.4% in biological sciences, 17% in computer science. A minority of respondents were enrolled in technologies (3.3%) and mathematical sciences (2.4%). The figures for engineering and technology, mathematics sciences and computer sciences reflected the national enrolment pattern for these disciplines.

Domiciled status

Respondents were asked where their permanent residence was when they were not studying. Of the aggregate sample, 59.7% were UK domiciled, 11.3% were EU and 28.9% were OS. Of the non-PEP respondents, 46.7% were UK domiciled, 14.8% were EU and 38.5% were OS. All PEP respondents were UK domiciled.

Gender

Of the sample, 62.6% of the respondents were male and 37.4% are female. This is not a surprising statistic as many STEM disciplines traditionally attract a higher proportion of males. The gender proportion of respondents in this survey also reflects the national enrolments for the same disciplines with 38.7% female participation and 61.3% male participation in 2013/14 (figures extracted from HESA statistics).

Age

Of the aggregate sample, the majority of respondents were under 30 years old. The sample comprised 56% being under 25 and 22.1% being 26–30 years of age. Of the remaining respondents, 14.7% were in the 31–40 age category, 5.8% in the 41–50 and 1.5% in the 51 years and above group. This is reflective of the national PGT student body.

Generational status

Of the aggregate sample, 52.3% were first generation students (parents not been to university) and 47.7% were second generation students (parent/s been to university). This statistic suggests that generational status is not a barrier to postgraduate study. However, when the data is examined by a range of demographic variables, noticeable differences do emerge and some of these are highlighted below. Generational status has proven to be a critical variable in the analysis and will be reported on in more detail in the various themed chapters.

- Of the second generation students, 57.5% had parents who had both been to university, 26.8% father only, and 15.8% mother only.
- Of respondents who had a sibling who had been to university, 40.3% were first generation and 59.7% second generation.
- 42% of first generation respondents were the first among their siblings to go to university compared to only 37.7% of second generation.
- There was little difference in terms of generational status of first generation females participation (49.3%) and second generation (50.7%), but there was a difference between first and second generation male participation with 53.9% and 46.1% respectively.
- A higher number of first generation respondents were undertaking part-time study (65%) compared to second generation (35%).
- Of those studying part-time, 51.5% of first generation respondents were populated in the age groups 31 years and above whereas for second generation, 62.5% were populated in the two age groups up to 30 years of age.
- There were more first generation White and Asian respondents than second, and more second Mixed and Other respondents than first generation.
- There were more second generation Black respondents than first.
- There were more first generation UK domiciled respondents than second, and more second generation EU and OS domiciled respondents than first (see Table 4).

Table 4. Domiciled and generational status

Generational status	UK (725)	EU (138)	OS (350)
First generation (633)	58.6%	35.5%	45.4%
Second generation (580)	41.4%	64.5%	54.6%

Within the project there was participation by one Russell Group University. The other participating institutions are categorised as post-1992 institutions. When the Russell Group institution was examined in isolation, two differences emerged in comparison to the aggregate and post-1992 samples.

- 28.1% of the Russell Group's respondents classified themselves as first generation and 71.9% as second compared to 52.3% and 47.7% respectively for the aggregate sample. The 1992 Group figures were similar to the aggregate sample with 54.9% for first generation and 45.1% for second generation.
- There were noticeably more second generation EU and OS respondents than first compared to the UK sample (see Tables 4 and 5).

Table 5. Russell Group domiciled and generation status

Generational status	UK (30)	EU (30)	OS (61)
First generation (34)	40.0%	26.7%	23.0%
Second generation (87)	60.0%	73.3%	77.0%

Ethnicity

Of the aggregate sample, 59.6% of respondents stated that they were White, 18.8% Asian, 11.9% Black, 4.7% (57) Other and 5% mixed. The reported ethnic groups and domiciled status are illustrated in Table 6.

Table 6. Domiciled status within each ethnic group

Ethnic group	UK (725)	EU (138)	OS (350)
Asian (227)	10.5%	0.7%	42.9%
Black (144)	8.1%	2.2%	23.4%
Mixed (61)	3.3%	2.2%	9.7%
Other (56)	2.2%	3.6%	10.0%
White (725)	75.9%	91.3%	14.0%

When analysed by age, those under 25 years of age were more likely to be White (64.2%) (see Table 7).

Table 7. Age within each ethnic group

Ethnic group	Under 25 (684)	26–30 (269)	31–40 (178)	41–50 (70)	Above 51 (18)
Asian (229)	24%	17.5%	7.9%	5.7%	0%
Black (145)	6.6%	18.2%	23.0%	14.3%	0%
Mixed (61)	2.9%	9.7%	5.1%	8.6%	0%
Other (57)	2.3%	5.9%	12.9%	1.4%	5.6%
White (727)	64.2%	48.7%	51.1%	70.0%	94.4%

When analysed by ethnicity and age, the majority of White and Asian respondents are under 25 years of age (60.4% and 71.6% respectively); for the Black group, the respondents are fairly equally distributed in the age groups Under 25 (31.0%), 26–30 (33.8%) and 31–40 (28.3%). In the Other category, 40.4% are in the 31–40 years age group.

Nationality

Respondents in the aggregate sample reported 92 different nationalities, with 1.6% of the respondents having dual nationality. The most populated nationalities were English and British (49%). Of the aggregate sample, 62.9% of respondents considered English as their first language. Of those who stated that they were UK domiciled, 14% stated that English was not their first language with 45 different languages being cited as their first. Arabic was the most cited and constituted 10% of these languages.

Route into study

Of the aggregate sample, a similar number of respondents were coming straight from work and university with 40.8% and 39.9% respectively, and 19.3% coming from 'Other' situations. As expected, those coming straight from university had completed their highest qualification in 2014.

Accommodation and commuting to university

Of the aggregate sample, 62.2% were living in a rented accommodation, 25.7% in owned accommodation and 12.1% in university accommodation. As expected, there was a relationship with age and type of accommodation: when asked about with whom they lived, 24.4% stated that they lived with friends, 24.1% lived by themselves, 17% with parents/guardians, 15.3% with a partner/spouse, 10.6% with partner/spouse and children, and 8.6% in other situations. When analysed by domiciled status, the UK respondents were not noticeably different from the aggregate sample. However, when comparing domiciled status (see Table 8) a higher percentage of:

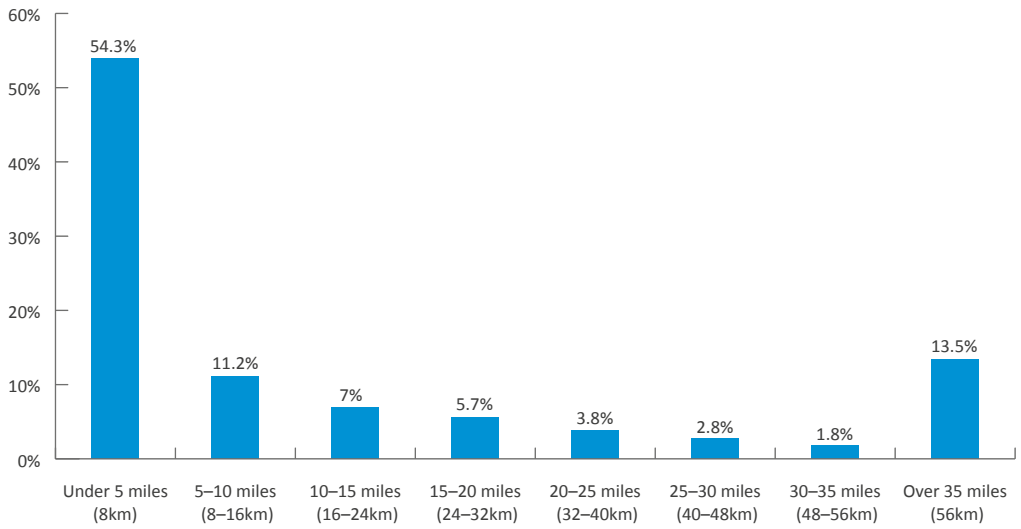
- EU respondents were living in rented accommodation;
- OS respondents were living in university accommodation;
- EU and OS respondents were living by themselves or with friends in comparison with UK respondents; and
- UK respondents were living with parents and partners compared to EU and OS.

Table 8. Domiciled status, type of accommodation and living status

Type of accommodation	**UK (725)**	**EU (138)**	**OS (351)**
University accommodation	4.4%	15.2%	27.1%
Owned accommodation	38.9%	5.8%	6.3%
Rented accommodation	56.7%	79.0%	66.7%
Living status	**UK (724)**	**EU (138)**	**OS (352)**
By yourself	11.9%	35.5%	44.7%
With a partner/spouse	20.4%	10.9%	6.3%
With a partner/spouse and children	15.3%	2.2%	4.3%
With friends	19.6%	33.3%	30.5%
With your parents/guardians	24.3%	5.1%	6.8%
Other	8.4%	13%	7.4%

Of the aggregate sample, 54.3% of the respondents lived less than five miles from their place of study (see Figure 1). In general, respondents tended to live near the university at which they were studying. As the distance to the university increased, the number of respondents decreased with the exception of respondents between 41 and 50 years old, where a higher percentage lived between 15 and 25 miles compared to those under 40 years of age. Those under 25 were more likely to live less than five miles from the institution, which is likely to be as a result of them recently having completed an undergraduate degree. Also, a higher percentage of students coming straight from work lived between 10 and 15 miles and over 35 miles in comparison with students coming straight from university.

Figure 1. Commute to place of study from residence



Mode of study and fee status

Of the aggregate sample, 83.2% of the respondents were studying full-time and 16.8% part-time. Unsurprisingly, participation in the part-time study for PEP respondents was higher (22.1%) than the aggregate sample and the non-PEP, regardless of domiciled status (15%). This is due to PEP scholarships being specifically targeted at part-time study. The figures for UK non-PEP was 30.3% part-time and 69.7% full-time.

The fee status reported by the aggregate sample was 58.3% for Home, 12.3% for EU, and 29.4% for OS. Excluding the PEP scholarship respondents who were all enrolled as paying Home fee, the non-PEP respondents reported 44.4% for Home, 16.3% for EU and 39.3% for OS. Table 9 shows the breakdown for the different analysis groups, for the aggregate sample by mode of study.

Table 9. Different variables by mode of study

Variable	Subgroup	Full-time (1,020)	Part-time (206)
Route into study	Straight from work	71.3%	28.7%
	Other	90.5%	9.5%
	Straight from university	92.1%	7.9%
Discipline	Biological sciences	85.2%	14.8%
	Physical sciences	83.6%	16.4%
	Mathematical sciences	93.1%	6.9%
	Engineering	81.4%	18.6%
	Computer science	83.7%	16.3%
	Technologies	75.6%	24.4%
Generational status	First generation	79.0%	21%
	Second generation	87.7%	12.3%
Domicile status	UK	73.2%	26.8%
	EU	94.9%	5.1%
	OS	99.4%	0.6%
Age	Under 25	92.8%	7.2%
	26–30	77.4%	22.6%
	31–40	70.0%	30.0%
	41–50	50.7%	49.3%
	Above 51	61.1%	38.9%
Gender	Female	81.8%	18.2%
	Male	84.0%	16.0%
Ethnicity	Other	93.0%	7.0%
	Mixed	90.2%	9.8%
	White	78.2%	21.8%
	Asian	90.8%	9.2%
	Black	89.0%	11.0%

Characteristics of UK domiciled PEP scholarship and UK non-PEP respondents

To get a more specific understanding of the issues faced by UK domiciled students (where the decline in enrolments is the greatest), where appropriate, the findings for PEP respondents and UK non-PEP respondents will be reported. When the characteristics of the PEP and UK non-PEP respondents are examined within their group, a number of interesting differences emerge (see Table 10). Of the PEP respondents, 55.7% were coming straight from university, whereas for UK non-PEP it was much lower with 35.8% even though PEP scholarships were equally targeted at recent graduates and those who had been out of the study for a while (see Chapter 3). The percentage of PEP respondents who were first generation was almost double that of those who were second, with 65.4% and 34.6% respectively. This finding could suggest that the PEP scholarships did what they were intended for, which was to widen participation. There was a generational difference in the UK non-PEP sample, but it was not as pronounced. There were no major differences in discipline or ethnicity for either sample.

Table 10. Characteristics of PEP and UK non-PEP respondents

Variable		PEP (307)	UK non-PEP (420)
Route into study	Straight from work	32.7%	48.0%
	Other	11.7%	16.2%
	Straight from university	55.6%	35.8%
Discipline	Biological sciences	30.3%	23.0%
	Physical sciences	34.5%	31.9%
	Mathematical sciences	1.3%	0.2%
	Engineering	18.9%	25.6%
	Computer science	10.1%	15.5%
	Technologies	4.9%	3.8%
Generational status	First generation	65.4%	53.9%
	Second generation	34.6%	46.1%
Age	Under 25	63.9%	47.9%
	26–30	15.1%	20.9%
	31–40	13.1%	18.1%
	41–50	6.9%	9.8%
	Above 51	1.0%	3.3%
Gender	Female	47.1%	40.1%
	Male	52.9%)	59.9%
Ethnicity	Other	2.9%	1.9%
	Mixed	1.6%	4.5%
	White	75.3%	76.2%
	Asian	11.4%	9.6%
	Black	8.8%	7.8%

Social class

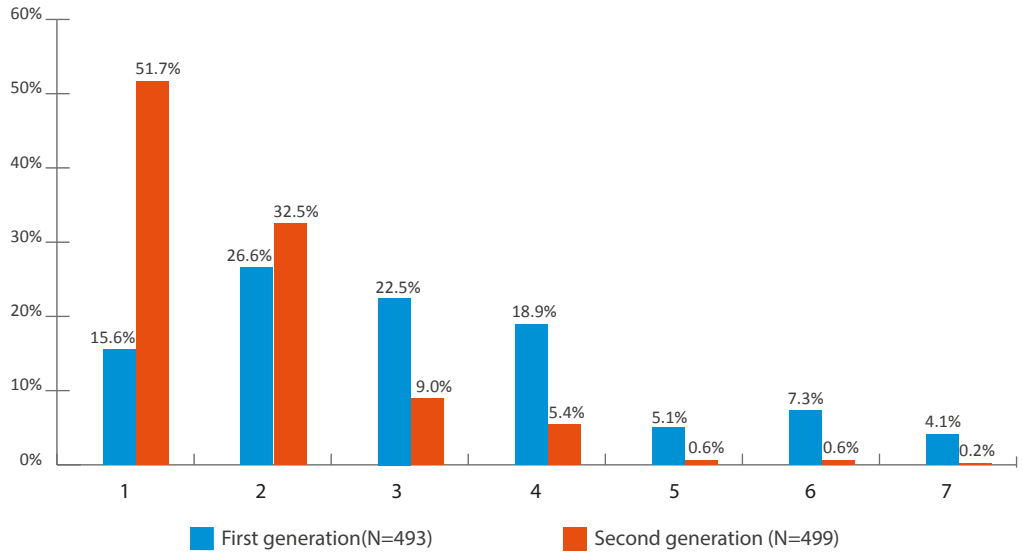
Social class status has proven to be a critical variable in terms of findings and it will be reported on in more detail in the various themed chapters. Of the aggregate sample, 81% of the respondents provided classifiable information about their parental occupation. Table 11 shows the numbers of respondents from each socio-economic classification category (henceforth 'social class'). Of the aggregate sample, 63.2% of the respondents were from NS-SEC classes 1 and 2.

Table 11. Social class within scholarship status and domicile

NS-SEC	Aggregate (995)	PEP (268)	UK non-PEP (351)	EU (107)	OS (266)
1	33.7%	27.6%	31.1%	50.5%	36.5%
2	29.5%	26.1%	33.6%	23.4%	30.1%
3	15.8%	19.4%	14.0%	12.1%	15.8%
4	12.2%	10.8%	12.5%	8.4%	14.7%
5	2.8%	4.1%	2.6%	2.8%	1.9%
6	3.9%	7.5%	4.3%	0.9%	1.1%
7	2.1%	4.5%	2.0%	1.9%	0%

One in two European domiciled respondents were from social class 1, which is higher in comparison to UK and OS respondents. When social class was analysed within generational status, noticeable differences were found (see Figure 2). The majority in social classes 1 and 2 were second generation whereas the majority of the other classes were first generation. The same patterns of results were found when analysing only UK domiciled respondents (see Table 12). However, no differences were found between social class 2 and generational status.

Figure 2. Social class and generational status



When parental experience of higher education was examined by second generation status, a substantially higher number of respondents from social classes 1, 2 and 4 reported that both parents had attended university compared to the other social classes (see Table 12).

Table 12. UK domiciled social class within generational status

NS SEC analytical class	First generation (352)	Second generation (260)
1 (180)	14.2%	50.0%
		Both parents: 56.9% Father only = 31.5% Mother only = 11.5%
2 (186)	27.3%	34.6%
		Both parents: 42.2% Father only = 25.6% Mother only = 32.2%
3 (100)	22.7%	7.7%
		Both parents: 25.0% Father only = 45.0% Mother only = 30.0%
4 (72)	15.6%	6.5%
		Both parents: 58.8% Father only = 17.6% Mother only = 23.5%
5 (20)	5.7%	0%
		Both parents: 0% Father only = 0% Mother only = 0%
6 (35)	9.4%	0.8%
		Both parents: 0% Father only = 50.0% Mother only = 50.0%
7 (19)	5.1%	0.4%
		Both parents: 100% Father only = 0% (0) Mother only = 0% (0)

When mode of study was analysed, a higher proportion of full-time respondents were in social class 1 (35.8%) in comparison to part-time respondents (23.7%), and part-time respondents were more likely to be from the lower social classes 5 to 7 in comparison to those who were full-time (see Table 13).

Table 13. Social class within mode of study

NS SEC class	Full-time (818)	Part-time (177)
1	35.8%	23.7%
2	29.5%	29.9%
3	16.0%	14.6%
4	12.1%	12.5%
5	2.2%	5.7%
6	3.1%	7.9%
7	1.3%	5.7%

No differences were found when analysing social class within route into study. However, respondents from social classes 1 and 2 were more likely to come straight from university in comparison to respondents coming straight from work. When previous university of respondents coming from a Russell Group university was analysed, 46.8% were from social

class 1. The figures were lower for respondents coming from a non-Russell-Group university (27.2%) and for respondents currently studying in their previous institution (27.5%). Of those currently studying at a Russell Group university in the PEP group, 48.5% were from social class 1 whereas for the post-1992 universities, the figures ranged between 11.1% and 36%.

Previous qualifications on entry to this postgraduate course

Respondents were asked to select all their previous qualifications prior to their current postgraduate study. The qualification options provided were aligned with the UK educational system, but an option was provided to report alternative qualifications, which could be especially relevant to EU and OS respondents.

For the aggregate sample, the most popular qualifications were BSc(Hons), AS/A-levels and BSc. Of the sample, 5.7% reported already having an MSc and 1.3% possessing an MA, MBA or MPhil/MRes (see Table 14). Of the nine respondents who reported having an integrated degree, 44.4% had graduated in 2014 with the others graduating prior to 2013 (see Chapter 9). This suggests that applicants holding an integrated degree are not potential masters applicants even though their qualification is technically managed as an undergraduate one.

Table 14. Major qualifications held on entry

Qualification	Aggregate	PEP	UK non-PEP	EU	OS
BSc(Hons)	41.9%	71.7%	49.5%	25.2%	13.1%
AS/A-levels	29.6%	54.7%	43.7%	3.0%	1.4%
BSc	20.0%	14.7%	12.4%	31.9%	29.6%
BEng	13.5%	6.5%	8.7%	11.9%	25.9%
BA(Hons)	6.4%	3.6%	11.5%	6.7%	2.8%
BA	3.1%	0.3%	3.3%	5.2%	4.6%
MSc	5.7%	1.3%	7.3%	7.4%	7.1%
CHE	0.5%	0.7%	0.7%	0%	0.3%
Integrated masters (Sci based)	0.7%	0%	0.9%	2.2%	0.6%
Undergraduate MA	0.8%	0%	0.7%	0.7%	1.7%
BA Ed	0.1%	0%	0%	0%	0.3%
LLB	0.4%	0.3%	0.7%	0.7%	0%
MA	0.6%	0%	0.7%	0.7%	0.6%
MBA	0.5%	0%	0.7%	0%	0.9%
MPhil	0.1%	0%	0.2%	0%	0%
MRes	0.1%	0%	0.2%	0%	0%
PhD	0.5%	0.3%	0.9%	0%	0.3%
Professional experience only	0.6%	1.0%	0.7%	0%	0.3%

When disciplines were analysed, BEng was the most popular qualification for 34.6% of engineering respondents. Mathematical science respondents were the ones with a higher proportion of MSc as previous qualification with 13.8% (see Table 15).

Table 15. Qualifications by HESA discipline

Qualification	Biology	Physics	Mathematics	Engineering	Computing	Technology
BSc(Hons)	68.0%	55.0%	27.6%	19.4%	35.1%	41.5%
AS/A-levels	40.8%	43.7%	-	18.1%	19.7%	26.8%
BSc	17.6%	20.6%	31.0%	17.6%	26.0%	14.6%
BEng	-	2.3%	-	34.6%	9.1%	12.2%
MSc	6.0%	4.2%	13.8%	5.4%	7.7%	2.4%

There were no major differences between first and second generation respondents regarding their previous qualifications. However, of the six respondents who had a PhD, all of them were second generation respondents and from social classes 1 and 2. Although the sample size was small, the second generation male students were more likely to progress onto research degrees than first, which reflects the findings of Wakeling and Hamden-Thompson (Wakeling and Hampden-Thompson, 2013).

Unsurprisingly, there is a major difference in the reporting of AS/A-levels between EU and OS respondents compared to those who are UK domiciled, but a similarity in numbers reporting an undergraduate qualification. For all domiciled groups, the science-based undergraduate qualifications (e.g. BSc, BEng) were the most prevalent qualification (see Table 16).

Table 16. All qualifications on entry by generational and domiciled status

Qualification	First generation	Second generation	UK	EU	OS
BSc(Hons)	45.6%	37.9%	58.6%	26.8%	13.1%
AS/A-levels	31.8%	27.3%	48.3%	3.6%	1.4%
BSc	17.4%	22.8%	13.5%	31.2%	29.5%
BEng	14.4%	13.5%	7.8%	11.6%	25.9%
BA(Hons)	4.9%	8.4%	8.3%	6.5%	2.8%
BA	2.5%	3.6%	1.9%	5.1%	4.8%
MSc	4.7%	6.9%	4.8%	7.2%	7.1%
PhD	-	1.0%	0.7%	-	0.3%
Other	-		7%	10.9%	10.5%

The BSc(Hons) was the most popular qualification across all age groups. Respondents above 31 years of age were more likely to have an MSc (see Table 17).

Table 17. Most popular qualification by age

Qualification	Under 25	26–30	31–40	41–50	Above 51
BSc(Hons)	48.4%	33.3%	32.8%	25.4%	61.1%
AS/A-levels	37.1%	19.6%	21.1%	19.7%	16.7%
BSc	19.7%	19.6%	22.8%	19.7%	11.1%
BEng	12.6%	20.5%	11.7%	4.2%	0%
MSc	3.9%	5.6%	9.4%	12.7%	11.1%

Year of highest previous qualification and where it was undertaken

Of the aggregate sample, 39.8% achieved their highest qualification in 2014. This figure was higher for the PEP respondents (see Table 18) and it is likely that due to the financial support being available to cover the cost of fees, more 2014 graduates felt they could immediately continue in their studies. The PEP scholarships were also heavily advertised within the nine

English participating institutions to final-year undergraduate students. Of the scholarships that were accepted and led to enrolment, 57% went to alumni, of whom 147 graduated in 2014, thus only 33.3% of alumni recipients across the consortium were 'old' alumni of more than two years (see Chapter 3). Within the UK non-PEP and OS samples, approximately one third had obtained their highest qualification prior to 2011.

Table 18. Year of previous highest qualification and scholarship status

Year	Aggregate	PEP	UK non-PEP	EU	OS
2014	39.8%	57.2%	35.6%	48.9%	26.9%
2013	16.9%	15.1%	13.3%	23.7%	20.1%
2012	11.4%	6.5%	10.5%	7.4%	18.3%
2011	6.1%	5.1%	7.6%	3.0%	6.3%
2010 and before	25.8%	16.1%	33.0%	17.0%	28.4%

When analysing the entry route of respondents, of those coming straight from work, 46.6% had achieved their highest qualification prior to 2011 (see Table 19).

Table 19. Entry route and year of highest qualification achieved

Year	Straight from University	Straight from work	Other
2014	100%	0%	0%
2013		23.7%	37.1%
2012		17.8%	21.1%
2011		11.9%	6.9%
2010 and before		46.6%	34.9%

Interestingly, when the year of the highest qualification achieved was examined by age (excluding those under 25) the majority of respondents in the age groups above 26 achieved their highest qualification prior to 2011 (see Table 20).

Table 20. Year highest qualification achieved and age

Year	Under 25	26–30	31–40	41–50	Above 51
2014	60.5%	15.4%	12.8%	10%	11.1%
2013	22.5%	10.9%	7.8%	11.4%	5.6%
2012	11.5%	15.4%	8.4%	4.3%	5.6%
2011	3.5%	13.9%	5.6%	2.9%	5.6%
2010 and before	1.9%	44.4%	65.4%	71.4%	72.2%

For the aggregate sample, most respondents studied their previous qualification in the country where they were permanently domiciled. Three English universities that are geographically positioned on the fringes of the country had a higher percentage of respondents whose qualification was achieved in the UK than the other post-1992 universities who were more centrally located. The Russell Group and one 1992 university (UK centrally based) contained substantially less respondents who held UK qualifications, with 31.4% and 34.2% respectively. Respondents with qualifications obtained overseas accounted for 48.3% and 55.1% respectively. Both institutions traditionally have an established international postgraduate body.

For the aggregate sample, 40.5% of the respondents were studying their masters qualification at the same university they had undertaken their previous qualification. However, when examined by scholarship status, this figure was noticeably higher amongst the PEP respondents with 65%. Again, this may be in part due to the scholarships being offered to alumni.

When examined by entry route, of the respondents who had come straight from university, 55.1% were currently studying in the same institution, but this figure was 20.6% for those coming straight from work. When age was analysed, as the age of the respondent increased, less were studying at their previous institution (see Table 21). This could be due to their previous institution not offering the course they were interested in or the graduate no longer lived in the vicinity of their first degree institution.

Table 21. Study by institution and age

	Under 25	26–30	31–40	41–50	Above 51
Same institution	39.3%	24.1%	22.8%	29.6%	38.9%
Different institution	60.7%	75.9%	77.2%	70.4%	61.1%

Undergraduate qualifications and incorporated work experience

Respondents were asked whether, as part of their undergraduate qualification, they had undertaken some form of incorporated work experience such as a sandwich, placement or internship and for what period of time. For the aggregate sample, 23.8% stated that they had undertaken some form of incorporated work experience. This percentage was noticeably lower amongst all UK respondents compared those who were EU and OS domiciled (see Table 22).

Table 22. Incorporated work experience

Incorporated work experience	Aggregate	PEP	UK non-PEP	EU	OS
Yes	23.8%	11.7%	15.9%	40.2%	40.8%
No	71.3%	86.2%	79.5%	55.1%	50.6%
Not applicable	4.9%	2.0%	4.7%	4.7%	8.7%

Of the aggregate sample, just over a third currently studying on engineering and computer science masters courses reported that they had undertaken some form of incorporated work experience as part of their undergraduate degree (see Table 23). These subject areas commonly provide a placement option.

Table 23. Incorporated work experience of previous degree and current discipline

Discipline (1039)	Yes (247)	No (741)	Not applicable (51)
Biological sciences (227)	14.5%	82.4%	3.1%
Physical sciences (275)	15.3%	81.5%	3.2%
Mathematical sciences (19)	15.8%	84.2%	0%
Engineering (317)	33.4%	58.7%	7.9%
Computer science (171)	33.3%	62.6%	4.1%
Technologies (30)	20.0%	70.0%	10.0%

For half of the aggregate sample who had undertaken incorporated work experience, the most common period was one year (29.1%) or one semester (21.7%) (see Table 24). For the PEP respondents, 71.1% had undertaken a one-year placement. These respondents were studying in the following PGT discipline: 37.5% were in engineering, 25% biological sciences, 20.8% physical sciences, 16.7% computer science and none for technology. When domiciled status was examined, the most common length of work experience for UK respondents was one year, whereas the most common for EU and OS was one semester.

Table 24. Length of incorporated work experience

Length	Aggregate sample (254)	PEP (38)	UK non-PEP (62)	EU (44)	OS (107)
One year	29.1%	71.1%	56.5%	4.5%	8.4%
One semester	21.7%	0%	6.5%	31.8%	34.6%
Five to ten weeks	15.4%	7.9%	12.9%	13.6%	20.6%
Under five weeks	10.2%	5.3%	4.8%	15.9%	12.1%
Two semesters	3.9%	2.6%	4.8%	2.3%	4.7%
Two terms	1.2%	2.6%	1.6%	0%	0.9%
One term	4.7%	5.3%	0%	15.9%	2.8%
Other	13.8%	5.3%	12.9%	15.9%	15.9%

First generation respondents' most common length of placement was one year (37.2%) and they were more likely to have had this length of placement in comparison to second generation respondents (22.1%). Second generation respondents were more likely to have had placements of one semester (28.2%) and one term length (8.4%) in comparison to first generation respondents (14% and 0.8%, respectively).

When asked the reasons for choosing an undergraduate course with incorporated work experience, of the five options available the top two reasons for choosing this type of qualification were *I felt it would benefit my future employment* (39.1%) and *I felt it would give me added skills* (34.3%). When analysed by discipline, age and generational status the same findings were found. However, for first generation respondents, the most cited reason was *I felt it would benefit my future employment* (43.2%) whereas for second generation it was *I felt it would give me added skills* (38.3%). Due to the limited sample size, there was no clear relationship between a placement being undertaken and undergraduate debt levels.

The main reason cited by the aggregate sample for not taking a course with incorporated work experience was *it was not available for my course* (47.7%); *I did not think about it as an option* (33%); *could not afford to undertake a longer period of study (11.9%)* and *it would delay entry into the workplace (5.8%)*. Respondents of all ages cited the same reasons as the aggregate sample.

c. Finance

The Finance survey demographics have not been analysed in such a comprehensive way as the Entry to Study survey because it was initially only intended to be completed by PEP scholarship students whose demographic data was already collected. It was decided quite late by the RWG to invite all MSc STEM students to complete it and due to all the other surveys (such as PTES) being undertaken, it was kept as short as possible. Many of the detailed findings illustrated above were found in the Finance survey so have not been repeated here in order to reduce information overload. Also, the Finance survey was undertaken by PGT students across a range

of entry points. They included both modes of study entering in 2014/15, part-time students who entered in 2013/14 and some January 2015 entrants. A total of valid 930 responses were collected, of which 29.7% were PEP respondents and 70.3% non-PEP. The analysis undertaken for the Finance survey includes the PEP scholarship fee level variable to determine whether the scholarship amount had impacted on any responses in this critical area.

Amount of scholarship fees

Of the PEP sample, 46.9% of the respondents held a 100% scholarship , 43.3% held a 60% scholarship and 9.8% had received a £1000 scholarship.

Gender

Of the aggregate sample, 38.9% were females, and 61.1% were males. The distribution of gender by scholarship status and domicile status is presented in Table 25.

Table 25. Respondents' gender by scholarship status and domicile

Gender	**Aggregate sample (930)**	**PEP (277)**	**UK non-PEP (341)**	**EU (49)**	**OS (263)**
Female	38.9% (362)	46.2%	40.8% (139)	42.9% (21)	28.1% (74)
Male	61.1% (568)	53.8%	59.2% (202)	57.1% (28)	71.9% (189)

Domiciled status

Of the aggregate sample, 66.5% were UK domiciled, 28.3% OS and 5.3% EU.

Mode of study

Of the aggregate sample, 80% were studying full-time and 20% part-time. This proportion was reflected in gender and mode participation with 79.6% of the females and 80.3% of the males studying full-time. A higher number of EU and OS respondents (91.8% and 97% respectively) were studying full-time compared to those who were UK domiciled (71.8%). Of those studying part-time, the majority studied one or two days a week over a year, rather than online or in block study format (see Table 26).

Table 26. Part-time delivery mode

Type of delivery mode	**Aggregate (186)**	**PEP (58)**	**UK non-PEP (116)**	**EU (4)**	**OS (8)**
One or two days	69.4%	89.7%	64.7%	25.0%	12.5%
Block	18.3%	10.3%	19.8%	75.0%	25.0%
Online distance learning	12.3%	0%	15.5%	0%	62.5%

Accommodation and commute to university

Of the aggregate sample, 64.6% of respondents stated that they lived in a rented accommodation, 27.7% in owned accommodation and 7.6% lived in a university accommodation. A higher percentage of EU and OS respondents reported that they were in university accommodation (see Table 27).

Table 27. Type of residence

Accommodation type	Aggregate (930)	PEP (277)	UK non-PEP (341)	EU (49)	OS (263)
University accommodation (71)	7.6%	7.3%	2.9%	10.2%	13.7%
Owned accommodation (258)	27.7%	35.7%	38.4%)	12.2%	8.4%
Rented accommodation (601)	64.7%	57.0%	58.7%)	77.6%	77.9%

Half of the respondents lived less than five miles from the university. Non-UK domiciled respondents tended to live closer to the university than UK domiciled respondents (see Table 28).

Table 28. Commute to place of study from residence

Distance	Aggregate (930)	PEP (277	UK non-PEP (341)	EU (49)	OS (263)
Under 5 miles (471)	50.5%	43.0%	40.8%	69.4%	68.1%
5–10 miles (118)	12.7%	16.6%	10.2%	8.2%	12.5%
10–15 miles (77)	8.3%	7.9%	10.2%	10.2%	5.7%
15–20 miles (53)	5.7%	7.9%	5.9%	0%	4.2%
20–25 miles (35)	3.8%	4.7%	5.6%	4.1%	0.4%
25–30 miles (41)	4.4%	5.8%	5.3%	2.0%	2.3%
30–35 miles (21)	2.3%	2.9%	2.9%	0%	1.1%
Over 35 miles	12.3%	11.2%	19.1%	6.1%	5.7%

Age groups

Around half of the respondents (51.8%) were under 25 years old (see Table 29). When comparing UK respondents only, the proportion of PEP respondents who were under 25 years old was higher (61.7%) in comparison to those who were UK non-PEP (46%).

Table 29. Age by domiciled and PEP scholarship status

Age group	Aggregate (930)	PEP (277	UK Non-PEP (341)	EU (49)	OS (263)
Under 25	51.8%	61.7%	46.0%	63.3%	46.7%
26–30	22.6%	17.3%	21.4%	24.5%	29.3%
31–40	18.2%	13.7%	20.5%	12.2%	20.9%
41–50	5.8%	6.1%	8.8%	0%	2.7%
Above 51	1.6%	1.2%	3.3%	0%	0.4%

UK sub-sample

Finance, and its impact in undertaking a PGT course, is particularly relevant for UK domiciled students. In order to analyse UK respondents' answers by social class and generational status, the Finance survey dataset was combined with the Entry to Study survey to identify these variables. Of the 930 respondents who completed the Finance survey, 396 UK domiciled students were identified as having completed the Entry to Study survey. Of these, 68.9% were PEP and 31.1% were non-PEP. The descriptives of this dataset are below.

Generational status and social class

Of this sample, 61.5% of the students were first generation and 38.5% were second generation.

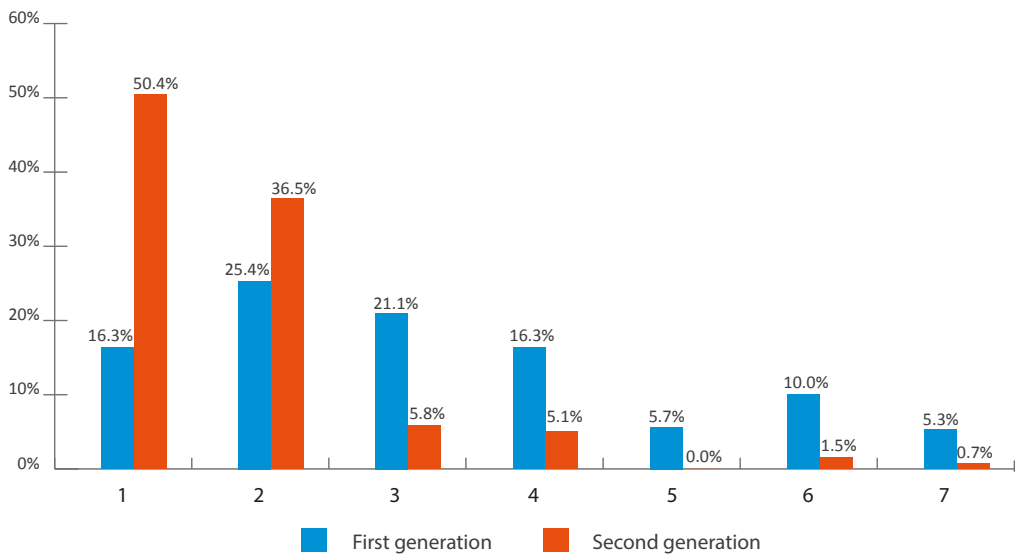
The most represented social classes were 1 and 2 (see Table 30).

Table 30. Generational status and social class of UK subset

NS-SEC	%
1	29.6%
2	30.0%
3	15.0%
4	11.7%
5	3.5%
6	6.7%
7	3.5%

When generational status was analysed by social class (see Figure 3), second generation respondents were more likely to be from social classes 1 and 2, and less likely to be from the other classes, in comparison to first generation respondents

Figure 3. Generational status and social class



Gender

This sample was composed by 53.9% male respondents and 46.1% female respondents.

Mode of study

Of the sample, 77% of the respondents were studying full-time, and 23% were studying part-time.

Age groups

The most populated age group was under 25 (58.1%), followed by 26–30 years old (18.2%).

d. Employer

Employers' long survey

Ownership status of the company

Of the nine companies who completed the long survey, seven were UK owned, one was a UK/international partnership and one was internationally owned. Five of the companies served the population within the UK and internationally, two just within the UK, one nationally (within England or Scotland or Wales or Northern Ireland), and one regionally (within a specific area of England or Scotland or Wales or Northern Ireland).

Sector and type of organisation

Of the nine companies, two were in the building and construction sector, and two were in the digital and creative (e.g. design, web, TV, film, cultural). The other companies were located in food manufacturing, information (e.g. software, IT), manufacturing, retail, and professional services. All of the companies classified themselves as a commercial organisation.

Size of the company

Based on employees headcount, six of the companies were medium sized (50–249 employees), two were small (10–49 employees) and one was large (up to 1000 employees). Both small companies had kept the same number of employees during the last 12 months, but the large company had increased their employees' figures. Of the medium-sized companies, three kept the same number of employers, two increased and one decreased them.

Employers short survey

Ownership status of the company

Of the 64 companies who completed the survey, 79.7% were UK owned, 17.2% were internationally owned, and just 3.1% were UK/international partnership.

Sector, size and type of organisation

Table 31 shows the sector representation for 61 out of 64 of the companies who provided their current number of employees. A fifth of the companies were in the manufacturing sector.

Table 31. Sector and size of the company

SECTOR	%	Small	Medium
Building and construction	3.1%	1	1
Chemical/Pharmaceutical	3.1%	0	2
Digital and creative (e.g. design, web, TV, film, cultural)	3.1%	0	2
Education	6.3%	2	2
Financial (e.g. banking, insurance)	9.4%	2	3
Government (e.g. civil service, local authority)	1.6%	0	1
Health (e.g. hospitals incl. private or NHS)	9.5%	5	1
Information (e.g. software, IT)	7.8%	0	5
Manufacturing	20.1%	5	8
Retail	4.7%	2	1
Transportation	7.8%	2	2
Energy and utilities (e.g. gas, water, electricity)	4.7%	2	1
Professional services	14.1%	3	5
Charity/non-profit	4.7%	3	0

In terms of type of company, 79.7% stated that they were a commercial organisation, 15.6% a charity, voluntary sector organisation or social enterprise, and 4.7% a local-government-financed body (e.g. school, transport, social care).

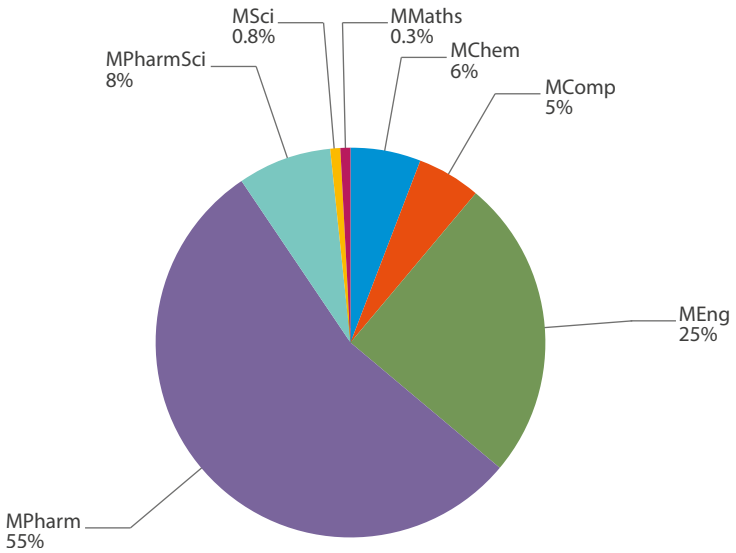
e. Integrated

A total of 609 valid responses were collected across eight of the 9E Group who participated in the Integrated survey.

Respondents by discipline

The responses for each discipline are shown in Figure 4. They were proportionate to the possible discipline sample sizes from the eight English universities, but not the English HEI figures due to the specific course offerings at the universities.

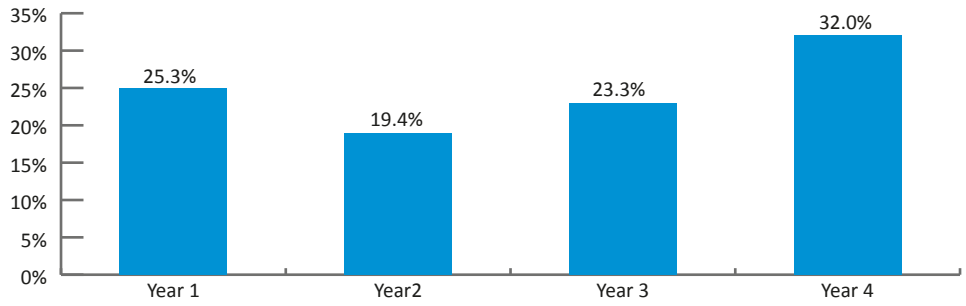
Figure 4. Respondents by integrated discipline



Respondents by year and mode of study

The respondents by 'year of study' were fairly evenly spread out across the different levels of study (see Figure 5). It is important to note that respondents in years 1 to 3 are those who would have commenced their studies from 2012/13 onwards when the increase in fees within English universities occurred. This will be discussed in more detail when the funding findings are reported in Chapter 9. As anticipated, most of the respondents were full-time with only three reporting that they were currently enrolled on a part-time mode which is likely to be due to modules being repeated.

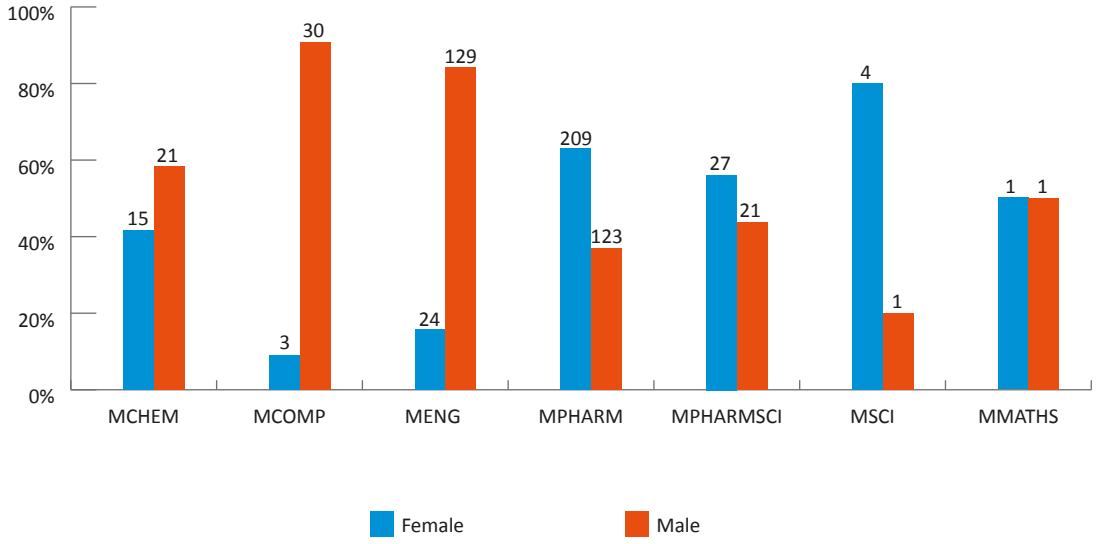
Figure 5. Respondents by year



Gender

Of the aggregate sample, 46.5% of the respondents were female and 53.5% male. Figure 6 highlights the gender split within each discipline and the figures generally represent the traditional participation of males and females in certain subjects. For example, high female participation in pharmacy and high male participation in computing and engineering disciplines.

Figure 6. Gender participation within each discipline



Domiciled status and nationality

Of the aggregate sample, 95% of the respondents stated that when they were not studying, their permanent residence was the UK, for 2% it was the EU and for 3% it was overseas. The respondents were broadly representative of the possible sample. However, for point of interest, the respondents sample is not reflective of EU (6.4%) and OS (12.2%) integrated enrolments across all English HEIs (see Table 114 in Chapter 9). Of the 609 respondents, 60 different nationalities were reported, of which 56 were by respondents who stated that they were UK domiciled.

Of the aggregate sample, 23.2% stated that English was not their first language and of these, 80.8% were UK domiciled. Fifty six languages were cited as a first language demonstrating the multicultural nature of integrated degree education across the eight English HEIs.

Age group

Of the aggregate sample, 87.8% were below 25 years of age. This comprised 47.3% in the 18–21 age category and 40.5% in the 22–25 age group.

f. Postgraduate Taught Experience Survey (PTES) 2015 (HEA)

PTES was completed by students of six universities participating in PEP. The HEA cleaned the dataset to include only STEM students and sent it to the PR Hub. A total of 1,186 responses were analysed.

Subject discipline

Of the sample, 42.8% of the respondents were enrolled in biological science courses, 22.2% in engineering and technology, 16.6% in physical sciences, 13.9% in computer science and 4.5% in mathematical sciences.

Domiciled status for fee purposes

Respondents were asked what their normal place of residence was for fee purposes. For 45.6% of the respondents it was UK, 20.3% were EU and 34.1% were OS. This high proportion of international students is due to 53.1% of the sample comprising a Russell Group university that has a high international student body.

Gender

Of the respondents who answered this question, 54.5% were male and 45.5% were female.

Age

The majority of respondents were under 30 years old. The sample comprised 62.1% being under 25 and 20.5% being between 26–30 years of age. Of the remaining respondents, 11.5% were in the 31–40 age category, 4.2% in the 41–50 and 1.5% in the 51 years and above group.

Ethnicity

Of the sample, 67.3% of respondents stated that they were White, 19.3% Asian, 4.8% Black, 4.5% Other and 4.2% Mixed.

Route into study

Less than one year prior to current PGT course, 42.4% of the respondents had completed an academic course (at any level).

Mode of study

The vast majority of respondents were studying full-time, with 80.4%, and part-time being 19.6%.

Previous highest qualifications on entry

The highest qualification on entry was an undergraduate degree or equivalent (e.g. BSc, DipHE, FdA) for 85.7% of the sample followed by a postgraduate degree (e.g. MA, PGCE, PhD) for 11.4%. A qualification below an undergraduate degree (e.g. A-level, HND) and those who stated 'Other' accounted for 1.4% respectively. Although 0.1% had no academic qualifications they did possess professional experience.

Current employment situation

Of the sample, 36.1% of the respondents were currently in paid employment. Of these, 33.3% were working more than 30 hours, 20.3% between 21 and 30 hours, 25% between 11 and 20 hours, and 21.5% between 1 and 10 hours.

5. PGT study motivations and decisions

Understanding student motivations for undertaking PGT study can help institutions and the students themselves manage their expectations, experiences and outcomes. This chapter reports the relevant findings from the following surveys: Non-enrolment A–D, Entry to Study, Finance and PTES 2015. The chapter covers motivations for undertaking PGT study, choice of university and course, mode of study, expectations and outcomes.

a. Key points

The key points highlight the headline aggregate findings.

Reasons for undertaking PGT study

- The three most cited reasons provided in the Entry to Study survey were: *To improve my employment prospects*, *I was interested in the subject* and *to develop a more specialist set of skills and knowledge.* For UK respondents, *improving their employment prospects* was noticeably higher in comparison to EU and OS respondents.

University and course choice

- Groups A–D of non-enrollers: the two most important reasons cited were *institutional, departmental and/or subject reputation* followed by *course content.* For Group A, the third reason was *location* followed by *cost of fees* and for Groups B–D it was *career prospects* and *cost of fees*.
- The three most important reasons cited in the Entry to Study survey were *course content*, *location of institution* followed by *reputation of chosen subject area.* Factors such as reputation for a *good social life*, *I felt inspired by a particular academic* and there were *opportunities for work placements* were the least cited reasons for choosing a university. For part-time respondents, *location of institution* was cited first followed by *delivery of the programme flexible enough to fit around my life* then *course content*. *Location of institution* was also the most first cited reason for first generation students, UK domiciled, for all respondents above 26 years old, and male respondents.

Mode of study

- For full-time respondents in the Entry to Study survey, *concentrating on the subject*, *completing the course as quickly as possible* and the *most appropriate way to study the course* were the top three most cited reasons for choosing this mode of study.
- For part-time respondents, retaining their employment and being able to study as well was the primary reason cited for this mode of study.
- Female respondents were more likely to state that they chose part-time study because they could not afford the full-time mode.
- Within the 31–40 age group, family responsibilities was the second most cited reason for choosing part-time.

Expected outcomes of PGT study

- The most expected outcome of undertaking PGT study in the Entry to Study survey was *specialising knowledge of the subject* followed by *widening knowledge.*
- The focus group's findings confirmed this with respondents explaining that their knowledge would equip them with the skills relevant for future employment.

Attitudes towards PGT study

- Respondents in the Entry to Study survey expected to undertake more *independent study*, receive more *value for money* and receive a more *personalised study experience at PGT level*.
- A fifth of all respondents stated that they did *not know what to expect* at PGT-level study.
- first generation respondents were less likely to know what to expect at PGT-level study than their second generation counterparts, and although there were no major social class differences, the higher social classes appeared better informed.

Concerns about starting PGT-level study

- *Coping with the level of study* was the most common concern amongst UK respondents in the Entry to Study survey. *Getting used to living in a new country* was the second concern for EU and the primary concern for OS respondents.
- For those who were OS domiciled, *fitting in with the university culture* was their third concern whereas for UK respondents it was *lack of sufficient funding*.
- First generation, part-time and straight from work respondents were more concerned about *fitting study around their work commitments* compared to those who were second generation, full-time and straight from university.
- Females were more concerned than males about *coping with the level of study* and their *lack of confidence about their ability to study.*
- Focus groups raised issues relating to workload and balancing their course with other commitments such as work, family and friends, as well coping with the financial pressure related to study.

Confidence levels about starting PGT-level study

- Respondents in the Entry to Study survey were less confident abou*t coping with balancing life demands and study* as well as *managing money*.
- UK respondents were less likely to be confident about *coping with balancing life demands and study*, *managing money* and *coping with travelling to university* compared to their EU and OS counterparts.
- Full-time respondents were more likely to be confident about *getting involved in university life*, *coping with travelling to university* and *looking after their health and welfare* than those studying part-time.

Anxieties about starting PGT-level study

- Four fifths of aggregate sample in the Entry to Study survey had some form of anxiety regarding their PGT study.
- UK non-PEP respondents were generally more anxious than PEP respondents.
- The 100% scholarship PEP respondents were less anxious than the 60% or £1000 scholarship recipients.

Anticipated use of support services

- Respondents expected to use *academic support* and *careers and employment services*.
- PEP respondents were more likely to use *careers and employment services* as well as *sports facilities* than UK non-PEP.
- Second generation were more likely to use *careers and employment services*, *sports facilities* and *health and wellbeing services* compared to their first generation counterparts.
- As the age of the respondent increased, the less likely it was that they intended using *careers and employment services*.
- Respondents coming straight from work were more likely to use *academic support services* than those coming straight from university.

b. PGT study motivations

In a highly competitive environment where graduates are competing for a finite number of graduate jobs, having a 'higher' level qualification advantage appears to be essential. The findings from the Entry to Study survey and focus groups showed that for the vast majority of respondents, a postgraduate qualification was being undertaken primary to improve their employment prospects. This finding is continually raised as a driver for participation in the HEA's annual Postgraduate Taught Experience Survey.

Source: Entry to Study survey

Respondents were asked to cite all their reasons for undertaking a postgraduate taught qualification. Respondents were given 21 options from which to select, including an 'Other' category. The most popular response cited was *to improve my employment prospects (70%)* followed by *I was interested in the subject* (66.7%) and *to develop a more specialist set of skills and knowledge* (61%) (see Table 32). For PEP respondents, *improving their employment prospects* was noticeably higher than for the non-PEP respondents. For all UK respondents, *improving their employment prospects* was substantially higher than for EU and OS. Family expectations to undertake higher level study was higher for OS and EU than UK respondents. UK respondents cited more frequently their *enjoyment of their previous studies* and their *inability to find a suitable job* compared to EU and OS. UK respondents were more likely to undertake PGT-level study to prove that they could do it, compared to EU and OS. OS were more likely to undertake PGT study to gain exposure to the research environment. When analysing the PEP respondents only, and the different scholarship amounts that were allocated, 25% of the respondents with a 100% scholarship stated that the primary reason was that funding was available. This was the case for 19.5% of recipients who received a 60% scholarship and for 5.7% of £1000 scholarship holders.

Table 32. Reasons for undertaking postgraduate taught study

Reasons	Aggregate	PEP	UK non-PEP	EU	OS
To improve my employment prospects	70.0%	82.1%	73.9%	64.4%	57.8%
I was interested in the subject	66.7%	75.9%	69.0%	71.9%	54.7%
To develop a more specialist set of skills and knowledge	61.0%	71.3%	61.3%	56.3%	53.3%
To develop a broader range of skills and knowledge	46.8%	51.8%	44.6%	41.5%	47.6%
To develop my professional networks	41.1%	43.6%	40.4%	34.8%	42.7%
To progress in my current career	39.4%	35.2%	41.1%	38.5%	41.0%
To enable me to progress to a higher level qualification (e.g. PhD)	38.5%	45.9%	36.4%	28.1%	39.0%
I want to continue studying	38.2%	47.2%	37.8%	31.1%	33.6%
It felt like a natural step for me	37.6%	49.8%	40.4%	39.3%	23.4%
I had enjoyed my previous higher education studies	28.7%	44.6%	31.7%	19.3%	15.4%
It is a requirement to enter my chosen profession	27.3%	26.7%	32.2%	20.0%	25.1%
To gain exposure to the research environment	25.1%	27.4%	22.1%	16.3%	30.5%
To prove I was capable of postgraduate study	19.8%	23.1%	20.4%	17.0%	12.8%
I want a career in higher education (e.g. researcher/ teaching career)	16.1%	18.6%	13.1%	11.9%	19.1%
The funding was available	13.4%	21.2%	12.0%	11.9%	9.1%
I had been unable to find a suitable job	12.0%	15.6%	14.8%	5.2%	8.0%
I was encouraged by a former academic tutor/supervisor	11.3%	15.6%	9.9%	8.1%	10.5%
My family expect me to undertake further study	7.7%	3.9%	5.4%	11.1%	12.5%
I was encouraged by an employer	6.2%	4.6%	7.3%	4.4%	6.8%
I wanted to postpone job hunting	4.8%	3.3%	5.6%	3.7%	5.7%
It is a requirement of my current job	4.1%	0.7%	3.3%	3.7%	8.3%
Other	2.7%	2%	3.5%	3.0%	2.0%

Source: Focus groups

The focus groups explored these findings in more detail. Many of the respondents felt that a PGT STEM qualification would help them *stand out from the crowd* and some stated that they needed it in their profession in order to progress in their careers. The comments below are representative of those provided across the 9E Group.

> *I was looking for jobs, and nobody wanted to take me on because it seems that degrees are ten-a-penny now, but when I was younger degrees meant something; that I was really, really clever. Now there are thousands of people doing degrees and so the next step has to be doing a masters.*
>
> *(…) since getting my bachelors, I have been working in industry for about 9 to 10 years and wanted something else to differentiate me from other engineers in my field; something to help my career.*
>
> *I looked for work after my bachelors, but there was a lot of competition and they have really high requirements. They want experience, and this and that, so I thought having a masters would equip me with those skills…..give me something extra.*
>
> *Well, where I come from a masters in [course] is unique, so I wanted to set myself apart from the crowd.*
>
> *(…) my background was in [discipline], so what I was doing on a day-to-day basis for the last four years wasn't concerned with [discipline] and I wasn't passionate about it, so I felt…I've always felt, whatever I live with in my career should be something I'm passionate about. I shouldn't just be working for the money.*
>
> *I've been, er working as a [role] so now I wanna kinda get to the next level. And I feel you need a masters to …get that little extra help with career development.*
>
> *I am doing postgraduate study to enable me to become a chartered engineer. I'm currently working in an engineering company and for me to go anywhere I need to become a chartered engineer.*

Source: PTES, 2015

The findings of the Entry to Study survey and focus groups are reflected in the findings from PTES 2015. When asked about the motivations for undertaking their PG course, respondents stated that *improving my employment prospects* was their primary motivation (63.1%) followed by *to progress in my current career path* (i.e. a professional qualification) (57.7%). *Personal interest* was next (49.2%) followed by *to enable me to progress to a higher level qualification* (e.g. PhD) (42.7%).

These results were similar to what was found in the full PTES 2014 report for all disciplines where 58.2% cited *career progression*, 54.8% cited *to improve employment prospects*, 47.2% for *personal interest* and 37.9% so they could *progress to PhD*.

c. University and course choices

Due to the lack of a comprehensive national postgraduate admissions process, there is no data to help inform which universities applicants apply to and the type of courses for which they apply. This lack of intelligence prevents the sector from fully understanding the university and course motivations of applicants and students. The information gathered from the Non-enrolment A–D and Entry to Study surveys are highlighted below.

i. University choice and course

Source: Non-enrolment Groups A–D

Groups A–D were offered 17 options for why they chose a course. The top four ranked responses are listed in Table 33. *Reputation* covers institutional, departmental and subject. For Group A, the factors considered by the enquirers was slightly different for those applicants who had submitted an application to a university. *Location* was an important consideration for them (11.6%) and ranked in third place. It appears that once an enquirer has chosen their type of location, other factors come to the fore. For Groups B–D, the same reasons in a similar order were given. The factors that were cited as unimportant across all the groups were: *university league tables*, *reputation for research*, *postive experience at open days* and *reputation for a good social life*. Domiciled status did not impact on the findings.

Table 33. Top four ranked reasons for choosing a course

Survey A (64) **Enquire but do not apply** **UK:47.8% EU:5.8%** **OS:46.4%**	**Survey B (440)** **Apply, offer, decline** **UK:14.9% EU:14.9%** **OS:70.1%**	**Survey C (90)** **Apply, offer, accept notify non-attendance pre-enrolment** **UK:26.0% EU:19.2%** **OS:54.8%**	**Survey D (131)** **Apply, offer, accept, no notification of pre-enrolment** **UK:7.8% EU:1.0%** **OS:91.2%**
Reputation (31.9%)	Reputation (31.9%)	Reputation (34.2%)	Reputation (39.2%)
Course content (21.7%)	Course content (21.7%)	Course content (27.4%)	Course content (19.8%)
Location (11.6%	Career prospects (13.4%)	Career prospects (9.6%)	Cost of fees (14.9%)
Cost of fees (7.2%)	Cost of fees (6.3%)	Cost of fees (5.5%)	Career prospects (14.9%)

Source: Entry to Study survey

In the Entry to Study survey, the broad option of *institutional/departmental/subject reputation* that was offered in the Non-enrolment survey was refined and each was made a specific option. On entry to their studies, respondents were asked to state what factors they had considered when choosing their current institution to undertake a postgraduate taught

degree. For the aggregate sample, of the 22 options available, *course content* (50.8%), *location of institution* (49.3%) and *reputation of chosen subject area* (41.6%), followed by *overall reputation of the institution* (37.7%) were the most cited reasons (see Table 34).

Table 34. Reasons for choosing their current university

Reason (select all reasons)	Aggregate	PEP	UK non-PEP	EU	OS
Course content	50.8%	50.8%	50.7%	57.8%	48.4%
Location of institution	49.3%	59.6%	59.2%	34.1%	35.3%
Reputation of chosen subject area	41.6%	41.0%	40.1%	45.9%	42.5%
Overall reputation of the institution	37.7%	32.9%	30.3%	43.0%	49.0%
I have studied at the institution before	29.7%	61.6%	33.8%	13.3%	3.4%
Good teaching methods	27.2%	32.6%	21.8%	24.4%	29.9%
Reputation of department	26.7%	28.3%	25.1%	30.4%	25.1%
The cost of the programme was lower compared to other institutions	26.5%	24.1%	29.6%	26.7%	25.1%
Institutional facilities	21.6%	21.5%	17.4%	13.3%	29.9%
Graduates from this institution have a good career and employment prospects	20.5%	19.5%	20.2%	22.2%	21.1%
It was recommended to me	20.3%	12.7%	17.1%	25.9%	27.9%
Funding was available to study this particular programme	17.2%	36.2%	12.4%	11.9%	8.8%
Delivery of the programme is flexible enough to fit around my life	17.0%	19.9%	21.4%	7.4%	12.8%
There were opportunities for work placements/working with employers	13.9%	17.9%	11.7%	14.1%	13.4%
It is the only institution offering this programme	12.5%	9.4%	15.0%	14.8%	11.4%
The way the programme is assessed	11.6%	7.5%	13.4%	11.1%	13.1%
Opportunities for international collaboration/fieldwork opportunities	11.3%	9.4%	6.8%	12.6%	17.7%
Reputation for good social life	9.3%	7.5%	5.9%	9.6%	14.5%
I felt inspired to work with a particular academic	5.8%	10.7%	4.5%	5.2%	3.1%
Other	4.7%	3.6%	6.8%	7.4%	1.7%
My employer advised or encouraged me to do it	2.3%	1.0%	3.3%	0%	3.1%
The cost of the programme was higher compared to other institutions	0.1%	0%	0%	0%	0.3%

When analysing the PEP students only, and taking into consideration the different scholarship amounts that were allocated, *funding was available to study this particular programme* was mentioned by 41.1% of the 100% scholarship respondents, 31.3% of those with a 60% scholarship, and 31.4% of those with a contribution of £1,000.

Differences

When the responses were analysed by different variables, noticeable differences were found.

- PEP scholarship recipients first cited reason was *I have studied at the institution before* (61.6%) (not surprising as many scholarships went to alumni), but it was fifth cited for the aggregate sample.

  > *I also studied here for my undergraduate. And I felt like, um, I've settled already for three years. So instead of moving to a new uni… I knew the teachers here as well. It was easy……*

- The Russell Group respondents' most cited reason was *overall reputation of the institution* (80.2%) followed by *reputation of chosen subject area* (64.5%) and *course content* (56.2%), but for the aggregate sample the *reputation of the chosen subject area* was cited in third place and *overall reputation of the institution* for the sample was cited in fourth place.

- The Welsh University respondents' most cited reason was *location of institution* (53.6%), followed by *course content* (50%), the *cost of the programme was lower compared to other institutions* (36.9%), and *reputation of chosen subject* (35.7%). The *cost of the programme* was the eighth most cited reason in the aggregate sample and not considered a primary reason.
- Full-time respondents cited similar reasons to the aggregate sample, but for those studying part-time, *location of institution* (63.6%) was cited first, *delivery of the programme flexible enough to fit around my life* (40.8%) cited in second and *course content* (48.5%) in third.

> *I work full-time and my job requires that I travel and meet up with different levels of people, across different organisations. And the fact that I can come in the evenings and still be able to do that was just an additional bonus, really…*

- Students coming straight from work cited *location of institution* in first place (53%) whereas, for students coming straight from university, it was third (48.4%).
- *Location of institution* was the first cited reason for first generation students (52%), UK domiciled (59.1%), for all respondents above 26 years-old, and male respondents (47.6%).
- UK non-PEP domiciled respondents were substantially more likely to have chosen their current institution due to *location,* for having *studied there before* and *delivery of the programme was flexible enough to fit around their commitments* in comparison to EU and OS respondents.
- EU and OS respondents were more likely to cite *overall reputation of the institution* than UK respondents. OS respondents were more likely to cite *institutional facilities* than the other respondents.

Source: Focus groups

The importance of the *location of the institution* was supported by comments made in the focus groups.

> *{university} is my home town so it made it more feasible, I was able to move back with my parents.*
>
> *The university was also a commutable distance from my house, although I may have considered moving closer to be able to attend this one above all others.*
>
> *It was close to home. When I did my undergrad I moved away, but I wouldn't have been able to afford to move away during my masters, so just being down the road was convenient and cheap.*

The importance of location and living near a place of study for respondents is reflected in Figure 1 in Chapter 4, which shows that 65.5% of respondents in the Entry to Study survey lived within 10 miles of their place of study. This finding was also reflected in the Finance survey.

Source: PTES, 2015

Similar results were found in PTES 2015 for the six participating 9E Group. The most cited reasons for studying at their current institution were: *the content of the course* (52%), *overall reputation of institution* (50.1%), *location of institution* (44.2%) and *reputation in chosen subject area/department*. *Reputation* was more important for respondents from the Russell Group university, and for non-UK respondents. *Location of the institution* was the most important reason for UK respondents.

Besides course content, *delivery of the course is flexible enough to fit around my life* (49.6%) and *location of institution* (41.4%) were the most cited reasons by part-time respondents. Again, these results are similar to those found in the full PTES 2014 report.

ii. Choice of mode of study

Source: Entry to Study Survey

Respondents completing the Entry to Study survey were asked about all their reasons for choosing the mode of their study.

Full-time

For the respondents who chose the full-time mode, of the five options available, the three most cited reasons were *it would allow me to concentrate on the subject* (50.5%), then *I wanted to complete the course as quickly as possible* (49.4%), followed by *it was the most appropriate way to study the course* (43%) (see Table 35).

Table 35. Reasons for choosing full-time study

Reason	Aggregate	PEP	UK non-PEP	UK	EU	OS
Would allow me to concentrate on the subject	50.5%	63.2%	49.8%	55.5%	38.8%	47.0%
Wanted to complete the course as quickly as possible	49.4%	51.9%	61.6%	57.1%	49.6%	37.2%
Most appropriate way to study the course	43.0%	44.4%	40.7%	42.5%	45.7%	43.6%
I only got funding for full-time study	9.6%	5%	4.4%	4.7%	12.4%	15.8%

When route in to study was analysed, the most popular reason for respondents coming straight from work was similar to the aggregate sample, with it *would allow me to concentrate on the subject* (52.9%) followed by *wanted to complete the course as quickly as possible* (51.1%), whereas for respondents coming straight from university the most popular reason cited was *I wanted to complete the course as quickly as possible* (52.4%) followed by *it would allow me to concentrate on the subject* (50.3%). For first generation (51.2%) and UK and EU domiciled respondents, the most cited reason was *I wanted to complete the course as quickly as possible.* For second generation, OS and both female and male respondents the most cited reason for choosing the full-time mode was *it would allow me to concentrate on the subject* (see Table 36).

Table 36. Reasons for choosing the course by generational and gender status

Reason	First generation	Second generation	Female	Male
Would allow me to concentrate on the subject	47.2%	53.6%	51.7%	49.8%
Wanted to complete the course as quickly as possible	51.2%	47.7%	50.9%	48.4%
Most appropriate way to study the course	39.9%	46.4%	43.4%	43.0%
I only got funding for full-time study	11.7%	7.4%	7.2%	10.7%

When age groups were compared, there appeared to be an age-related response. The most cited reason for respondents under 25 years old was *it would allow me to concentrate on the subject* (53.6%), whereas for respondents in the other age categories, it was *I wanted to complete the course as quickly as possible* (between 47.8% and 72.7%). This was especially the case for those in the 41–50 (61.6%) and 51 and above age groups (72.7%).

When ethnicity was compared, the most cited reason for Asian respondents was *most appropriate way to study the course* (53.4%), for Black and Mixed respondents was *would*

allow me to concentrate on the subject (58.1% and 38.2%), and for White and Other respondents was *wanted to complete the course as quickly as possible* (53.3% and 50.9%).

Part-time

The findings in Table 37 were reflected in the discipline, generational and domiciled status responses. The most popular reason cited of the seven options available for choosing part-time mode were *I had a job/wanted to continue working* (58.7%) followed by *I couldn't afford full-time study* (27.2%).

Table 37. Reasons for choosing part-time study

Reason	Aggregate	PEP	UK non-PEP	EU	OS
I had a job/wanted to continue working	58.7%	50.0%	65.1%	50.0%	0%
I couldn't afford to study full-time	27.2%	41.2%	20.2%	16.7%	50%
I was in full-time work and being allowed study release	25.7%	17.6%	30.2%	16.7%	0%
I have family commitments/caring responsibilities	19.9%	29.4%	16.3%	0%	0%

When route in to study was analysed, the most cited reason for both respondents coming straight from work and coming straight from university was *I had a job/wanted to continue working* (67.4% and 44.7%, respectively.) The second most popular reason for respondents coming straight from work was *I was in full-time work and being allowed study release* (32.6%) whilst for respondents coming straight from university it was *I couldn't afford to study full-time* with (42.1%). For those coming from another route, it was *I have family commitments/caring responsibilities* (27.3%).

When gender was analysed, a higher number of male respondents cited *in full-time work and being allowed study release* (32%) in comparison with female respondents (15.7%), but female respondents cited *I couldn't afford to study full-time* (38.6%) more often than male respondents (19.7%) (see Table 38).

Table 38. Reasons for choosing part-time study by gender

Reason	Female	Male
I had a job/wanted to continue working	54.2%	61.5%
I couldn't afford to study full-time	38.6%	19.7%
In full-time work and being allowed study release	15.7%	32.0%
I have family commitments/caring responsibilities	22.9%	17.2%

When age was compared, the most cited reason for all groups was *I had a job and wanted to continue working* (see Table 39). Of the respondents aged between 31 and 40 years old, the second most cited reason was *I have family commitments/caring responsibilities* (44.4%). For the respondents in age groups under 30, the second most cited reason was *I couldn't afford to study full-time*.

Table 39. Reasons for choosing part-time study by age

Reason	Under 25	26–30	31–40	41–50	Above 51
I had a job/wanted to continue working	49.0%	65.6%	55.6%	62.9%	71.4%
I couldn't afford to study full-time	38.8%	31.1%	20.4%	20.0%	0%
In full-time work and being allowed study release	16.3%	31.1%	24.1%	34.3%	14.3%
I have family commitments/caring responsibilities	8.2%	11.5%	44.4%	17.1%	0%

Delivery of part-time study

For the majority of the part-time respondents, their study was spread out over the year and delivered in one or two days per week (see Table 40). Those respondents reporting online and block style were enrolled in three of the 9E universities and in particular disciplines. Block style is a particularly common delivery mode in disciplines such as engineering and computer information systems.

Table 40. Delivery style

Delivery style	Aggregate
1–2 days per week	70.8%
Block	14.6%
Online distance learning	14.6%

d. Expectations

Students highlighted a number of expectations when starting a course. Although they are fairly well understood at undergraduate level, there is limited data that has captured extensively what postgraduate students expect. The Entry to Study survey and focus groups explored this in more detail. This section reports the general expectations of new students. The specific learning and teaching expectations can be found in the Learning and Teaching chapter in this document (Chapter 7).

i. Starting the course

Source: Entry to Study survey

Respondents were asked to state what they were looking forward to and expecting when starting their course. The open ended comments provided by the respondents fell into four broad categories: academic, career, interpersonal and personal related. The themes and sub-themes for each one of these broader categories are showed in Table 41.

Table 41. Expectations on starting the course

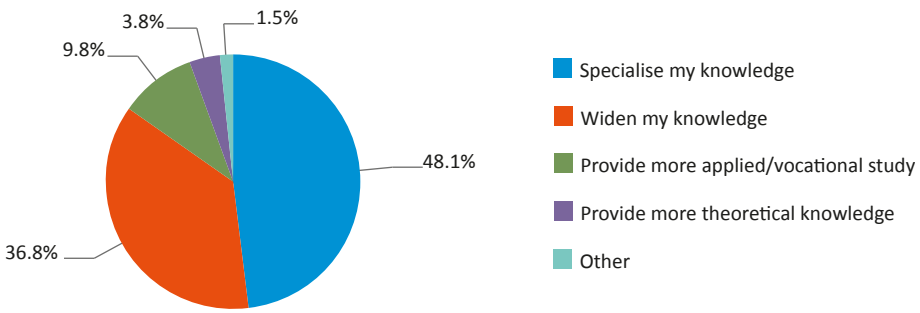
Broad category	Themes	Sub-themes
Academic	Course	Good course structure Support from lecturers Good communication Work in projects Hands-on/practical training Site visits Good grades/doing well in the course
	Knowledge and skills	Learning a new subject New challenges Professional skills Research skills
	Institution	Facilities
Career	Employability	Workshops in employability Opportunities for placements Career prospects Getting a professional qualification
	Networking	Meeting new people in the same field Gaining contacts in the industry
Interpersonal	Social aspects	Working with likeminded people University life Social interaction with the academic community
Personal	New experiences	New challenges Independence/living away from home. Improved self-confidence New institution

ii. Expected outcomes of undertaking postgraduate study

Source: Entry to Study survey

For the aggregate sample, 48.1% of the respondents expected to *specialise their knowledge* and 36.8% expected to *widen their knowledge* (see Figure 7). Just 9.8% of the respondents expected that their postgraduate course would provide *more applied and vocational study* with only 3.8% expecting to obtain *more theoretical knowledge*.

Figure 7. Expected outcomes of PGT study



The same pattern of expectations was found for all respondents regardless mode of study, route into study, generational status, domicile, and gender. However, when analysing age, differences were found for older mature respondents above 41 years old.

- For 41–50 year olds, the most cited expectation was *widening my knowledge* (43.7%). Similar findings were found with the over 51 age group with 50%.
- Respondents in the 41–50 (35.2%) and 50 above age groups (27.8%) expectation to *specialise my knowledge* was lower in comparison with under 25 respondents (51.2%).

These findings suggest that the *widening of knowledge* expectation increases as age increases, and *specialising knowledge* decreases as age increases (i.e. younger students were more likely to expect to specialise their knowledge, and older students were more likely to expect to widen their knowledge).

When each expectation was analysed individually by different demographic variables, some interesting and noticeable differences were found.

- Respondents coming straight from university (11.9%) expected *more applied/vocational knowledge* in comparison to respondents coming straight from work (8%). This is not a surprising finding as students coming straight from university often feel that they did not acquire any or enough applied or vocational experience in their undergraduate degree that would enable them to compete in the employment market. Obtaining this experience was cited as one of the motivations of undertaking PGT study.
- 42.7% of engineering respondents were more likely to expect to *widen their knowledge* in comparison with 30% of physical sciences and 32.4% of biological sciences.
- Physical sciences respondents were more likely to expect to *specialise their knowledge* (54.2%) in comparison to engineering respondents with (44.3%). This can be partially explained by the nature of the different disciplines and requirements to specialise.
- First generation respondents were more likely to expect to *widen their knowledge* (39.8%) in comparison to second generation respondents (33.4%).

Source: Focus groups

Respondents regularly mentioned that they expected their PGT course would equip them with the knowledge and skills needed for a future career or required for their current field.

> *Without a doubt, I feel it's the only thing that's preparing me properly for the future. I think hopefully the outcome of this course will be exactly what I need to go where I want to go. Unlike my undergraduate course, which was quite broad, this has narrowed down my interests.*
>
> *The amount of knowledge I have gained from this university, I cannot compare… It's really incredible.*

Many respondents were more specific, stressing that they expected the course to provide them with the experience and applied skills relevant for future employment.

> *Providing me with skills and knowledge to further my career.*
>
> *Yes this course gives a lot of hands-on/field experience. Basically it's going to make me a lot more employable in the industry I want to go in. My course is incredibly specific in itself, I can see where it will contribute in the future, it's almost as though I'm being taught all the answers to an interview...*

However, there was some concern among several students that they would still be lacking in practical experience when it came to looking for a job.

> *I'm not expecting to leave this course and say 'yes I'm capable to do everything'. I know what to do in my area but when they look at my education they will say 'you don't have any experience' so I'm expecting to end up in lab before I can go to the place I want.*

iii. Attitudes towards postgraduate study

Source: Entry to Study survey

Respondents were invited to rate their agreement on the following statements about postgraduate-level study. For data analysis, the initial five point Likert scale (definitely agree, agree, unsure, disagree and definitely disagree) was recoded into three more broad categories: agree, unsure and disagree.

- *Postgraduate-level study requires more independent study than at undergraduate level*
  93.1% of respondents agreed that they expected to undertake more independent study on their postgraduate course than at undergraduate level, with 5.4% being unsure and 1.5% disagreeing. Similar findings were found for the PEP and non-PEP respondents.
- *I expect more value for money at postgraduate level than at undergraduate level*
  Unsurprisingly, respondents also expected more value for money. For the overall sample, 74.9% agreed, 18.9% were unsure, and 6.2% disagreed.
- *Postgraduate level should provide a more personalised study experience for the student than at undergraduate level*
  Of the aggregate sample, 87.4% agreed that postgraduate level should provide a more personalised study experience with 10.6% being unsure and 2% disagreeing.
- *I do not know what to expect when studying at postgraduate level*
  Of the aggregate sample 21.6% did not know what to expect at postgraduate level, but PEP respondents was noticeably higher with 30.5% (see Table 42).

This finding is reflected in previous research undertaken (Morgan, 2013a). Unless applicants or students have actively researched what to expect or have gained knowledge through previous study or family and friends, there is no reason why they should know what to expect at postgraduate level of study. This is one of the reasons why managing the transition into postgraduate study is so crucial to negate lack of information being a reason for later withdrawal.

Table 42. Expectation of study at postgraduate level

I do not know what to expect when studying at postgraduate level	**Aggregate**	**UK**	**EU**	**OS**	**PEP**	**UK non-PEP**
Agree	21.6%	25.3%	13.8%	17.2%	30.5%	21.3%
Unsure	24.5%	25.9%	21.7%	22.7%	27.5%	25.4%
Disagree	53.9%	48.8%	64.5%	60.1%	42.0%	53.3%

When the four statements were analysed by demographic variables noticeable differences emerged.

- EU (64.5%) and OS (60.1%) respondents were more likely to say that they *know what to expect* when studying at postgraduate level in comparison with UK respondents (48.8%).
- EU respondents were less likely to agree that *postgraduate level requires more independent study* (87%) in comparison with UK (93.7%) and OS (94.3%) respondents.
- OS respondents were more likely to *expect more value for money* at a postgraduate level (81.4%) in comparison with UK (72.7%) and EU (70.3%) respondents.
- Full-time respondents were more likely to agree that postgraduate level *requires more independent study* (93.9%) in comparison with part-time respondents (89.3%).
- Full-time respondents were more likely to expect *more value for money* (76.7%) in

comparison with part-time respondents (65.9%). However, part-time respondents were more unsure about *value for money* (24.4%) in comparison with those who were full-time (17.8%).

- Full-time respondents were also more likely to agree that postgraduate level should provide a more *personalised study experience* (88.8%) in comparison with part-time respondents (81%).
- Second generation respondents were more likely to disagree with the statement *I do not know what to expect when studying at postgraduate level* (58.3%) in comparison with first generation respondents (49.8%).
- Female respondents were more likely to agree that postgraduate level study *requires more independent study* (96.5%) in comparison with male respondents (91.1%). No gender differences were found regarding *value for money*, *personalised experience* and *what to expect at postgraduate level*.
- Respondents in the age groups 41–50 and above 51 were less likely to expect *more value for money* (64.8% and 55.6% respectively) in comparison with the younger age groups (whose responses ranged between 72.8% and 78%).
- There were no noticeable social class differences.

It was interesting that 58.5% of respondents coming straight from work were more likely to disagree with the statement *I do not know what to expect when studying at postgraduate level* in comparison with 49.5% of respondents coming straight from university. This result suggests that respondents coming straight from work were more confident about what to expect at postgraduate level in comparison with respondents coming straight from university, although this finding is counter to the general perception about transition to PGT study. It may be that these students sought more information than those coming straight from university.

Source: Focus groups

Many students agreed that postgraduate study required more independent learning, particularly when in comparison to undergraduate level.

> *I think there's a lot more independent study at PG than there was at undergrad. At undergrad it was very much that you had learnt what they told you but here you have to find some stuff out yourself which is good because you're learning more.*

Some students also felt that their experience at postgraduate level was more personalised.

> *(…) because I went from a course that was about 100, to 12, you really get to know the people on your course, the lecturers are so much more -well they can be more involved in you and if you look stressed they will sit down and chat with you and it's a much more personal touch.*

> *….a bit more personable, because we've obviously got smaller class sizes so it's easier to kind of get to know the lecturers a bit more and they sort of get to know you. Like I don't think I really had any lecturers apart from my tutor last year that knew me by my first name. But yeah, I found this year it's a bit more friendly.*

e. Concerns, confidence and anxieties on starting PGT study

The study wanted to explore whether the incoming cohort of STEM masters students had any concerns or anxieties and to determine their confidence levels relating specifically to their studies. Their initial concerns were collected via the Entry to Study survey then explored in the focus groups six months later. The findings from both are reported below.

i. Concerns

Source: Entry to Study survey

The top five concerns reported by the aggregate sample related to study and finance issues (see Table 43). These were also frequently mentioned in the focus groups sessions, with the 9E group's students.

Table 43. Concerns by domiciled status

Concern	Aggregate	UK	EU	OS
Coping with the level of study required at this level	44.2%	53.4%	35.5%	29.3%
Difficulties in fitting the course around my existing work commitments	24.1%	35.1%	13.8%	5.7%
Lack of confidence about my ability to study	24.0%	24.3%	20.3%	24.4%
Lack of sufficient funding	23.7%	28.3%	22.5%	14.8%
Concerns about committing more time to study	23.2%	24.9%	22.5%	20.2%
Concerns about getting into debt	20.5%	25.9%	13.8%	12.2%
Concerns about increasing my existing levels of debt	17.3%	24.3%	9.4%	6.3%
Lack of information about study opportunities	16.2%	12.4%	15.2%	23.6%
Having a long commute to attend the course	14.7%	18.6%	9.4%	9.1%
Difficulties in fitting the course around family commitments	14.5%	20.5%	6.5%	5.7%
Lack of information about funding support	14.4%	17.9%	9.4%	8.8%
Getting used to living in a new country	14.4%	1.9%	31.9%	33.5%
Getting on with fellow students	14.1%	11.7%	15.9%	18.2%
Fitting in with the university culture	12.9%	7.2%	12.3%	24.7%
Unsure if the course is right for me	8.6%	7.3%	13.0%	9.7%
Complex course application process	6.7%	3.6%	8.0%	11.9%
Difficulties in getting the information I need to calculate my study costs	5.5%	5.6%	6.5%	4.5%
Lack of support/encouragement from my family and friends	3.9%	3.7%	7.2%	2.8%
Lack of support/encouragement from my employer	3.4%	4.7%	1.4%	1.4%
Lack of affordable childcare	3.2%	4.4%	0.7%	1.7%
Lack of suitable childcare	2.5%	3.2%	1.4%	1.7%

When analysed by a range of variables, interesting and noticeable differences emerged.

- OS were more likely to be concerned with *getting on with fellow students* (18.2%).
- UK respondents were more concerned about *coping with the level of study required at this level*, *getting into debt*, *difficulties in fitting the course around my existing work commitments* and *increasing existing levels of debt* in comparison to EU and OS respondents.
- UK respondents (28.3%) were more likely to be concerned about *lack of sufficient funding* in comparison to OS respondents (14.8%), but this was higher for UK non-PEP than PEP respondents.
- First generation respondents were more likely to be concerned about *difficulties in fitting the course around existing work commitments* (28.2%) than second generation (19.7%).
- First generation respondents were more likely to be concerned about *fitting the course around family commitments* (16.6%) compared to second generation respondents (12.2%).
- Part-time respondents were more concerned than full-time about:
  - *fitting the course around existing work commitments* (63.6% and 16.2% respectively);
  - committing *more time to study* (30.1% and 21.9% respectively);
  - *fitting the course around family commitments* (35.4% and 10.3% respectively); and
  - *lack of support* and *encouragement from current employer* (10.2% and 2.1% respectively).

- Female respondents were more concerned than males about:
  - *coping with the levels of study required at postgraduate level* (54.4% and 38.2% respectively);
  - their *lack of confidence about their ability to study* (31.8% and 19.5% respectively);
  - *fitting the course around existing work commitments*, *committing more time to study*, *getting into debt* and *increasing existing levels of debt*.
- Straight-from-work respondents were more concerned about *fitting the course around existing work commitments* (34%) than those coming straight from university (20.3%) as well as *family commitments* (20.4% and 9.2% respectively).
- Straight-from-university respondents were more concerned about *lack of sufficient funding* (29.6%) than those coming straight from work and other routes (20% and 19% respectively).
- The older the student, the more concerned they were with *fitting the course around existing work commitments*: respondents under 25 (17.5%), 26–30 (28.5%), 31–40 (30%), 41–50 (49.3%), and above 51 (50%). The same pattern of results was found for the concern of *fitting the course around family commitments*.
- Biological sciences respondents were more concerned about *coping with the level of study required at postgraduate level* (58.4%) than with respondents from other disciplines (who ranged between 27.6% and 51.8%).
- Biological sciences respondents were also more likely to be concerned about their *lack of confidence about ability to study* (31.6%) in comparison to other respondents especially engineering respondents (18.1% – other disciplines ranged between 23.8% and 26.8%).
- PEP respondents were noticeably more concerned about *increasing my existing levels of debt* than UK-non-PEP.
- Within PEP respondents, £1000 scholarship holders were more concerned about *lack of sufficient funding* (51.4%) than 60% (21.1%) and 100% scholarship respondents (16.3%).

Source: Focus groups

The focus group sessions explored academic and non-academic issues experienced at postgraduate level. Of the academic issues, the most frequent were related to workload, and specifically difficulties balancing course and other commitments (work, family, friends).

> *I know that at this point it's just about trying to keep my head above water (…) I expected it to be really intense, but (…) it surpassed anything I expected in terms of the workload. I've quit my job a few months ago in order to have time, I had a part-time job, in order to have enough time to have the coursework stuff done and I've been to see some of my lectures and had all the coursework dates completely rearranged for the entire course, because they were absolutely unreasonable.*

> *This is really intense. We can't really do extracurricular activities. I was doing badminton every Monday, and Wednesday, but I had to drop out because my masters was getting too intense, unfortunately. I mean, this is my only issue though.*

Of the non-academic issues, the most frequent were related with finance (see Chapter 6 for more information).

> *I got a career development loan, so it's okay. With the student loan you get a number of years to pay it back but with this you have to pay it back quite quickly and it's a high rate of interest paying it back straight away after the course. So you are in trouble a little bit if you don't manage to get a job straight away really. You don't have much security. I have my parents helping me out as well, like most people. It's definitely more of a challenge.*

> *It's sort of the mental stress of trying to keep up with your financial outgoings that looms on me a little bit; it's like keeping up with everything, making sure you're not getting letters is the kicker... at undergrad you had the support mechanism of student finance but as a postgrad you're treading a fine line between trying to work and pay your bills but also fit in your studying and doing the best that you can to get your degree so you can get a better job and hopefully pay off your debt.*

In terms of funding, that was my biggest concern in doing masters, because I didn't know how I would fully fund it. I had some savings, but... if I didn't have my family to back me up, I don't think I would have gone through a masters.

ii. Confidence levels

Source: Entry to Study survey

Respondents on entry were invited to rate their agreement on the following confidence statements about starting their postgraduate course. For data analysis, the initial five-point Likert scale that was used (very confident, confident, unsure, not confident, not confident at all) was recoded into three more broad categories: *confident, unsure* and *not confident*. Table 44 reports only the *confident* and *not confident* responses and lists the *not confident* first. For over a third of the aggregate sample, respondents were not confident with *balancing life demands and study* (32.4%), approximately a quarter were not confident about *managing money* (26.6%), and a fifth were not confident with *coping with the standard of work required at this level of study* (20.5%).

Table 44. Confidence levels

Statement	Level of confidence	Aggregate	UK	EU	OS	PEP	UK non-PEP
Coping with balancing life demands and study	Not confident	32.4%	36.0%	2.09%	25.9%	31.9%	38.7%
	Confident	60.7%	55.4%	64.5%	70%	58.6%	53.5%
Managing money	Not confident	26.6%	28.9%	25.4%	22.4%	26.1%	30.7%
	Confident	66.8%	64.1%	65.2%	73.0%	67.6%	61.6%
Coping with the standard of work	Not confident	20.5%	21.7%	19.7%	17.9%	16.3%	25.5%
	Confident	71.4%	70.5%	70.1%	74.4%	74.6%	67.7%
Getting involved in university life	Not confident	18.5%	17.7%	23.2%	18.3%	13.0%	21.1%
	Confident	73.3%	70.6%	71.7%	79.4%	80.8%	63.1%
Making friends	Not confident	15.4%	13.5%	17.4%	17.8%	11.1%	15.3%
	Confident	78.6%	78.0%	79.7%	79.9%	84.0%	73.5%
Looking after my health and welfare	Not confident	11.3%	9.0%	18.2%	13.6%	7.8%	9.7%
	Confident	81.6%	81.6%	77.4%	82.9%	84.3%	79.7%
Coping with the travelling to university	Not confident	10.5%	12.3%	5.1%	9.3%	10.8%	13.1%
	Confident	81.7%	77.0%	88.4%	89.0%	80.7%	74.6%

When analysed by a range of variables, interesting differences emerged. For each statement below, the findings include the Entry to Study survey results and comments from the focus groups.

Coping with balancing life demands

- Part-time respondents were less confident in *coping with balancing life demands and study* (38.3%) in comparison to full-time respondents (31.1%).
- Male respondents were more confident (65.2%) than females (52.9%).
- Engineering respondents were more confident (68.6%) and biological sciences were the least confident (51.4%). The other disciplines' confidence levels were between 58.6% and 60.9%.
- UK respondents were also less confident (55.4%) in comparison with EU (64.5%) and OS (70%) respondents. This finding may be related to the intentions to undertake paid work during postgraduate studies. UK respondents were more likely to work full-time and part-time than EU and OS respondents.

And that's always stressful having to work, and obviously other people were saying, you know, when you have to balance quite a full-time course, which is quite, you know, intense, which you want to do really well at because you've paid for it, with working or trying to find work. It is quite, it can be quite stressful.

Managing money

- Full-time respondents were less confident about *managing money* (28.3%) than part-time respondents (18%). This is likely due to the fact many part-time respondents will be able to work thus have an income whilst studying.
- Male respondents were more confident (69.3%) than females (62.5%).
- Although all age groups did not differ in their confidence levels about managing money, there were differences in the *not confident* answers. Respondents under 25 and 26–30 were less confident (27.9% and 28.4% respectively) than respondents aged 41–50 (11.6%) and above 51 years old (5.6%).
- OS respondents (73%) were more confident than UK (64.1%) and EU respondents (65.2%).

I pay rent as well but, erm, I'd saved up most of it in the summer but, erm, still have to work at the weekends. Erm, obviously when the deadline's coming up now I'm saying no to work on the weekends as well. It's getting a little bit harder to kinda juggle my money and save a little bit here and there.

Yeah, mostly money, money's quite tight, I'm working a lot which means I don't have a lot of time for all our coursework, which is then more stress.

Making friends

- Full-time and part-time respondents were confident about *making friends* with 79.4% and 74.3% respectively. However, when analysing the *not confident* levels, full-time respondents (16.3%) were noticeably less confident than part-time respondents (10.7%).
- Engineering respondents were the most confident (82.9%) and mathematical sciences the least confident (58.6%). The other disciplines' confidence levels ranged between 70.7% and 79.7%.

These findings could in part be explained by the comments arising from the focus groups where respondents explained that they did not have time or were not worried about making friends on their course because it was only for a year and it was very different to the undergraduate experience. Full-time students spend more time at university than part-time students in a high-pressured environment and part-time students may have more opportunities to make friends in other social contexts related to work unlike full-time students.

It's a bit sad when you study at MSc because you have to start with a new group and some of them are committed and some of them aren't. Some of them study, some of them don't... at undergrad I had loads of friends, some of them went to Scotland and some went to Middle East. I feel as though I was just left over. So when you start MSc you have to find a new group. It was a bit hard for me but I always socialise with them on Facebook and Twitter but it just takes time to start with another group.

I just don't have the time to make friends what with my workload, undertaking part-time work and looking after my family…

Looking after health and welfare

- Full-time respondents were more confident about *looking after their health and welfare* (83%) than part-time respondents (74.8%).
- Respondent under 25 (85.1%) were more confident than respondents aged 31–40 (73.3%) and 41–50 years old (67.1%).
- EU respondents were least confident (18.2%) in comparison to UK respondents (9%).

So I work at local pub, and I've found that it's basically meant that the very little free time that I would have just to, kind of, recuperate really, I lose because I work. And as a result of that I've, kind of, I've noticed that I've been a lot more tired whilst doing the masters, and I've got ill a lot more. And I think it's just because I have no time to do nothing any more, which… just in terms of wellbeing really.

Coping with the travelling to university

- Full-time respondents were more confident about *coping with the travelling to university* (84.5%) than part-time respondents (68%).
- First generation respondents were less confident (78.1%) in comparison with second generation respondents (85.5%).
- Respondents aged 41–50 were less confident (61.4%) than the other age groups (ranged between 76.5% and 85%).

Travelling to and from university can be irritating. I travel by train and the train times don't fit my schedule very well. Some days I'm at university for 11 hours and don't get home till 9:45pm.

Getting involved in university life

- Respondents coming straight from university were more confident about *getting involved in university life* (78.7%) than respondents coming straight from work (69.5%) or Other situation (71.1%).
- Respondents aged 41–50 years were less confident (52.9%) compared to the other age groups (ranged from 64.4% to 78.7%).
- OS respondents were more confident (79.4%) than UK respondents (70.6%).
- Engineering respondents were the most confident (80.1%) and biological sciences the least (67.6%). The other disciplines' confidence levels ranged between 70.5% and 72.6%.
- Full-time respondents were more confident with getting involved in university life (76.9%) in comparison with part-time respondents (55.8%).

What I noticed this year is that I don't have a social life - it's just gone. Undergrad years I was part of the society, I ran the Biomedical Society, there is no time for that anymore. Social life out the window. It's been: go home, study; go to university and continue to study.

Looking for a suitable accommodation

- Respondents from OS were more confident *looking for a suitable accommodation* (83.6%) than EU (72.5%).

Coping with the standard of work

- Male respondents were more confident about *coping with the standard of work* (77.3%) than female respondents (61.4%).
- Engineering respondents were more confident (79%) compared to computer science (66.7%) and biological science respondents (62.5%). The other disciplines' confidence levels ranged between 72.4% and 75.6%.

I have had problems with the timescales and deadlines because of having to work part-time. I could have benefitted from a little more flexibility of the project deadlines.

Like, I hardly meet up with anyone or see anyone because I'm so busy in my room or in the library trying to catch up with work, which I think I miss the social side of my undergraduate degree. Because no matter how hard the workload was I still had enough time just to meet up with some friends.

In all honesty, I am really struggling with university this time round. The work load is similar to what I was expecting, but I don't feel I am coping with it very well.

Comparing PEP and other UK, EU and OS respondents confidence levels

When comparing PEP and other UK, EU and OS respondents, no differences were found in the levels of confidence for *coping with balancing life demands and study*, *managing money*, *coping with the travelling to university*, and *looking after my health and welfare*, but there were some differences. PEP respondents were:

- *more confident* getting involved in university life (80.8%) in comparison to other UK, EU and OS respondents (70.9%).
- *more confident* in making friends (84%) in comparison with other UK, EU and OS respondents (76.7%).

UK non-PEP were *noticeably less confident* in coping with the standard of work (25.5%) in comparison other UK, EU and OS respondents.

iii. Anxiety levels

Source: Entry to Study survey

Respondents were asked to rate their anxiety level on entry to their studies. Table 45 shows the different levels of anxiety for the aggregate sample, different domiciled groups and UK PEP and non-PEP respondents. All levels of anxiety have been combined in Table 45 under *anxious of some kind*. Of the sample, 13% stated that they were unsure about their anxiety levels, but for the purpose of reporting the relevant findings, these respondents have been excluded.

The anxiety levels for the aggregate sample, the PEP and UK non-PEP respondents were similar. When comparing only UK respondents, PEP scholarship respondents were more likely to be *not anxious at all* (25.7%) in comparison to UK non-PEP (17.9%).

Table 45. Anxiety levels

Anxiety level	Aggregate	UK	EU	OS	PEP	UK non-PEP
Anxious of some kind	80.8%	78.7%	77.7%	86.6%	74.3%	82.1%
Very anxious	9.2%	10.0%	9.1%	7.9%	7.9%	11.3%
Anxious	20.2%	17.9 %	19.8%	25.0%	17.0%	18.7%
Slightly anxious	51.4%	50.8%	48.8%	53.8%	49.4%	52.0%
Not anxious at all	19.2%	21.3%	22.3%	13.4%	25.7%	17.9%

There were no generational differences in terms of anxiety levels, but there were gender differences. Of the female respondents, 76.9% stated that they were *anxious* in some way compared to 66.7% of males.

Although full-time and part-time respondents' anxiety levels were similar, when *not anxious at all* was analysed, a smaller number of full-time respondents felt *not anxious at all* (15.4%) compared to part-time respondents (23%).

PEP respondents with a 100% scholarship had less anxiety (58.6%) than those holding a 60% (67.2%) and £1000 scholarship (74.3%). In addition, 29.3% of the 100% scholarship holders were *not anxious at all* in comparison to 16.4% of the 60% scholarship and 17.1% of the £1000 scholarship respondents.

Source: Focus groups

In the focus group sessions many students shared how stressed they were about their postgraduate courses, mainly because of finance, debt and workload.

> *Without a doubt I'm struggling desperately. I've split from my husband and I'm now gone from a fairly comfortable life to living on the breadline, really, and a lot of my expenses have gone on the credit card in the hope that when my divorce is finalised I'll be able to clear my bills. I question a lot what I'm doing and whether it's the right thing but I think it will, for my future and earning potential it is, you know, a positive step for me, and I've looked at going back to work, but with costs of the child care at the moment, with my little one at two, in some sense I feel like this is the best option, it gets yeah really hard.*

I am paying for the course with the Professional and Career Development Loan, which despite applying for in July, only came through in February. So this has cause[d] a lot of stress with not being able to pay accommodation and tuition fees.

So I think one of the major difficulties with this course is actually just financial stress, it's really difficult. That's probably, it bothers me more than the workload, the idea of making rent and buying food is just really difficult. Yeah, I mean, is like £350 a month and then plus food, so I have to work about 30 hours a week just to make ends meet, and then you're constantly on the back foot. And if you want to do things like pay for professional memberships or, you know, get subscriptions to magazines, or do some unpaid work experience you, kind of, can't. So that's a bit of a disadvantage.

I feel like there is a constant high stress level, because even if you do have time to relax, there's just like so much to think about, you can't really, well I can't really switch off at all.

f. Support

i. Desired support

Source: Entry to Study survey

Respondents who stated that they had anxieties were asked to state what help, if any, might help reduce their anxiety levels. The suggestions provided fell into six main themes: finance/ funding, course/learning and teaching, communication, support, travel/transportation, sports and exercise (see Table 46). The sub-themes for each one of these themes are showed in the table 46. Study- and communication- related suggestions were the most prevalent.

Table 46. Desired support

Themes	Sub-themes
Finance/Funding	Knowledge of funding availability Keeping a budget of expenses Affordable accommodation Time to pay the tuition fees Larger income
Course/Learning and teaching	Support in getting back into learning Adaptation to postgraduate life Timetables in advance Face to face meetings with tutors Effective support from lecturers Better self-time-management Getting clear feedback Advice on how to cope with PG level of study Placements opportunities
Communication	Information about studying at a postgraduate level Information about coursework and exams Good induction periods Clarity of information Lack of uncertainty Lecturers communication and interpersonal skills
Support	Study support Peer-support Counselling Childcare Current employers support
Travel/Transportation	Commuting difficulties More parking spaces Efficient bus routes
Sports and exercise	Sports facilities

ii. Anticipated use of university support services

Source: Entry to Study survey

Respondents were asked which services they expected to use whilst studying. More than half of the respondents stated that they expected to use *academic support* and *careers/ employment services* (see Table 47).

Table 47. Anticipated use of university support services by domiciled and scholarship status

Type of support	Aggregate	UK	EU	OS	PEP	UK non-PEP
Academic support	64.5%	59.3%	58.0%	77.8%	60.3%	58.9%
Careers and employment	64.4%	62.4%	64.5%	68.8%	74.9%	53.5%
Sports facilities	41.8%	34.9%	57.2%	50.0%	41.7%	29.8%
Health and wellbeing	33.7%	25.3%	35.5%	50.3%	28.0%	23.7%
Financial advice	24.8%	25.4%	18.8%	26.4%	29.3%	22.5%
Housing advice	6.9%	2.8%	11.6%	13.9%	2.6%	2.8%

When analysed by different variables, interesting and noticeable differences emerged.

- PEP respondents were more likely to use *careers and employment* support services (74.9%) in comparison to UK non-scholarship respondents (53.5%) and more likely to use *sports facilities* (41.7% and 29.8% respectively).
- Second generation respondents were more likely to use *careers and employment support* services (68.8%) in comparison with first generation respondents (60.3%).
- EU and OS respondents were more likely to obtain *housing advice* than UK domiciled.
- As the age of the respondent increased, the less likely they were to use the *careers and employment support services* (respondents under 25, 68.8%; 26–30, 65.6%; 31–40, 57.2%; 41–50, 42.3% and above 51, 38.9%).
- Second generation were also more likely to use arrange of services compared to first generation.
  - *Sports facilities*: 44.9% compared to 37.4%
  - *Health and wellbeing services*: 39% compare to 30.3% respectively
- Full-time respondents were more likely to use a range of services compared to part-time respondents.
  - *Careers and employment*: 67.9% in compared to 47.1%
  - *Sports facilities*: 45.3% compared to (24.3%)
  - *Health and wellbeing*: 35.9% compared to 22.8%
  - *Housing advice*: 8.1% compared to 1%

Interestingly, no noticeable differences were found for respondents coming from different routes, but for academic support. Respondents coming *straight from work* and from *other routes* were noticeably more likely to use *academic support services* (67.6% and 70.3% respectively) compared to respondents coming *straight from university* (58.5%). This result may suggest that respondents *coming straight from work* may feel less confident about their academic abilities (as they have been away from the academic environment) and therefore are more inclined to seek support in this area than respondents who come *straight from university*. Other interesting findings include:

- respondents aged under 25 were less likely to use *academic support services* (59.9%) than respondents over the age of 30, regardless of entry route (other ages ranged between 68.9% and 74.6%);

- respondents aged under 25 were also more likely to use *sports facilities* (47.2%) than respondents over 30 years of age (other ages ranged between 16.7% and 37.8%);
- male respondents were more likely to use *sports facilities* (45.7%) compared to females (35.3%); and
- biological sciences respondents were less likely to use *academic support* (56.8%) in comparison to engineering and computer sciences respondents (69.3% and 70.7% respectively).

iii. Support and information to improve the overall student experience

Source: Entry to Study survey

The respondents were asked to suggest any specific help or information that might have helped them on their course or that could help their upcoming overall experience at university. The suggestions fell into five main themes: university communication, course, support, career prospects, social/recreational. The sub-themes for each one of these themes are shown in the Table 48.

Table 48. Helpful support and information

Themes	Sub-themes
University communication	Study pack (set of all resources for PG course) Prior information on courses and modules Visit to the university facilities Library access Timetables
Course	Sample coursework Internships Links and contacts with industry Creative learning Independent learning Guidelines on time to study Online lectures
Support	Academic support Financial support Language courses Accommodation Special education needs
Career prospects	Career and employment support
Social/recreational	Greater engagement with the campus community/university life Opportunities to meet fellow students before the course Study groups

Source: Focus groups

The focus group sessions provided useful information about what would help during their PG studies. As in the Entry to Study survey, the majority of the shared suggestions related to university communication, course support and general support.

University communication

> *I think that one of the things that they could have done (…) was before I started uni I used to go on the website just to have a look at the course itself and to see, they didn't give much information because I was really looking for maybe like recommended textbooks, and how they break the modules down, just so that I could read around there before I started to study, but that was not available. It just had brief summary of what the course was about but not a break down the modules we would be doing or things like that. So I think that could have been something to improve on knowledge of the course before we had started it.*

Course

I just think a little bit more help with the assessments and making it clear what they are expecting and I think it was only recently that I've been given marking criteria for masters level, would have been useful in the start of the year as well as explaining the differences between masters and undergraduate.

There's a module to do an internship, which I decided to do 'cos I thought that would be brilliant to use, to have skills when I want to get a job, so I immediately took that particular module and it was really good, and I would hope that continues with the particular course that I'm doing, it's brilliant.

Support

I think it might be a good idea (…) to have like tick sheet when you enrol? Actually on your first day here, which says something like: do you have any problems? And then someone could pick up on that (...) right in the beginning. So you don't have to go out to them and tell them. It's all in a piece of paper and then they come to you if you have got problems and need help. In that way, you are dealing with it first hand.

(…) if university can support anybody with children, especially the young one, after school or something it would be really great for me or somebody like me to entertain children in specific periods of time especially when schools are closed.

(…) Because that's a problem in England: they really look after undergraduate students, but postgraduate is like "if you want to do, you do this", but they don't help with accommodation, fees. I think it's lack of support as well.

(…) more information on the scholarships you can get and having more scholarships 'cause only a few people can get it, and there are so many people doing a masters degree. And bit more of guidance or help on how you can fund it.

g. Comment

Reasons for study and study expectations

The findings in this chapter highlight that fully the majority of respondents saw undertaking postgraduate study as a means of fulfilling their future employment expectations, whether that was through accruing specific knowledge or obtaining specific skills. However, as Chapter 8 demonstrates, there is a disconnect between students' and employers' expectations of postgraduate qualification. A student's motivations for undertaking a PGT qualification will affect their expectations, interactions and experiences. For example, those seeking vocational experience from the course are likely to be disappointed if the course is research focused. The challenge for institutions is to support students studying on the same course who have different motivations and expected outcomes.

The chapter has highlighted that understanding applicant behaviour is not possible due to the absence of an effective and comprehensive national application system being available. If such a system was adopted by the sector, as is the case at undergraduate level, it would provide intelligence on an applicant's demographic characteristics; how many and the type of universities they applied to; and whether they had enrolled, deferred or given up on the idea of studying. The recording of an applicant's status varied between the participating institutions. Whilst some kept all the application offer codes on an applicant record as the individual passed through each application stage, others only kept their current status. The benefit of keeping all the application codes is that an institution can effectively track the journey and behaviour of an applicant. This would be particularly helpful in identifying applicants who defer once or are multi-deferrers. In many of the participating institutions, when an applicant deferred, a new application was created for the upcoming year that they anticipated entering. This meant that an applicant could have multiple records instead of one. Some institutions are adopting databases that are more customer relationship management (CRM) focused, which can greatly assist in exploring this behaviour.

The findings demonstrate that the majority of respondents expected a higher-quality experience than at undergraduate level and that certain student characteristics such as age, generational and domiciled status were significant in contributing to these expectations. It has

been long recognised at undergraduate level that effectively managing student expectations by providing targeted support, information and advice, and supporting the transition into study in the academic and non-academic spheres can impact on the entry, progression, resilience and success of the student (e.g. Morgan, 2013b; Thomas, 2012) and this study suggests that it is the same at PGT level. As student fees at all levels of study increase, so too is it likely that student expectations will also continue to rise. The challenge for institutions is to provide an experience that leads to high student satisfaction and low levels of student complaints.

Supporting students in, through and out of PGT study

The findings illustrate that PGT students had high levels of anxiety in academic and non-academic areas. The finance-and academic-specific issues and support requirements will be discussed in more detail in Chapters 6 and 7 respectively. Balancing paid work, study and life demands are known to affect a student's ability to fully engage in their studies at undergraduate level (e.g. Stuart et al., 2008; Morgan, 2013b) and this project demonstrates the similarity at postgraduate level. It is reasonable to speculate that as a student gets older, life demands that could affect study time, such as paid work and caring responsibilities, will increase. Although this project did not measure anxiety levels with achievement outcomes, the evidence reported in undergraduate students is compelling (e.g. Andrews and Wilding, 2004; Wong et al., 2006) and in the absence of evidence to prove the contrary at PGT-level, it would be reasonable to speculate that the same could be applicable at PGT-level. The multifaceted characteristics of the students, and their competing life demands, provide institutions with the challenge of not only delivering targeted and high-quality services, but also of supporting a diverse student body to help them manage their study and life anxieties more effectively.

Providing dedicated support rather than expecting PGT students to utilise services, systems and processes designed for undergraduates requires funding and resources, and careful consideration of what postgraduates need. This could include ensuring that support services for part-time students, who study during the evening, are open and do not just operate during 'normal' working hours of 9am to 5pm, or rewriting the support literature so that it is specifically targeted at PGT students rather than adopting a one-size-fits-all approach. Respondents stated that they wanted honest information during the application and entry process about the difficulties and issues they could face at PGT level of study. By being aware of and understanding the issues, they could prepare themselves more adequately and make better-informed decisions. Respondents wanted to be provided with 'real' student experiences and not student 'role model' experiences.

Support requirements

The findings highlight that respondents required, wanted, were aware of and engaged with different information and support depending on their situation and circumstances. The PTES survey asks students whether they are 'aware of various support services' and it commonly gets a low response in comparison to other questions suggesting that institutions are poor at providing this information. However, in the Entry to Study survey, the question posed was whether students intended or expected to use a range of support services during their studies. The response rate was similar to the PTES question cited above. This suggests that what services students are aware of when they complete the PTES survey is dependent on their intention or expectation of using them, and if they do not intend using them, then they do not need to be aware of them. Questions in surveys relating to awareness of support services may be better phrased along the lines of 'were you made aware of the support services on entry and throughout your studies?'.

Respondents suggested different forms of academic and non-academic support based on their expectations and requirements and for many, communication being a key issue. The challenge for institutions is to effectively manage PGT applicant and student expectations through the provision of targeted and accessible information from first contact until after graduation.

h. Summary

This chapter has highlighted a number of areas that could benefit from further research when considering PGT students' motivations for undertaking this level of study. They include:

- further examination of whether the factors for choosing a university between the 9E and Russell groups are reflective across the sector and the impact it may have on marketing and recruitment strategies;
- further research on motivations of graduates under the £9K-a-year scheme entering PGT STEM study;
- further research on social class and generational status as part of the widening participation debate;
- consideration of a more effective sector-wide admissions system for PGT applications;
- sector-wide data review to identify useful data and standardisation of data collection; and
- introduction of CRM systems to enable applicant behaviour to be effectively analysed and the analysis of data produced by existing CRM systems that are already in use.

6. Finance

Financing postgraduate taught study is recognised as a major issue for the sector in the UK and considered to be the primary reason for the declining numbers participating in PGT-level study. Obtaining loans to fund PGT study is very problematic as the only funding currently in existence are career development loans provided by the Co-operative and Barclays Banks, which are hard to obtain and as a result only constitute for less than 10% of funding at PG level (Robinson, 2014). The research available suggests that the funding of fees and living costs associated with postgraduate study are often met through family support, savings and combining work with study (Stuart el at, 2008; Morgan, 2013a; Soilemetzidis et al., 2014).

Exploring the funding methods of applicants and students throughout the student lifecycle as well as the financial barriers that prevented successful admission in, through and out of study was a key aim of the project. The findings below are taken from the Non-enrolment, Entry to Study, Withdrawal of Enrollers and Finance surveys. Where appropriate, it refers to the PTES findings for the six PEP institutions participating in that survey in 2015. Due to the number of surveys being reported on and the type of analysis undertaken, this chapter is the largest in the report. As well as the common variables being reported on such as domiciled status, age and gender, the differences between the UK domiciled groups (i.e. UK PEP and UK non-PEP) are also reported due to the finance and funding issues currently being discussed by government and the sector.

a. Key points

Expected source of PGT funding

- Respondents in the Non-enrolment, Entry to Study and Finance surveys reported that the primary method of funding PGT STEM study was *parents and guardians*.
- *Parents and guardians* was the primary source of funding for EU and OS, full-time, second generation, social classes 1–3 and 5, those under 25 years of age and coming straight from university.
- UK domiciled respondents were more likely to be funded primarily by *savings* and *salary*.
- Part-time respondents were reliant on *salary* then *employer sponsorship*.
- Female respondents regardless of generational status received equal support from *parents and guardians* whereas first generation males were likely to receive less support than their second generation counterparts.

Impact of funding on study choices

- For the vast majority of students, the funding method impacted on their study choices, with the primary impact being to study full-time.
- The full-time choice was more prevalent amongst EU and OS, under 25 years of age, second generation and social classes 1–4.
- Part-time mode was primarily chosen by UK respondents, those coming straight from work and first generation and mature students.

Actual source of funding

- The main sources of funding expected in the Entry to Study survey were the same as reported in the Finance survey. However, the proportion of *expectation* versus *actual* funding was lower in the Finance survey and reliance on one particular funding method decreased with reliance on multiple options.

Searching source of funding

- *Searching online* was the most common method of searching for funding information for one third of the respondents.
- One fifth of the aggregate sample did not look for funding sources at all.
- *Searching online* was more likely to be used by those respondents who were under 40 years of age, full-time, PEP or EU and OS domiciled.
- Part-time, straight from work and mature respondents were more likely to look via or to employers.

Financial barriers to study

- Not being able to obtain financial support was cited as barrier for Group A enquirers and the major barrier for non-enrollers in Groups B–D.
- Financial difficulties with *living costs* and *paying the fees* were the primary reasons cited by the Group E withdrawers.
- Difficulties paying the *fees* and *living costs* resulted in some respondents changing mode of study, considering withdrawing or intermitting.

Importance of fee levels

- Fee levels were cited (out of 17 options) as the fourth important criteria for Groups A–D in choosing a course.
- Fee levels were *very important* for all types of students.
- The importance of fee level increased as respondents progressed in their studies due underestimating the costs of PGT study and the impact of debt levels in general.

Previous study debt and impact

- UK respondents were more likely to have prior study debt compared to EU and OS domiciled and the debt was higher.
- PEP respondents' perception of debt was higher than UK non-PEP, but when comparing actual debt levels, there were no differences, thus raising the question of debt perception.
- There were no major differences in debt levels reported within the UK sample regardless of demographic variable.
- Debt did not impact on choosing to undertake PGT study for three quarters of the aggregate sample in the Entry to Study survey, but it impacted on course choice such as influencing mode of study, delayed entry and choosing a local university.

Expected PGT study debt only

- The majority of respondents regardless of domiciled and PEP status and mode of study expected to have a debt level for their *PGT study only* of less than £10K.
- A higher number of EU and OS respondents were more likely to expect debt levels of £15–25K in comparison to UK domiciled due to accommodation costs and work restrictions.
- A higher number of UK non-PEP respondents *expected* debt levels of up to £15K compared to PEP respondents, suggesting that the impact of the PEP scholarship would reduce expected debt levels.

Total study debt (inclusive of possible UG and PGT)

- EU and OS respondents report lower *total* study debt levels to UK respondents.
- Mature UK domiciled respondents were more likely to have less study debt compared to those under 30 years of age.

Financial anxiety

- Three quarters of all respondents in the Finance survey stated they were *anxious in some way* about their finances.
- Respondents over 41 years of age were less *anxious* than those under 30 years of age.
- Respondents in social classes 3 and 4 were *more anxious* than those in social classes 1 and 2.

Financial support

- The top forms of helpful support that respondents stated they would like to receive were a *bursary or grant* followed by help with *transport costs*, *discounted accommodation* and then a *discount on their fees.*
- Nearly three quarters of the sample suggested that a *discount for achieving a 2:1 classification* at another university (for non-alumni) would be a valuable enticement.

Viable funding options

- Of the aggregate sample, nearly two-thirds stated that a mixed funding method that could include a fee discount, loan and self-funding would have been their most viable funding method when starting their studies. Government-backed loan schemes were not a popular option.
- UK respondents were more likely to prefer having a loan where they could combine their UG and PGT loans and pay it back over a longer period of time.

b. Funding of PGT study

Detailed analysis has been undertaken to explore how respondents *intended* and *actually* did fund all aspects of their studies, just their fees and just their living costs. The fees and living cost findings were very similar so for the purpose of this section, only the overall *expected* and *actual* funding findings are reported.

i. Expected method of funding PGT study

Source: Non-enrolment survey Groups A–D

The funding intentions for applicants who did not enrol with the 9E Group are highlighted in Figures 8 (Group A) and 9 (Groups B–D). For Groups A and B–D, the top five funding intentions were the same although ranked slightly differently. For Group A, the intention for funding a PGT course was *savings*, followed by *parents/guardians*, *salary, bank loan* then a *scholarship*. For Groups B–D, *parents/guardians* was followed by receipt of a *scholarship* of some kind, then *savings, salary* and a *bank loan*. It is important to note that these groups contained a high number of EU and OS respondent. Of the Group D respondents who stated that they intended obtaining a scholarship, all were OS respondents and seeking a scholarship from their government.

Figure 8. Group A funding intentions

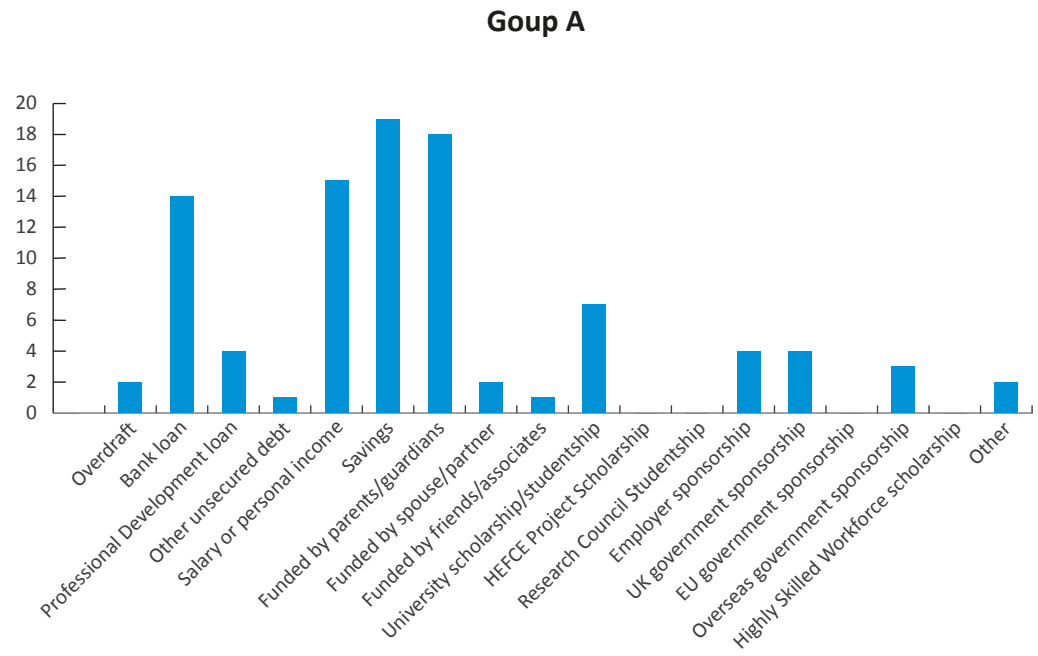
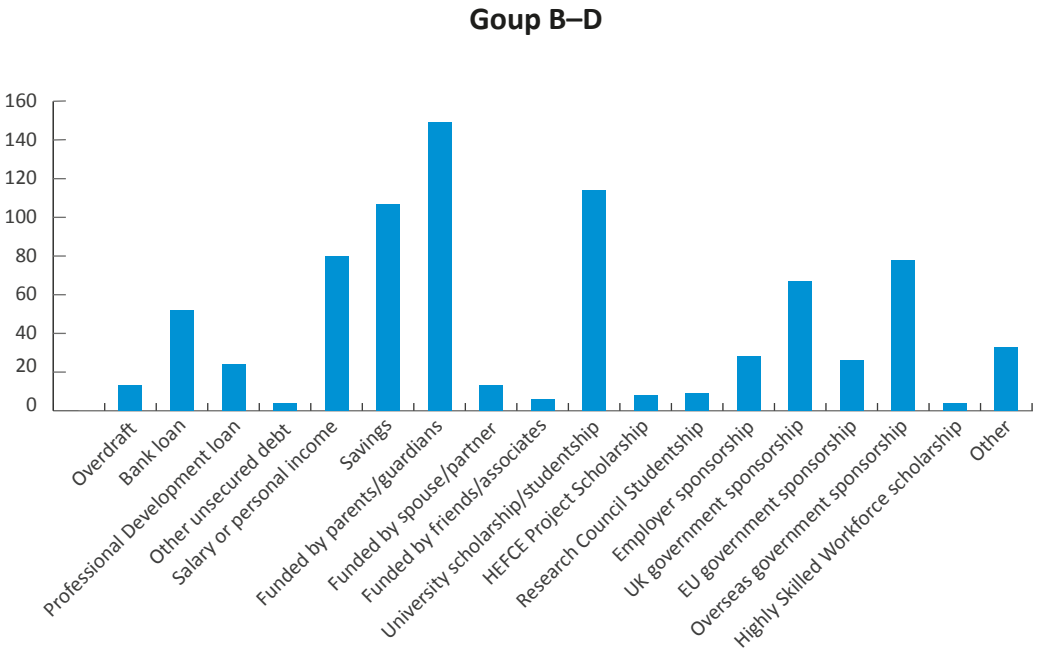
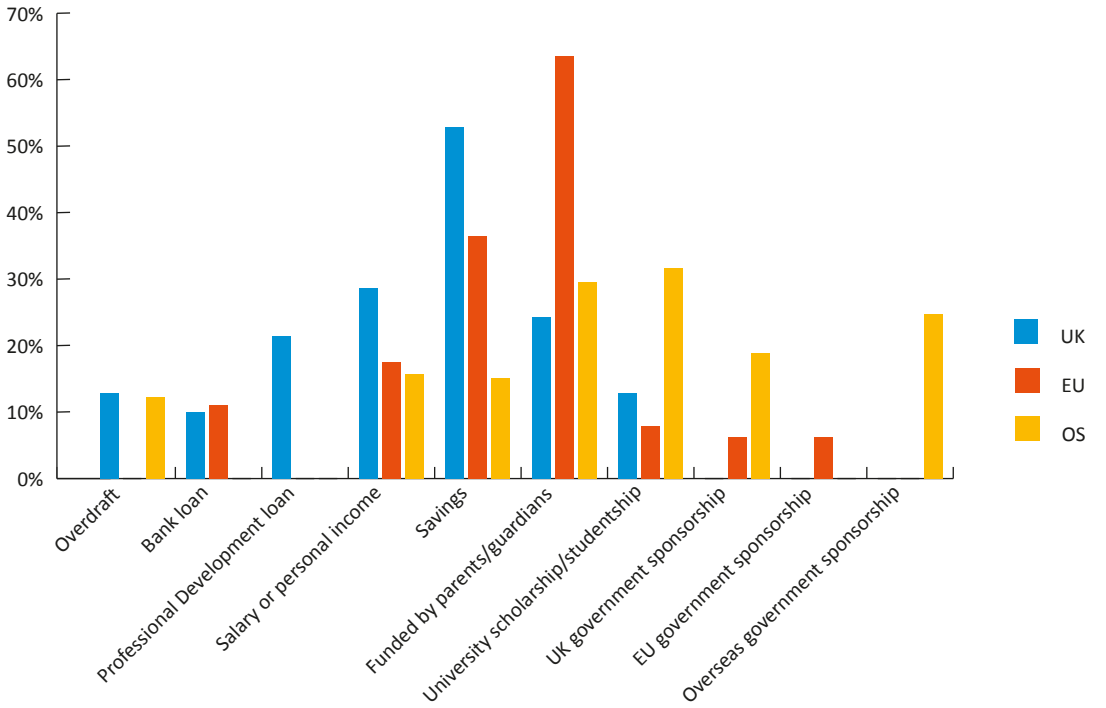


Figure 9. Groups B–D funding intentions



When analysed by domiciled basis, although *parents/guardians* and *savings* were cited by all domiciled groups, overseas enquirers in Group A and applicants in Groups B–D cited more frequently various types of scholarships provided by government and universities (see Figure 10). Gender did not appear to impact on funding by a parent intentions.

Figure 10. Groups B–D funding intentions by domiciled status



Source: Entry to Study survey

The survey asked what the main *expected* sources of funding were for postgraduate study. Respondents were asked to select all that applied. The top four responses were funding by *parents and guardians* (32.9%), *savings* (26.6%), *salary or personal income* (18.4%) than a *loan* (14.1%) (see Table 49). Funding options such as *overdraft* and *unsecured debt* were negligible (2.4% and 1.1% respectively). Funding by *spouse or partner* only constituted 2.8% although 15.7% of the aggregate sample stated they were married and 13.9% were living with a partner.

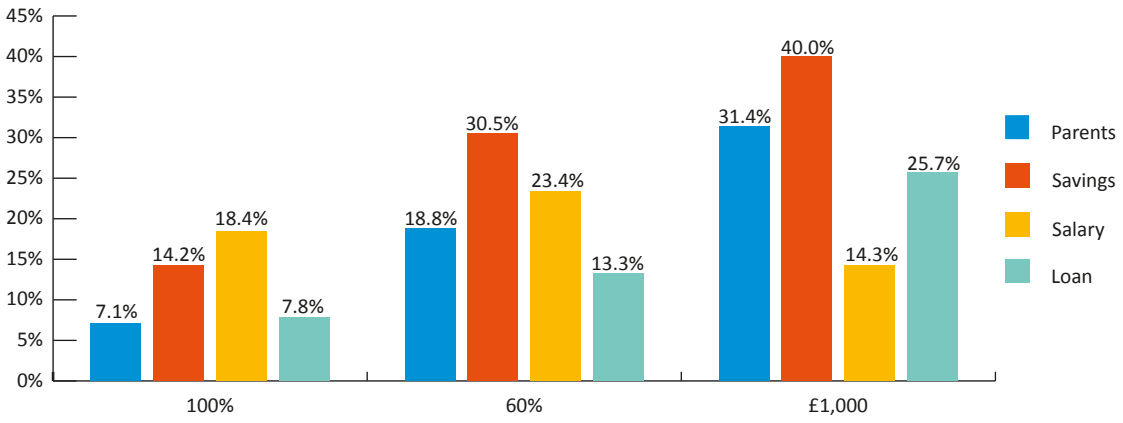
The *expected* main source of funding for almost a half of the PEP respondents was the *PEP scholarship* (47.6%). Although the top four ranked reasons are similar for all domiciled groups, EU and OS relied more on *parental/guardian* support compared to their UK counterparts who were more reliant on *savings, salary* and *personal income* and *loans.*

Table 49. Expected sources of funding PGT study

Sources of funding PGT study	Aggregate	UK	EU	OS	PEP	UK non-PEP
Funded by parents/ guardians	32.9%	20.1%	54.3%	50.9%	15%	23.9%
Savings	26.6%	28.7%	35.5%	19.3%	23.8%	31.9%
Salary/personal income	18.4%	25.2%	12.3%	7.1%	20.2%	28.4%
Loan	14.1%	14.9%	8.0%	15.1%	12.4%	16.7%
University scholarship/ studentship	9.4%	14.2%	1.4%	2.3%	30.6%	2.3%
HEFCE Project Scholarship	6.4%	10.7%	0%	0%	24.8%	0%
Employer sponsorship	5.8%	6.6%	0.7%	6.0%	0.3%	11.0%
Overseas government sponsorship	4.2%	0.3%	0.7%	13.9%	0%	0.5%
Funded by spouse/partner	2.8%	2.8%	2.9%	2.8%	2.3%	3.1%
Overdraft	2.4%	4.0%	0.7%	0%	2.6%	4.9%
UK government sponsorship	1.3%	2.1%	0%	0.3%	2.9%	1.4%
Other unsecured debt (e.g. credit card, payday lender)	1.1%	1.2%	0.7%	0.9%	0.7%	1.6%
EU government sponsorship	0.8%	0.3%	5.1%	0.3%	0%	0.5%
Highly Skilled Workforce scholarship	0.6%	0.1%	4.3%	0%	0%	0.2%
Funded by friends/ associates	0.4%	0.3%	0.7%	0.6%	0.3%	0.2%
Research Council Studentship (e.g. ESRC, EPSRC, AHRC)	0.2%	0.4%	0%	0%	0.3%	0.5%

For PEP respondents, as the level of scholarship decreased, reliance on *savings*, *loans* and *parental/ guardian* support increased (see Figure 11). There was no clear pattern with reliance on *salary/ personal income*. When analysing the PEP respondents only, those in receipt of a £1000 scholarship were more likely to have a *loan* as main source of funding compared to those who had a 100% or 60% scholarship. £1000 and 60% PEP respondents were both more likely to use savings and have *parental/guardian* support as their main source of funding in comparison to 100% PEP recipients.

Figure 11. Expected main sources of funding of PEP scholarship amount



There were notable *expected* funding social class difference (see Figure 12). The most striking was that as the social class of a respondent decreases, the reliance on *parental/guardian* support also decrease. For the lower social classes, *salary/personal income* and *savings* were the main sources of funding.

Figure 12. Expected main sources of funding by social class

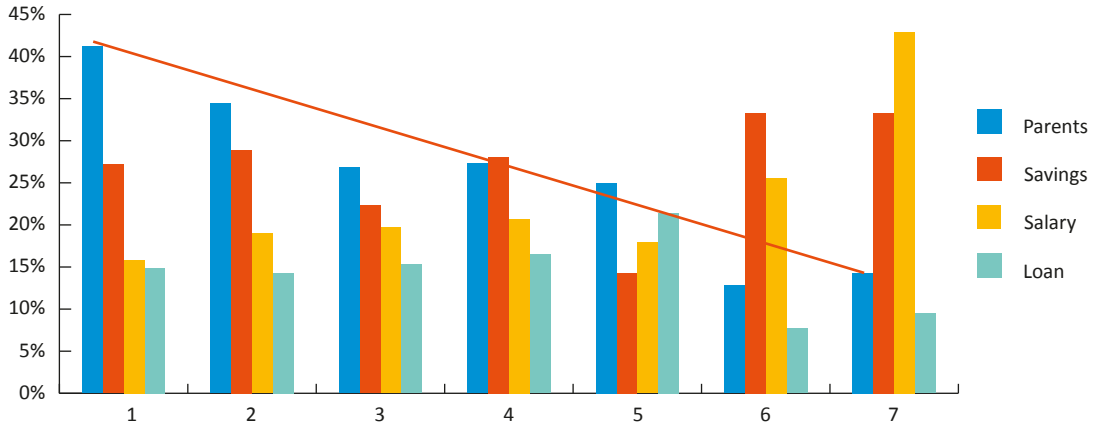


Table 50 provides the detailed figures of the breakdown in funding. The main source of funding for respondents in social classes 1–3 and social class 5 was *parents/guardians* (see Table 50). For respondents from social class 4 the main sources of funding were *savings* and *parents/guardians*; for respondents from social class 6 was *savings*; and for respondents of social class 7 was *salary/personal income*. Respondents from social class 1 were more likely to be funded by *parents/guardians* (41.2%) in comparison to respondents from social classes 6 and 7 (12.8% and 14.3% respectively).

Table 50. Expected main sources of funding within social class

Main source of funding	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Funded by parents/guardians	41.2%	34.4%	26.8%	27.3%	25.0%	12.8%	14.3%
Savings	27.2%	28.0%	22.3%	28.1%	14.3%	33.3%	33.3%
Salary/personal income	15.8 %	19.0%	19.7%	20.7%	17.9%	25.6%	42.9%
Loan	14.9 %	14.3%	15.3%	16.5%	21.4%	7.7%	9.5%

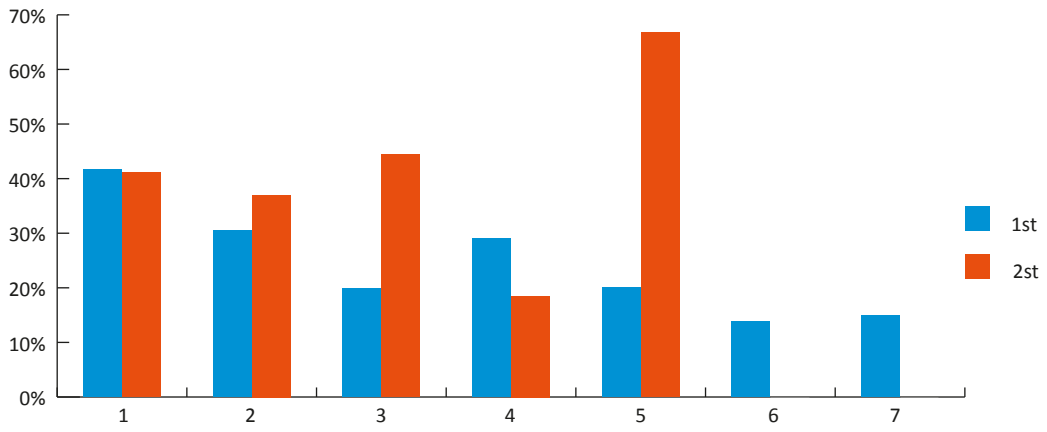
When generational status was examined, the top five ranked sources for first and second generation respondents were the similar to the aggregate rankings. The rankings for the different generational statuses were also the same, but with different proportions especially for parental support (see Table 51).

Table 51. Sources of funding PGT study by generational status

Sources of funding PGT study	First generation	Second generation
Funded by parents/guardians	27.1%	38.9%
Salary/personal income	21.2%	15.6%
Savings	24.9%	28.3%
Loan	14.1%	14.2%
Employer sponsorship	7.5%	3.9%

Proportionally, second generation were more likely to be funded by *parents/guardians* compared to first. Figure 13 shows that parental support for first generation respondents decreased as social class decreased.

Figure 13. Parental funding by social class and generational status



When examined by mode of study, the main source of funding for part-time respondents was *salary/personal income* (43.2%) followed by an *employer sponsorship* (20.9%) (see Table 52). *Parental/guardian* support was negligible. For full-time respondents, *parental/guardian* support (38.4%) followed by *savings* (29.0%) were the most cited sources of funding and they were more likely to have a *loan*.

Table 52. Sources of funding PGT study by mode of study

Sources of funding PGT study	Full-time	Part-time
Funded by parents/guardians	38.4%	5.3%
Salary/personal income	13.4%	43.2%
Savings	29.0%	14.6%
Loan	15.3%	8.3%
Employer sponsorship	2.7%	20.9%

When gender, generational status and funding method were examined, within the first generation sample, slightly more females (29%) stated that they were getting help with funding from *parents/guardians* compared to first generation males (25.9%). Within the second generation sample, the *parental/guardian* help provided to females was noticeably higher than first generation females (36.5%). However, parental contribution for second generation males (40.5%) was noticeably higher than for first generation (25.9%). *Parental/*

guardian funding for females regardless of generation status appeared to be similar, but for males, second generation students were more likely to receive *parental/guardian* funding than their first generation counterparts.

The main source of funding for respondents under 25 years old was *parents/guardians* (45.8%); for respondents above 26, the primary source was *savings* or *salary/personal income* (see Table 53).

Table 53. Sources of funding PGT study by age

Sources of funding PGT study	Under 25	26–30	31–40	41–50	Above 51
Funded by parents/ guardians	45.8%	26.3%	8.3%	2.8%	5.6%
Salary/personal income	12.0%	23.3%	28.3%	35.2%	22.2%
Savings	23.8%	34.1%	27.8%	19.7%	33.3%
Loan	19.3%	8.5%	7.2%	7.0%	0%
Employer sponsorship	1.0%	7.8%	14.4%	16.9%	27.8%

Respondents who were coming straight from work cited *savings* as their first source followed by *salary/ personal income* (see Table 54). For respondents coming straight from university or other routes, *parents/guardians* were their major source of funding followed by *savings*. There were no social class differences. However, although there was no major generational difference for respondents coming straight from university, of those coming straight from work, second generation were more likely to get *parental/guardian* support than first.

Table 54. Sources of funding PGT study by entry route

Sources of funding PGT study	University	Work	Other
Funded by parents/guardians	42.6%	20.4%	40.1%
Salary/personal income	14.8%	25.9%	10.8%
Savings	24.4%	29.5%	22.8%
Loan	14.0%	14.1%	15.1%

ii. Impact of funding on study choices

Source: Entry to Study survey

The study explored whether the method of funding postgraduate taught study impacted on students' choices of university and course. Respondents who completed the Entry to Study survey were asked if and how their choices were affected.

Of the aggregate sample, 79.3% of respondents stated that their funding method had made an impact on how to study and this was reflected in all the domiciled groups (see Table 55).

Table 55. Impact of funding method on study choice by domiciled status

Impact	Aggregate	UK	EU	OS	PEP	UK Non-PEP
Yes	79.3%	81.8%	79.6%	75.2%	81.4%	81.9%
No	20.7%	18.2%	20.4%	24.8%	18.6%	18.1%
How it affected	(966)	(594)	(109)	(261)	(250)	(348)
I decided to study full-time	58.7%	51.9%	67.0%	70.9%	54.4%	49.7%
It affected my decision about what institution to attend	25.9%	24.4%	29.4%	27.6%	24.4%	24.7%
I decided to study part-time	15.9%	24.9%	4.6%	0.4%	21.2%	27.6%
I decided to study at a local university and live with my family	13.6%	21.0%	0%	2.3%	22.8%	19.5%
It affected my decision about what course to take	8.7%	7.7%	8.3%	11.1%	8.8%	6.9%

When the impact was examined, there were noticeable differences.

- Choosing full-time study was higher for EU (67%) and OS (70.9%) than UK (51.9%) respondents.
- Choosing part-time study was higher for UK domiciled respondents (24.9%) than EU (4.6%) and OS (0.4%).
- Studying locally was a considerably more important decision for UK (21%) respondents than EU (0%) and OS (2.3%).
- Part-time respondents (86.9%) were more likely to have their choice of course affected than those studying full-time (77.8%). The reason given was availability of part-time course.
- Respondents coming straight from work (25.5%) mentioned more frequently the decision to study part-time than respondents coming straight from university (8%) or another route with (10.9%).
- More first generation respondents (18.8%) mentioned the decision to study part-time than second generation (12.9%).
- Respondents from social classes 1–4 were more likely to study full-time and social classes 5–7 part-time.
- PEP respondents were more likely to study part-time, and study at a local university and live with their family.

The funding method affected the decision about how to study for different age groups. Respondents under 25 years old were less likely chose part-time study in comparison with older groups (see Table 56).

Table 56. Impact of funding method on study choices by age

If yes…	Under 25	26–30	31–40	41–50	Above 51
I decided to study FT	64.2%	51.9%	55.5%	39%	64.3%
It affected my decision about what institution to attend	26.6%	29.0%	22.6%	18.6%	21.4%
I decided to study PT	7.3%	22.0%	28.1%	39.0%	28.6%
I decided to study at a local university and live with my family	13.9%	10.3%	13.7%	22.0%	14.3%
It affected my decision about what course to take	7.2%	13.1%	10.3%	5.1%	0%

Source: Finance survey

When the impact of funding method was asked again in the Finance survey, similar findings were found. The survey explored in more depth the reasons behind their decision. The most frequent qualitative reasons are provided below.

Choosing full-time study

Respondents who wanted to study full-time cited that they wanted to *conclude their courses as quickly as possible*; their *course was not available in part-time mode* and they had savings, so they had no need to work while studying.

> *I would have chosen to study full-time/live close to the university even with a different funding method.*
>
> *My choice to study full-time was based on completing the course in a year and the requirement for part-timers to be working in industry already. Location was based on where I live.*
>
> *The full-time course was less expensive and therefore would have been the only one I could afford.*
>
> *I always intended to study full-time to get back to full-time work as soon as possible.*
>
> *I budgeted for full-time studying costs.*

Choosing part-time study

Respondents who preferred to study part-time cited that it enabled them to be able to work while studying and because they had caring responsibilities.

> *The place and mode (part-time) were what was agreed with my employer to allow me study leave to attend lectures; another place or mode would not have been accepted.*
>
> *Part-time study was essential, block-style study helped time organisation around work.*
>
> *I was happy to do part-time study due to work commitments.*
>
> *I had already decided to study part-time as I am a mum and also work part-time.*
>
> *My disabilities mean I need to study part-time distance learning.*

Choosing to study locally

Some respondents wanted to study locally.

> *I was always planning on living at home to continue to work alongside my studies.*

Other reasons

Other respondents mentioned having savings and financial support, which justified why their funding would not affect their decision to study.

> *Because my parents are funding me…*
>
> *I had budgeted previously to be able to afford this year.*
>
> *I knew I would be using loans anyway.*

iii. Actual funding of PGT study

Source: Finance survey

The Finance survey asked respondents what the main funding source for their PGT studies had *actually* been. This enabled a comparison to be made with the *expected* funding method for PGT study by respondents in the Entry to Study survey with the *actual* funding method in the Finance survey. Although the non-PEP sample may have contained different respondents from those who completed the Entry to Study survey (thus explaining some of the variation), the PEP sample contained the same respondents. Table 57 shows the changes in *expected* funding sources in the Entry to Study survey (see *ES figure) and *actual* funding sources reported in the

Finance survey. Although the ranking of the *actual* funding method was similar to the *expected* funding method on entry, all respondents reported noticeably lower reliance on *parental/ guardian support, savings* and *salary/personal income*. It appears that the *expected* reliance on one primary method actually decreased with respondents using a number of funding methods.

Table 57. Main source of funding in rank order

UK non-PEP, EU and OS	**% within the group**	**PEP**	**% within the group**
Funded by parents/guardians	30.8% *ES=38.8%	PEP scholarship	65.3% *ES=55.4%
Savings	20.6% *ES=27.5%	Saving	9% *ES=23.8%
General bank loan/PCDL	10.8% *ES=14.7%	Funded by parents/guardians	7.2% *ES=15%
Employer sponsorship	10.2% *ES=7.6%	General bank loan/ PCDL	6.2% *ES=12.4%
Salary/personal income	10.1% *ES=17.9%	Salary/personal income	3.6% *ES=20.2%
UK/EU/OS government sponsorship	7.3% *ES=7.6%	Overdraft	2.9% *ES=2.6%
Overdraft	1.5% *ES=2.4%		

Other noticeable findings included:

- 7.2% of PEP respondents were funded by *parents/guardians* compared to 30.8% of all other respondents (see Table 57).
- 40.8% of EU and 41.4% of OS respondents were funded by *parents/guardians* compared to 21.1% of those who were UK non-scholarship (see Table 58).
- respondents in social classes 1–3 tended to rely on *parents/guardians* and *savings* whereas those in social classes 5–7 relied on *savings*.
- first generation respondents relied more heavily on *salary* and *savings* compared to second generation where reliance was on *parents/guardians* and *savings*.
- *parents/guardians* being the main source of funding for students in the age groups up to 25 and 26–30 years of age.
- minimal reliance on *parental/guardian* support was found in the age groups 31–35 and 36–40 and it was not a source of funding for anyone above 41 years of age.

Table 58. Actual funding by domiciled and PEP scholarship status

Rank	PEP	UK non-PEP	EU	OS
First	PEP scholarship 65.3%	Savings 24.3%	Parents 40.8%	Parents 41.4%
	Savings 9.0%	Parents 21.1%	Savings 32.7%	OS government sponsorship 16.3%
	Loan/PCDL 5.1%	Employer sponsorship 15.0%	Salary 10.2%	Savings 13.7%
Second	Salary 29.2%	Salary 28.4%	Parents and savings 22.4% each	Parents 22.1%
	Savings 18.1%	Savings 17.6%	Salary 16.3%	Salary 19.0%
	Parents and PEP scholarship 13.7% each	Parents 13.2%		Savings 17.5%
Third	Salary 21.3%	Salary and savings 16.1% each	Parents and savings 18.4% each	Parents 18.6%
	Savings 17.7%	Parents 12.6%	Salary 16.3%	Savings 15.2%
	Parents 17.0%	Overdraft 9.7%		Salary 6.8%

c. Search sources of funding (help with fees and/or living costs)

The study explored whether respondents had searched for information about funding their PGT studies, the type of search method they used and if there was a particular type of applicant who searched for information. The findings reported below come from the Entry to Study survey.

Source: Entry to Study survey

Of the nine search options offered to respondents, 34.2% had *searched online*, and 19.6% had *searched through their current institution's information*, 19% had *looked but couldn't find any*, and 18.8% *did not look* (see Table 59). When comparing PEP and non-scholarship respondents, different search method patterns were found. Of the PEP respondents, almost double that of the aggregate sample had *searched through their current institution* and *online*, with 46.9% and 45.6% respectively. Of the non-scholarship respondents, 30.4% had *searched online*, 23.7% *did not look* and 23.1% had *looked but couldn't find any information*. This suggests that PEP respondents were more proactive in seeking out information. Of the non-scholarship sample, more EU (12.6%) and OS (23.9 %) respondents searched funding information *through friends and family* compared to UK respondents (7.5%). Very few respondents searched through a *professional body*.

Table 59. Main search sources of funding by aggregate sample, scholarship and domiciled status

Search sources of funding	Aggregate	PEP	UK non-PEP	EU	OS
Through searching online	34.2%	45.6%	27.7%	40.7%	30.2%
Through current institution's information	19.6%	46.9%	13.1%	9.6%	7.4%
I looked but couldn't find any	19.0%	6.8%	29.1%	22.2%	16.2%
I did not look for what sources of funding were available	18.8%	3.9%	22.3%	27.4%	23.9%
Through friends and family	13.8%	11.4%	7.5%	12.6%	23.9%
Through previous place of study	7.3%	17.3%	4.5%	8.1%	2.0%
Through another type of organisation	4.3%	2.3%	3.1%	4.4%	7.7%
Through a professional body	2.8%	3.6%	1.4%	1.5%	4.3%

Different age groups showed different funding search behaviours (see Table 60). Respondents under 25 years old relied more on the *information provided by family and friends* (18%); respondents above 31 years old were more likely to *search through my employer* (19.4%); and those respondents above 41 years old were more likely *not to have looked for available sources of funding* (31%). Respondents with ages between 26 and 50 years old were also less likely to have searched *through friends and family.*

Table 60. Search sources of funding by age

Sources of funding	Under 25	26-30	31-40	41-50	Above 51
Through searching online	36.1%	37.8%	29.4%	19.7%	16.7%
Through current institution	23.4%	13.0%	17.8%	14.1%	11.1%
I looked but couldn't find any	19.1%	17.8%	22.8%	12.7%	16.7%
I did not look for what sources of funding were available	16.4%	22.6%	15.6%	31.0%	38.9%
Through friends and family	18.0%	9.6%	7.2%	8.5%	5.6%
Through previous place of study	10.1%	4.4%	2.8%	1.4%	16.7%
Through my employer	2.0%	8.1%	19.4%	22.5%	27.8%

Respondents coming from different routes into study also cited more frequently *searching online* (see Table 61). Respondents coming straight from work were more likely to *not look for sources of funding* (22.6%) and search *through their employer* (15.3%). Respondents coming straight from university were more likely to search *through current institution* (29.9%) and *previous place of study* (11.9%) in comparison with the other respondents.

Table 61. Search sources of funding by entry route

Sources of funding	Straight from work	Straight from university	Other
Through searching online	34.2%	35.1%	31.9%
Through current institution	11.2%	29.9%	13.4%
I looked but couldn't find any	17.3%	18.6%	24.6%
I did not look for available sources of funding	22.6%	16.7%	15.9%
Through friends and family	11.0%	15.7%	17.2%
Through previous place of study	3.1%	11.9%	6.0%
Through my employer	15.3%	1.5%	3.9%

When key variables were analysed, noticeable differences emerged.

- Full-time and part-time respondents' searching behaviour did not differ, with both groups showing the same pattern as the aggregate sample. However:
  - full-time respondents were more likely *to search online* (35.8%) than part-time respondents (26.2%);
  - full-time respondents were also more likely to find out about sources of funding *through friends and family* (15.5%) than part-time respondents (5.3%); and
  - part-time respondents were more likely to search *through their employers* (25.2%) than full-time respondents (3.9%).
- First generation respondents were more likely to search *through their employers* (9.1%) than second generation (5.8%). These groups did not differ noticeably in the other searching sources.

d. Financial barriers to PGT study

Although there is plenty of anecdotal evidence and experience across the sector to strongly suggest that finance is a barrier to PGT study, there is actually very limited data to prove that this is the case. This section reports the findings of the financial issues raised across the various PEP surveys that indicate the barriers impacting on applicants and students at PGT level. The findings come from the Non-enrolment, Entry to Study, Withdrawal of Enrollers, Entry to Study and Finance surveys as well as the focus groups.

Source: Non-enrolment survey Groups A–D

Group A, who were the enquirers in the Non-enrolment survey, were asked why after inquiring about a course at a university they chose not to submit an application. Over one third of the respondents cited a confusing application process and limited provision of information as the primary reasons for not pursuing study at the university (see Table 62).

Table 62. Group A main reason for not submitting an application

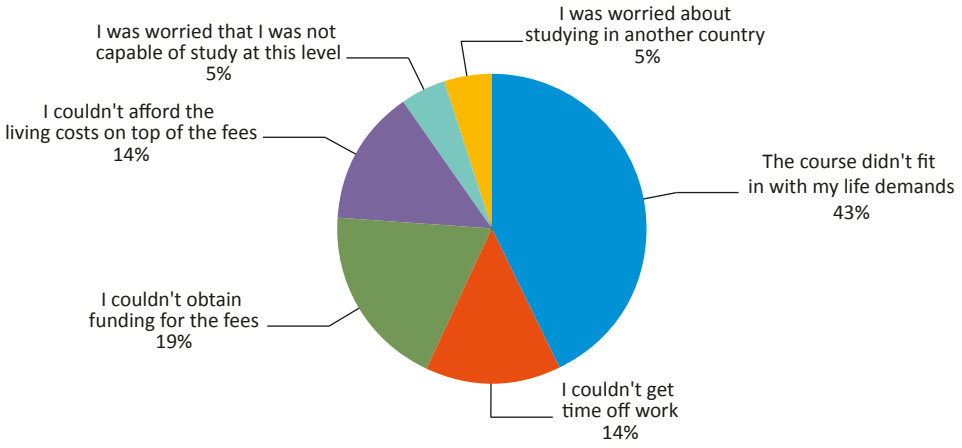
The application process was confusing and the information about the course and university was limited	37.7%
I gave up on the idea of studying for a masters degree	29.0%
I applied for a place at another university that suited my needs better	29.0%
I was worried that I may experience emigration and relocation issues	4.3%

Respondents who selected this response were asked to expand on any issues they experienced. Comments provided included:

> *An application was sent, but a reply came back saying I was missing certain evidence, which I knew I had already sent. It really annoyed me.*
>
> *I applied but didn't receive an acknowledgment or offer.*
>
> *I applied and was offered a place, but had to decline as I have done study at masters level already so due to UKBA new rules I can't study again at MSc in the UK.*
>
> *The requirements were too many and I was not able to meet them all.*

The enquirers who stated that they had given up on the idea of studying were asked to expand on why this was the case. Just under half of the applicants stated that *the course did not fit in with their life demands* (see Figure 14). The next reason was *not being able to obtain funding for the fees*. Due to the sample size, any correlations with other demographic variables were not possible.

Figure 14. Group A main reason for giving up on masters-level study



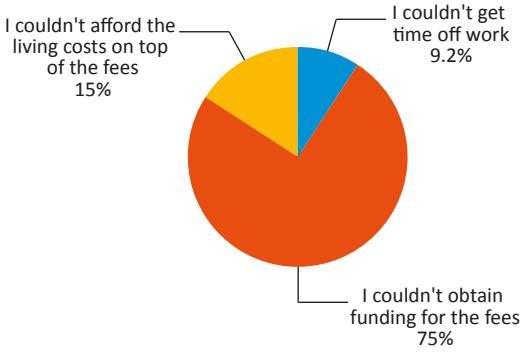
Groups B–D were asked why they chose not to pursue their application to the enrolment stage. The main reason cited by 37.4% was that they had *decided to defer until next year* followed by 24.8% stating that they did *not believe that the course could deliver its promises* (see Table 63).

Table 63. Groups B–D main reason for not completing the application to enrolment process

Reason for application non-completion	Aggregate	UK	EU	OS
I didn't think the course could deliver its promises	24.8%	27.9%	19.7%	24.8%
I deferred my place until next year	37.4%	44.1%	44.3%	34.5%
I applied for a place at another university that suited my needs better	14.5%	7.4%	21.3%	14.8%
I used the offer to get a place at another university	4.0%	2.9%	6.5%	3.8%
I gave up on the idea of studying for a masters degree	17.2%	16.2%	8.2%	19.3%
The information available about the course and university after accepting a place was limited and prevented me from being able to plan my studies properly	2.1%	1.5%	0%	2.8%

Unlike Group A, of those in Groups B–D that stated that they had given up on masters-level study (17.1%), only three reasons were cited. These are highlighted in Figure 15. The *course not fitting in with life demands*, *not being able to afford the living costs* and *being worried about studying in another country* were not cited.

Figure 15. Group B–D main reason for giving up on masters-level study



Respondents were asked to expand on the issues they had experienced. Comments provided for each response included:

The course didn't fit in with my life demands

Family circumstances changed drastically with the addition of a new baby, therefore not having the time to commit to such an undertaking.

I applied for a part-time MSc to help spread the costs of living, whilst undertaking a part-time job. However, due to lack of applicants the par- time course was stopped, and there was no way I could afford the fees and living expenses, whilst doing my best academically and working part-time. It was disappointing, but I have found a job and hope to return to full-time education in the future.

The course I chose was part-time but was inflexible as I am working full-time and there were no evening sessions. The course was cancelled.

I was rejected for a loan. I can no longer afford to study. Now I am stuck in an unfulfilling career.

I couldn't obtain funding for the fees

I am irritated knowing that EU citizens pay half of what foreigners do. And after that those students will get job offers in UK while others don't have a chance. I doubted the authenticity of the program and felt it was a rip-off.

I didn't have money to pay tuition fees.

I didn't have sufficient income to cover my fee.

I didn't get funding to pursue this course.

I couldn't afford the living costs on top of the fees

I choose to study in a German university even though I did not like. I did because it is free education, and for visa they do not ask irrational amount of money.

Because of the visa term and very less chance of employment in the UK after graduation, without a job in the UK, repaying my educational loan would be impossible.

The universities in the UK are too costly.

I choose not to stay at my university because although a graduate there, no discount has been offered and I got offered a 20% fees scholarship from another university.

I was not selected for the scholarship grant I applied for.

Other

Due to my previous Tier 4 visa refusal, the university demanded a 100% fee submission upfront that was not affordable for me.

As a result of unstable circumstances relating to my country's policy and governmental changes, I couldn't come.

I couldn't study the course because of government laws not allowing international students to have more than one MSc full-time degree.

I did my undergraduate course in Lincoln but wanted to experience other city.

I did think the course could deliver its promises; however, I was offered a job so I declined the masters course.

I didn't fulfil the conditions.

I got awarded a PhD scholarship in Australia.

HEFCE's Intentions After Graduation Survey in 2013 found similar responses. Of the 63% of eligible respondents who completed the survey, 17% intended studying for a postgraduate qualification (HEFCE, 2015a). Of these, 56% actually did so. The survey asked all students what factors would affect their decision. For 65% of those who intended undertaking further study and for 61% who did not, *course fees* were a primary factor for putting them off. In 2014, the Intention After Graduation Survey was completed by 62% of eligible respondents with only 14% stating they intended going onto further study.

Source: Withdrawal survey of enrollers

Of the 94 STEM MSc withdrawers who formally withdrew across the 9E Group, 21.3% (20) completed the withdrawal survey. This comprised seven biological, four computer science, three engineering, two technology and five physical sciences respondents. The most cited reasons for withdrawal related to financial difficulties paying study associated *living costs* and *fees* (see Table 64).

Table 64. Reasons for enrollers withdrawing

First reason in rank order	Second reason in rank order	Third reason in rank order
Financial difficulties with living costs	Financial difficulties paying fees	I struggled with balancing life demands/ study
I was unhappy with the course content	I chose the wrong course and wasn't enjoying it	I struggled with the commute
Financial difficulties paying fees	Financial difficulties with living costs	I was unhappy with the course content
I struggled with balancing life demands/study	I struggled with balancing life demands/study	Financial difficulties paying fees

Other reasons mentioned as a primary reason included: *I chose the wrong course and wasn't enjoying it*, *I didn't like the institution*, *I didn't get on with my course tutor*, *my circumstances changed dramatically* and *I had a young family/caring responsibilities that took precedence*.

Within mode of study, noticeable differences were cited. For full-time withdrawal respondents, the primary reasons were *unhappy with course content* (33%) followed by *difficulties paying for living costs* and *fees* (each 16.7%). For part-time withdrawal respondents, *difficulties paying living costs* and *struggling to balance the demands of study and life demands* were in joint first place (each 28.6%) followed by *difficulties paying fees* (14.3%). When analysed by age, those under 25 were more likely to cite financial difficulties than those from the other age groups.

e. Importance of fee levels

With the ongoing debate across the sector about appropriate fee levels for PGT study, the project wanted to explore applicant and student attitudes towards fees and if it impacted in any way on their university and/or course choices. The findings below come from the Non-enrolment, Entry to Study and Finance surveys and the focus groups.

i. Importance of fee levels in the decision-making process

Source: Non-enrolment survey Groups A–D

Of the 17 options Groups A–D were given for why they chose a course, *cost of fees* was the fourth most important criteria in the decision-making process (see Table 65). *Reputation* in includes institutional, departmental and subject.

Table 65. Top 4 ranked reasons for choosing a course

Survey A (64) **Enquire but do not apply** **UK:47.8% EU:5.8%** **OS:46.4%**	**Survey B (440)** **Apply, offer, decline** **UK:14.9% EU:14.9%** **OS:70.1%**	**Survey C (90)** **Apply, offer, accept** **notify non-attendance** **pre-enrolment** **UK:26.0% EU:19.2%** **OS:54.8%**	**Survey D (131)** **Apply, offer, accept,** **no notification of** **pre-enrolment** **UK:7.8% EU:1.0%** **OS:91.2%**
Reputation (31.9%)	Reputation (31.9%)	Reputation (34.2%)	Reputation (39.2%)
Course content (21.7%)	Course content (21.7%)	Course content (27.4%)	Course content (19.8%)
Location (11.6%	Career prospects (13.4%)	Career prospects (9.6%)	Cost of fees (14.9%)
Cost of fees (7.2%)	Cost of fees (6.3%)	Cost of fees (5.5%)	Career prospects (14.9%%)

Source: Entry to Study survey

Respondents in the Entry to Study survey were asked specifically about their attitude towards fee levels in choosing their postgraduate course. For the majority of the respondents, the fee level was *very important or important* in making their decision (see Table 66). The fee levels were noticeably more *very important* for PEP respondents in comparison with all other respondents. For the aggregate sample, no major differences were found for domicile, gender, institution and generational status in terms of importance.

Table 66. Importance of fee levels

Level of importance	**Aggregate**	**PEP**	**UK non-PEP**	**EU**	**OS**
Very important	40.7%	52.5%	34.8%	37.0%	39.3 %
Important	37.4%	30.4%	38.2%	40.7%	41.3%
Slightly important	15.7%	14.2%	18.8%	17.0%	13.0%
Not important at all	6.2%	2.9%	8.2%	5.3%	6.4%

Fee levels were more likely to be *very important* for the respondents who were allocated a 100% and 60% PEP scholarship (see Table 67).

Table 67. Importance of fee levels by PEP scholarship level

Level of importance	**100%**	**60%**	**£1000**
Very important	55.3%	52.8%	37.1%
Important	32.6%	29.1%	28.6%
Slightly important	9.9%	14.2%	31.4%
Not important at all	2.2%	3.9%	2.9%

In terms of age, fee levels were *very important or important* for more than 70% of each age group. The fee levels were *slightly important* for a higher percentage of respondents under 25 and between 41 and 50 years old, in comparison with respondents between 26 and 40 years old (see Table 68).

Table 68. Importance of fee levels by age

Level of importance	**Under 25**	**26–30**	**31–40**	**41–50**	**Above 51**
Very important	38.6%	43.8%	45.5%	40.0%	27.8%
Important	37.7%	38.6%	39.3%	24.3%	44.4%
Slightly important	18.3%	10.9%	9.0%	25.7%	16.7%
Not important at all	5.4%	6.7%	6.2%	10.0%	11.1%

Although only 6.2% of the aggregate sample stated that fee levels were *not important at all*, there were differences between route and mode of study. A higher percentage of respondents coming straight from work cited fees were *not important at all* (7.3%) in comparison with those coming straight from university (4.2%). For mode of study, part-time respondents, 11.2% stated that *fees were not important at all* in comparison to full-time with 5.1%. This may suggest that respondents coming straight from work have a more secure financial background in comparison with respondents coming straight from university.

When the importance of fee levels is examined by social class, the attitude towards them being *very important* increased as the social class decreased (see Table 69). Respondents from social classes 3–7 were more likely to consider the fee levels as *very important* in comparison to respondents from social class 1 (33.1%). There were no major differences for generational status or gender.

Table 69. Importance of fee levels by social class

Level of importance	1	2	3	4	5	6	7
Very important	33.1%	38.6 %	48.1%	44.2%	50.0%	57.9%	47.6%
Important	40.6%	41.3%	34.0%	35.0%	28.6%	23.7 %	38.1%
Slightly important	21.2%	15.0%	10.8%	15.0%	7.1%	10.5%	9.5%
Not important at all	5.1%	5.1 %	7.1%	5.8%	14.3%	7.9%	4.8 %

Source: Finance survey

The fee level question in the Entry to Study survey question was repeated in the Finance survey, but respondents were also asked if the fee level had specifically impacted on their choice of university and course, and whether their attitude towards fee levels had changed as they had progressed in their studies.

In terms of how important the fee levels were in the decision-making process, more respondents in the Finance survey (49.5%) (see Table 70) than the Entry to Study survey (40.8%) stated that fees were *very important* and fewer in the Finance survey stated that it was *not important at all* (4.5%) compared with the Entry to Study (6.2%). As with the Entry to Study survey there were few differences when analysed by PEP and domiciled status. However, PEP respondents were more likely to consider the fees as *very important*, in comparison to UK non-PEP, EU and OS respondents (see Table 70).

Table 70. Importance of fee levels by scholarship and domicile

Level of importance	Aggregate	PEP	UK non-PEP	EU	OS
Very important	49.5%	58.5%	43.2%	44.9%	49.0%
Important	32.2%	26.0%	33.4%	34.7%	36.6%
Slightly important	13.8%	13.0%	16.7%	14.3%	11.0%
Not important al all	4.5%	2.5%	6.7%	6.1%	3.4%

ii. Change in attitude towards fee level

Source: Finance survey

The Finance survey asked respondents whether their attitude to fee levels had changed as they had progressed in their studies. Of the aggregate sample, 29.9% said that their attitude had changed. When analysed by PEP and domiciled status, this was the case for 30% of PEP respondents, 28.2% of UK non-PEP, 16.3% of EU and 34.6% of OS. Of those respondents who had

changed their mind, 88.8% of the respondents now considered the fee levels to be *very important* or *important.* Respondents aged over 40 were less likely to have changed their opinion on the importance of fee levels. The reasons given for the fees becoming more important included:

> *Whilst studying at postgraduate level, I have realised the impact of the fee debt and how it can change somebody's perception on studying at postgrad level.*
>
> *I underestimated the total cost of living, travel and other costs associated with the course. Reasonable-priced fees really help meet costs.*
>
> *I now believe that high university fees are the major reasons why some students decide not to undertake postgraduate studies, therefore fee levels are hugely important.*

Source: Focus groups

Many PEP respondents reported that as they progressed in their studies, they recognised that their scholarship had become a much more important funding method than perceived at the start of their studies. Reasons provided in the focus groups included: being able to *concentrate on their studies without distraction*, *underestimating study costs at the start of their studies* and *not wanting to rely on parental support*.

> *If I didn't have the scholarship, I would have had to work more, so I would have less concentration for my studies. So now I am like concentrating more on studies because I don't need to work for money as much.*
>
> *I do feel the scholarship has helped in a lot of the ways, because if I hadn't got the scholarship I would have probably had to do more hours [of work] which would have been more strenuous for myself (...) I would have been more tired than I feel now, so, it helped a great deal and I have appreciated it more as I have progressed……..*
>
> *I have underestimated the total cost of living, travel and other costs associated with the course. Even with the help of the scholarship, which has been a godsend, and working full-time, I have struggled with money throughout the course.*
>
> *I get money from my parents every single month, and they support me fully. They pay for my rent, they pay me for everything and on top of that I have a job. They would have paid for my tuition fees, but I didn't really want to take money from them. I am 20, I am an adult, and I want... I would have found another way to support myself. So... yeah, the scholarship was quite handy to not take money from my parents. And my dad wants to retire so it's kind of taking money away from him. I want to support them after, anyway. But then it's like... it's not fair on them to pay for everything I do.*

f. Study debt

There is concern that the accumulation of *previous* study debt acts as a significant barrier to participation in further study, but there is little evidence to inform the sector whether this is the case and to what extent. The project explored levels of *previous* existing study debt and any impact it had on study choices, expected *PGT only debt* and expected *total* study debt. The findings come from the Entry to Study and Finance surveys and focus groups.

i. Previous existing study debt

Source: Entry to Study survey

Respondents were asked if they had any outstanding student loan or any debts directly related to any study previously undertaken. Approximately half of the aggregate sample (48.3%) reported having an outstanding debt linked to previous study (see Table 71).

UK domiciled respondents most frequently cited having *previous* study debt (71.8%) compared to EU and OS, and this figure was substantially higher for the PEP respondents (83%) compared to UK non-scholarship respondents (63.7%).

Table 71. Previous existing study debt by scholarship and domiciled status

Debt	Aggregate	UK	EU	OS	PEP	UK non-PEP
Yes	48.3% (590)	71.8% (520)	13.0% (18)	13.4% (47)	83.0% (254)	63.7% (270)
No	51.2% (631)	28.2% (204)	87.0% (120)	86.6% (303)	17.0% (52)	36.3% (154)

When those who stated they had a debt were analysed for debt level, the levels of debt between PEP and UK non-PEP respondents were similar. When comparing domiciled status, EU and OS respondents' debt sizes were substantially different from the UK respondents with UK domiciled reporting a much higher level of debt (see Table 72). When social class perception of debt was examined, it was higher in the lower social classes (5–7) in comparison to the higher classes (1–4), but the *actual* debt level was similar. This raises the question of perception of what debt is amongst the UK respondents.

Table 72. Debt levels by domiciled status

Level of debt	Aggregate sample	UK	EU	OS	PEP	UK non-PEP
£1–9,999	16.7%	13.5%	38.9%	40.0%	13.8%	13.8%
£10,000–14,999	17.8%	17.4%	38.9%	15.0%	14.3%	19.9%
£15,000–19,999	23.5%	25.1%	5.6%	12.5%	23.2%	27.2%
£20,000–24,999	26.3%	28.5%	0%	12.5%	32.6%	24.4%
£25,000–29,999	10.0%	10.5%	11.1%	5.0%	11.2%	9.8%
£30,000+	5.7%	4.9%	5.6%	15.0%	4.9%	4.9%

For all the age groups, the majority of study debt was located between £1,000 and £24,999. The most common debt size for UK domiciled who were under 25 was £20–25k (34.8%) (see Table 73).

Table 73. UK domiciled status and age by debt levels

Size of debt	Age groups – UK domiciled				
	under 25	26–30	31–40	41–50	above 51
£1–9,999	10.5%	14.1%	25.0%	29.4%	0%
£10,000–14,999	14.4%	25.0%	22.9%	17.6%	0%
£15,000–19,999	26.9%	23.9%	20.8%	11.8%	0%
£20,000–24,999	34.8%	20.7%	10.4%	17.6%	0%
£25,000–29,999	10.8%	7.6%	10.4%	11.8%	100%
£30,000+	2.6%	8.7%	10.4%	11.8%	0%

ii. Impact of previous study debt on undertaking PG study

Source: Entry to Study survey

Overall, for the majority of respondents, debt size did not influence their choice of undertaking postgraduate study (75.9%) (see Table 74). A similar finding was also found in the Finance survey (82.1%). No differences were found between the various demographic variables except for domiciled status. Debt impact in the decision to choose postgraduate study was higher amongst EU and OS in comparison to UK respondents, even though these respondents had smaller debt (see Table 73 above). It is important to note that the EU and OS samples were relatively small in this analysis. However, this suggests that the perception of existing *previous* study debt and *actual* debt impacts on decisions for UK respondents differently to EU and OS respondents.

Table 74. Impact of previous study debt on choice of study

	Aggregate	UK	EU	OS	PEP	UK non-PEP
Yes	24.1%	22.1%	44.4%	38.3%	22.2%	21.6%
No	75.9%	77.9%	55.6%	61.7%	77.8%	78.4%

The most common reasons given by respondents for whom debt did not influence their choice of postgraduate:

- They would have studied anyway.
- They had saved to undertake PGT study or have no debt.

  I left it a few years, in order to save money towards living expenses.

  I have no previous debt.

- Masters would give a higher-paid job that would pay off their debt quicker.

  …after the graduation I can earn good salary and pay my debt back as soon as possible.

  By doing the MSc, my job prospects are better so I will be more able to pay back my student loan.

The qualification was a requirement.

The debt is irrelevant, as the qualification is needed to further my education in order to acquire a job paying a high enough salary therefore negating the debt.

- I didn't think about the debt.

  I don't really think about my undergraduate debt yet - I don't have to pay it back until I reach the required salary.

  The debt is going to rack up anyway.

- Not paying for the costs

  My parents were going to pay for the MSc anyway.

  Employer sponsorship does not increase debt levels.

The most common reasons given by respondents for whom debt did influence their choice:

- It influenced the mode of study
  - Decided to study full-time

  I decided to study full-time in order to access the work place as soon as possible.

  With debts looming, I opted for a full-time, one- year masters course so I could start work and pay off debts within the shortest amount of time.

  - Decided to study part-time study, to be able to work and pay for the loans

  I choose to study part-time and work, as opposed to full-time and adding to the debt with no employment.

  I decided to study part-time so I could breakdown the university fee.

- It influenced which university to choose

  Don't want to get into more debt so chose a university close to home with parents. This reduces the living expenses. Also don't have to work quite as much outside of university to fund myself so can concentrate more on the study load.

- It delayed entry to postgraduate study

  I wanted a break after doing my undergraduate. So I went and worked for a year. Saved up and came back to do masters.

iii. Expected PG –only study debt

Source: Finance survey

Expected *PGT-only* study debt was explored in the Finance survey. The majority of respondents (regardless of domiciled status) expected their *PGT–only* debt to be in the region of £1-9,999 (see Table 75). The PGT fee level in the 9E Group ranged between £4,500 and £6,500 and was an important factor in the level of PGT study debt accrued. A higher number of EU and OS respondents reported PGT debt levels between £15,000 and £24,999 compared to UK domiciled students. This may be due to EU and OS respondents having higher accommodation costs and work restrictions. Many UK respondents reported that they had chosen to study locally in order to live at home and reduce debt levels. When analysed by UK domiciled and PEP status, a higher number of PEP respondents reported that their expected *PGT–only* debt would be up to £9,999 rather than £10,000 upwards compared to UK non-PEP, suggesting that their PEP scholarship was an important factor in reducing *PGT–only* debt levels.

Table 75. Expected PGT STEM debt only by domiciled status and PEP scholarship

Debt level	UK	EU	OS	PEP	UK non-PEP
£1-9,999	70.7%	54.3%	48.0%	73.1%	67.6%
£10-14,999	11.6%	11.5%	25.3%	7.9%	16.2%
£15-19,000	5.4%	17.1%	10.0%	4.5%	6.3%
£20-24,999	4.9%	17.1%	7.3%	5.8%	4.5%
£25-29,999	4.0%	0%	2.6%	5.8%	0.9%
£30,000+	3.4%	0%	6.8%	2.9%	4.5%

When expected *PGT-only* debt levels were examined there were some differences between the modes of study. Full-time respondents expected to accrue higher levels of debt in debt categories above £10,000 compared to those in part-time study (see Table 76). This is linked to funding expectations (see Section C in this chapter).

Table 76. Expected level of PGT debt only by mode of study

Level of debt	Full-time	Part-time
£1-9,999	60.6%	81.2%
£10,000-14,999	16.0%	9.1%
£15,000-19,999	7.9%	3.3%
£20,000-24,999	7.0%	2.6%
£25,000-29,999	3.9%	1.9%
£30,000 plus	4.6%	1.9%

When the expectation of *PGT-only* debt level was analysed by social class and generational status (see Chapter 4 for explanation of sample size), the sample was too small to generate any conclusive patterns of debt level. Table 77 shows that expected debt levels for both generations were similar in the lower debt categories, with more second generation respondents reporting debt in the highest.

Table 77. Expected level of PGT debt only by generational status

Debt level	First generation	Second generation
£1-9,999	72.9%	68.8%
£10,000-14,999	10.3%	10.8%
£15,000-19,999	3.7%	7.2%
£20,000-24,999	5.6%	5.1%
£25,000-29,999	5.6%	2.0%
£30,000+	1.9%	6.1%

iv. Total study debt

Source: Finance survey

The Finance survey also explored the expected *total* study debt of respondents upon completion of their PGT studies. Respondents were asked to provide a figure in British pounds, which was then categorised. For many respondents, their *total* debt would be a combination of undergraduate and postgraduate debt. Some respondents over the age of 30 did not have any or a significant amount of *previous* undergraduate debt.

When UK domiciled status was examined, a higher number of UK non-PEP respondents reported their expected *total* debt to be in the debt categories up to £24,999. A lower number of UK domiciled respondents reported that they anticipated no debt (this finding is linked to age) compared to those who were EU and OS (see Table 78). It is important to note that some EU and OS students are able to obtain funding from their governments to help pay for UG and PG study costs in the UK.

Table 78. Total study debt by domiciled and PEP scholarship status

Debt level	UK	EU	OS	PEP	UK non-PEP
£0	29.0%	68.0%	65.5%	20.5%	27.3%
£1-9,999	7.5%	8.5%	9.7%	4.5%	8.2%
£10-14,999	7.8%	4.2%	5.8%	7.6%	7.5%
£15-19,000	8.9%	4.2%	6.9%	7.6%	13.2%
£20-24,999	12.9%	4.2%	4.6%	15.2%	17.4%
£25-29,999	13.1%	2.4%	1.7%	20.7%	4.1%
£30,000+	20.8%	8.5%	5.8%	23.9%	22.3%

Many respondents reported that their expected *total* debt level did not include interest. A higher number of PEP respondents expected their *total* debt levels to be in the top two highest debt categories. A contributory explanation for this could be that of the PEP respondents, 65% were first generation and more likely to be in the lower social classes compared to their second generation counterparts thus less likely to obtain parental/guardian support for funding. *Total* debt levels for UK domiciled respondents was related to age so the older respondents were less likely to have high levels of study debt, but those under 30 years of age expected their *total* study debt to be in the region of £20–30K. Within the UK domiciled group, PEP respondents were less likely to have no debt in comparison to non-PEP. The sample was too small to generate any conclusive patterns of expected *total* debt level by social class and generational status.

g. Financial anxiety levels and issues

The Finance survey and focus groups explored the financial anxiety levels and issues experienced by current postgraduates. Of the respondents who had completed the Entry to Study survey, 23.7% had expressed a concern about *lack of sufficient funding*; 20.5% were concerned about *getting into debt* and 17.3% concerned about *increasing their existing levels of debt* (see Chapter 5).

i. Financial anxiety levels

Source: Finance survey

Of the respondents who completed the Finance survey, 75.9% were *anxious of some kind* about their finances. UK non-PEP respondents were more *very anxious* in comparison to EU and OS respondents (see Table 79). There were no financial anxiety differences between males and females, although females did report anxiety levels related to study (see Chapter 7).

Table 79. Anxiety by domiciled and PEP status

Level of anxiety	Aggregate	PEP	UK non-PEP	EU	OS
Very anxious	14.2%	12.6%	19.4%	6.1%	10.5%
Anxious	24.4%	29.2%	21.4%	22.4%	23.6%
Slightly anxious	37.3%	39.7%	34.3%	46.9%	36.9%
Not anxious at all	20.1%	15.3%	22.0%	18.4%	23.3%
Unsure	4.0%	3.2%	2.9%	6.1%	5.7%

When UK students' age was analysed, respondents below 30 years of age had similar anxiety levels, but those above 41 years old were less likely to be anxious in comparison to respondents under 30 (see Table 80). This finding is linked to debt levels.

Table 80. Anxiety levels of UK domiciled respondents by age

Level of anxiety	Aggregate	Under 25	26–30	31–40	41–50	Above 51
Anxious of some kind	78.0%	81.1%	81.8%	77.8%	57.4%	42.9%
Not anxious at all	18.9%	16.8%	16.5%	17.6%	38.3%	35.7%
Unsure	3.1%	2.1%	1.7%	4.6%	4.3%	21.4%

When social class was examined, respondents from social classes 3 and 4 (intermediate occupations) were more likely to be more *anxious* (87.1%) in comparison to respondents from the higher social classes (1–2) and lower social classes (5–7) (ranging from 77.8% to 78.7%) (see Table 81). When social class was examined by generational status, although the sample was small, the data shows a tendency for second generation respondents in the higher social classes to be more interestingly *anxious* than first generation.

Table 81. Anxiety levels by social class and generational status

Anxiety levels	Social classes 1–2		Social classes 3–4		Social classes 5–7	
	First	Second	First	Second	First	Second
Anxious	70.1%	83.2%	85.9%	93.3%	79.5%	66.6%
Not anxious	27.5%	12.6%	14.1%	6.7%	15.9%	0%
Unsure	2.4%	4.2%	0%	0%	4.6%	33.4%

ii. Financial issues and difficulties

When asked about any financial issues experienced, the most frequently mentioned were related to debt, associated study costs such as accommodation costs, and future employability. Table 82 highlights the overall themes.

Table 82. Financial issues by theme

Themes	Sub-themes
Travel to university	Expensive travel costs Insufficient car park availability
Living costs	Expensive accommodation Expensive meals Expensive bills
Childcare	Lack of child support
Employability	Struggling with getting a job during the course and after the course Lack of work experience
University issues (teaching and learning)	Balancing work with study demands Lack of value for money for the PG course
Health	Lack of support for disabled students Lack of support for students with psychological issues
Debt and finance	Struggling with a low budget on a daily basis Struggling with the future debt Expensive tuition fees

These themes were reflected in the respondents' answers when asked to rank their largest expenses relating to study (excluding fees). Table 83 provides the top three responses given for the top three ranked costs. All domiciled groups generally reported the same issues. As expected, *cost of accommodation* was a higher expense for EU and OS in comparison to UK domiciled respondents. *Meals* and *transport costs* were selected as other main expense for all respondents, but UK domiciled cited the *purchase of IT equipment*, *printer costs* and *text books* as a main expense which EU and OS did not.

Table 83. Top three ranked largest associated debt costs

	PEP	UK non-PEP	EU	OS
First	Cost of accommodation 45.1%	Cost of accommodation 46%	Cost of accommodation 85.7%	Cost of accommodation 84%
	Transport costs 34.3%	Transport costs 26.4%	Transport costs 4.1%	Transport costs 4.6%
	Purchase of IT 4.7%	Purchase of IT 5.6%	Meals 4.1%	Meals 3.0%
Second	Meals 30.7%	Meals 21.7%	Meals 55.1%	Meals 38.4%
	Transport costs 18.8%	Transport costs 25.5%	Transport costs 20.4%	Transport costs 22.4%
	Cost of accommodation 9% and text books 9.0%	Purchase of IT 10.3% and text books 10.3%	Cost of accommodation 12.2%	Cost of accommodation 8.7%
Third	Meals 19.5%	Meals 22.0%	Transport 28.6%	Transport 27.8%
	Printer 17.0%	Printer 12.9%	Meals 22.4%	Meals 20.9%
	Textbooks 12.3%	Transport 11.1%	Printer 22.4%	Printer 10.6%

When asked whether they had experienced any issues relating to the payment of bills, some respondents stated that they were late in paying or unable to pay accommodation, transport and food costs (see Table 84). There were no major domiciled differences, although more OS respondents reported difficulties in paying their rent and UK domiciled being unable to pay existing debt.

Table 84. Difficulties in paying bills

Bill	Late paying	Unable to pay	Total
Rent or mortgage	84.4%	15.6%	250
Utility bills (e.g. electricity, gas, water)	86.2%	13.8%	254
Food	69.8%	30.2%	192
Going out/entertainment	21.7%	78.3%	364
Mobile phone costs	67.5%	32.5%	197
Travel costs (including car ins, petrol)	46.1%	53.9%	254
Other insurance costs	48.7%	51.3%	158
Existing debt	47.9%	52.1%	217

When respondents were asked if any financial concerns had impacted on the completion of their studies:

- 77.8% (723) had managed financially;
- 7.3% (73) had considered withdrawing;
- 5.6% (52) had considered intermitting/taking time out due to financial pressures;
- 1.8% (16) had moved from full-time to part-time (8) and part-time to full-time (8) to financially cope; and
- 0.8% (8) had withdrawn (6) or intermitted (2) due to financial issues.

h. Financial support

Source: Finance survey

The Finance survey explored what type of financial support students had received. When asked what support would have been helpful, the respondents were considered and circumspect in their answers. Of the 14 options available, help with *accommodation*, *transport costs* and *meals* were common replies (see Table 85) and this corresponds to the difficulties experienced and reported above. A discount on fees was highlighted by 28.3% of the aggregate sample as a positive means of support. Some of the PEP partner universities do give alumni discounts, but for those students who chose their local university to undertake study and were not alumni, this was a benefit that they could not access. When asked what level of fee discount would be an incentive to undertake study, as little as 10% was cited as making a positive difference.

Table 85. Helpful support

Support option	%
Cash via bursary/grant	47.1%
Help with transport costs	31.6%
Discounted or contribution to university accommodation or contribution	30.1%
Discount on fees	28.3%
Help with printer costs	23.5%
Vouchers for text books	23.0%
Subsidised meals	22.6%
Help with the purchase of IT or course-related equipment	17.5%
Prepaid cards for university goods or services	17.4%
Subsidised field trips	9.4%
Help with childcare costs	6.3%
Help with laboratory costs	5.6%
Funding via disability assistance	2.1%
None of these	4.2%

The qualitative comments made by respondents regarding other types of support that would have been helpful included:

> *Any help at all would have been helpful.*
>
> *As I travel a long distance to university, on-site parking would be a tremendous help, in terms of parking costs and also in terms of time management.*
>
> *Students should pay lower vehicle insurance fees.*
>
> *Cheaper university sports memberships.*
>
> *Reduced home internet costs, since a lot of work done at home. A free NUS card as given to first-year undergraduate students that gives discounts for clothes stores.*
>
> *I was charged an additional £1600 in my final semester due to a university error this led to an enormous amount of stress and anxiety and me almost having to give up the course and losing my job over anxiety issues and financial hardship. I was finally granted some help but I had to fight for it.*
>
> *Having classes from 10am to 5pm (not 9am to 6pm) so I didn't have to pay as much in childcare!*

For 73.3%, a discount for being a UK graduate with at least a 2:1 classification would have been an enticement (see Table 86). Graduates do not stay at the university where they did their undergraduate degree for a number of reasons, including: it does not offer the course they require; they have been out of study for a few years; or do not live in the area anymore.

Table 86. Useful level of alumni discount

Level of alumni discount	Yes	No
10% alumni discount	57.6%	42.4%
25% alumni discount	64.7%	35.3%
50% alumni discount	73.4%	26.6%
A discount from another university for getting a 2:1 classification	73.3%	26.7%

Source: Focus groups

Similar comments around the same issues about support were expressed in the focus groups.

Accommodation

Accommodation is, like, £350 a month and then plus food, so I have to work about 30 hours a week just to make ends meet, and then you're constantly on the back foot. And if you want to do things like pay for professional memberships or, you know, get subscriptions to magazines, or do some unpaid work experience you, kind of, can't.

Food

……. but it would have been nice if there was a way of having a small scholarship to be able to fund living as well. Maintenance, just to cover travel, food. When I came here I had a piece of toast at 5am, and I can't afford to buy something from that rather expensive shop.

Child care

I am managing the workload, but have missed a few lectures due to the fact I am a lone parent and have not been able to find suitable childminding at times.

Travel

People that travel from far away out, like myself, if there was a way of having a loan from the university so you could buy like a year's travel card and then you can pay that back. Because I pay more having to pay daily than I would do if I could do a year's one and then pay it back. I know that they do this for staff, but I think that for people who commute distances that should be a scheme that you can borrow the money from the university and pay it back.

Source: Finance survey

The Finance survey explored the type of financially related support respondents had received. As expected, the most common form of support was via a fee discount (29.5%). Overall, support received across the different domiciled groups was similar. Support with *transport costs* and *subsidised field trips* were more frequently mentioned by OS respondents than UK and EU.

i. Respondents attitudes to the current funding regime

Source: Finance survey

My biggest concern financially is what happens in the first month after leaving university and starting work, probably requiring a small advance on pay to get through the first month because not only is there now additional costs to consider, such as commuting, but landlords will require approximately the first month's rent twice, once in the form of standard rent and once in the form of deposit. A small performance-based reward (as part of the total scholarship/assistance?) for completing the masters course (with a given grade? I'm on track for a distinction) such as about £400-600 would go a long way to easing the load during the first month after university is completed.

Why aren't masters courses backed the same way as undergraduate? Due to the world we live in a lot of people have degrees and masters courses are becoming more noteworthy and are indicative of a more skilled person. Therefore based on this, why aren't masters courses funded the same as undergraduate? Especially as from my experience I probably would not have undertaken a masters degree if I had not got a scholarship.

I think that performance-related discounts should be offered from the start, even for the undergraduate degree. If learners have an extra incentive to do well at A-level and beyond, then it will help promote a culture of excellence. I believe that this would require further differentiation of grades, with the need to stretch the most able children to greater heights and with greater rewards on offer. We should be enabling and rewarding the hard work of the students, not loading them with masses of debt. I believe the current system is unsustainable and that a lot of the current three-year degrees could be completed in one year or less. A more targeted and focused education system that works more closely with businesses is something that could reap much greater rewards for the country as a whole. Currently, when a student leaves university, a company that takes them on will generally have to provide a lot of training anyway. The fact that university education is not standardised at all, means that two people from different universities doing the same course can end up with a completely different skillset. For any employer, taking on a new employee is a risk, when there is increased uncertainty then there is increased risk. If courses can be tailored to fit the needs of employers, with standardised core competencies being demonstrable by the students, this can help increase the confidence of employers and will bring down unemployment. Having additional rewards and discounts that a linked to competency levels can only be a good thing for helping to improve the long-term productivity of companies and for the economy of the nation.

Education should not be about potential direct contribution to the economy. A more educated population is healthier, more engaged (socially and politically), more able to improve its quality of life and create new industries. I worry that students are seen as a short-term conveyor belt of money, after which they can be forgotten. The education system was created and seems to be run by people who expected their degree (which was funded by grants) to give them a job, straight away, for life, on a high salary. That is not the way the world works today. I will be lucky to find an entry-level job after this self-funded masters, and luckier still if I can buy a house before age 45. The UK education system is not suitable for the financially unstable internet age, but I am forced to use it and pay handsomely for the privilege. Scholarships and discounts will help a few people a little, but they are just cosmetic. I don't know what the solution is, but I pity the next decade of teenagers who will still be expected to pay their way through the system, at higher and higher prices, for diminishing returns, until someone from my generation takes charge and has the courage to make the huge changes that are needed.

It seems so short-sighted that an institution set up to nurture the minds of tomorrow is so driven by finances that it actually hampers the students it wishes to teach. How can alumni achieve anything when they will enter the work place tens of thousands of pounds in debt? There will be a constant driving force toward making more money in order to contain the constantly rising debt level of the individual, which will in essence stop them from pursuing a career in the area which they have studied throughout university. The system is broken. Education is a privilege, not only for the students wanting to learn, but also for those that teach; and it should be treated as such. The greed of looking to line one's pockets with money taken directly from the young minds who don't have anything to give is absurd and outdated.

All of my anxieties have been financially related throughout the course often having to go without eating meals simply because I would have no money between being paid through numerous part-time jobs.

High fees are a massive barrier to learning. I was fortunate enough to complete my undergraduate degree in Scotland (as a Scottish citizen) where I paid very little in fees. However I still managed to accrue massive debts and have absolutely no idea how anybody affords to study in England. It makes me despair that I will probably not have paid off my debt long into my adult life, and if I have children I may not be able to financially help them through their lives due to the debt I have (I was completely self-funded through university) especially if they are raised in England and university fees are in excess of £9,000 per year.

Financial support for many of the respondents, as found in the Entry to Study survey and focus group sessions, was frequently provided by parents.

My parents spend all their savings to pay for my study. I hope that I will get the job good enough to repay them for that and help them in future.

Personally, although living with parents whilst studying, I am married with a child. With future ambitions of finding our own home, living on one income at most times when I'm not working full-time and paying loan payments for this course in addition to childcare, it has become very tight financially.

Even with the support of my parents, I had to survive on £17 a week for five months, that was interesting! Anxiety? All the time!

I am left finishing a master's degree absolutely financially disabled and very anxious and stressed about the future; not how I had hoped to finish the course, if I'd known I would never have studied further. What choice do I have but to continue living with my parents?

j. Viable funding options

The Finance survey asked respondents what type of funding model would have been the most viable for them when considering embarking on their PGT studies. The options included the current government thinking on a possible PGT loan scheme. All the options and the responses are listed in rank order in Table 87. For almost two-thirds of the sample, the preferred funding option was a *mixed scheme*. There were no overall domiciled, generational or social class differences. The financial anxieties highlighted above suggest that respondents do worry about debt; hence, in order to keep their debt to a minimum, a mixed funding method was the most preferable option. Companies such as StudentFunder and Future Finance are spearheading funding models in this area.

A government-backed loan where a UG and PG loan was combined at 9% interest was more popular amongst by PEP respondents (see Table 87). This may be related to their previous debt as 28.7% of the PEP respondents had a debt level between £20,000 and £24,999.

Table 87. Viable funding method by domiciled and scholarship status

Type of viable loan	Aggregate	PEP	UK non-PEP	EU	OS
A mix of fee scholarship or alumni discount, loan and self-funding	62.2%	56.7%	63.0%	71.4%	64.6%
A bank loan you would only start repaying six months after graduation	9.0%	4.0%	8.5%	6.1%	15.6%
A government-backed loan at 9% interest repaid when earning £21,000 a year (note: if you have a UK UG loan already, you will pay both at the same time = 18% of your salary)	13.5%	18.1%	15.0%	14.3%	6.8%
A government-backed loan at 9% interest repaid six months after graduation regardless of income (note: if you have a UK UG loan already, you will pay both at the same time = 18% of your salary)	1.2%	0.4%	0.9%	0%	2.7%
A government-backed loan where your UG and PG loan is combined and you pay 9% interest	14.1%	20.9%	12.6%	8.2%	10.3%

Interesting differences include:

- a higher percentage of respondents in the 41–45 years age group were prepared to consider a government-backed loan that was repaid once earnings reached £21K.
- UK respondents were more likely (8%) than EU and OS to prefer combining UG and PG loans and pay back over a longer period of time with an interest rate of 9%.
- more respondents who were 46 years and above were more prepared to combine UG and PG loans and pay back over a longer period of time at 9% than any of the other age groups.
- EU respondents were more likely (10%) to prefer a mix of fee funding than UK and OS.
- a mix loan option was more noticeably preferred by first generation respondents (60.3%) than their second generation (51.8%) counterparts.
- a mix loan option was the most popular option for all social classes (ranged between 41.7% and 61.0%).

k. Comment

Funding of PGT study

As highlighted in Chapter 1, whilst PGT study continued to grow; little attention was paid by government or the sector to how students funded their PGT study. There was a common assumption, albeit anecdotal, that when a student entered PGT study that they were financially self-reliant, funded their own studies through bank loans or savings and that parental financial involvement substantially reduced or was non-existent. However, bank development loans have not been in existence for many years in the UK, no detail about the government's proposed funding model has yet been announced for UK students wishing to pursue PGT study and the Career Development Loan only accounts for a small percentage of students undertaking PGT-level study. BIS consultation stated *that Professional and Career Development Loans (PCDL) have financed less than 10% of postgraduate students over the last 10 years. On average, over the last five years, approximately 6,300 individuals have taken out a PCDL per year for the purposes of undertaking a postgraduate taught masters degree, in a landscape where there are approximately 80,000 UK postgraduate taught students.* (DBIS, 2015:24).

As a result of the downturn in enrolments since 2011, how students fund their PGT study has become of great interest to the sector and been explored through national surveys such as

PTES run by the HEA. As with the PTES, this chapter has shown that student characteristics and debt levels impact on accessing and progressing in PGT-level study. *Parent/guardian* support is currently the primary source for accessing PGT study for many students, but applicants and students who do not have this avenue of support are disadvantaged. This chapter highlights that UK domiciled students who are first generation and from the lower socio-economic classes are particularly affected. Domiciled status, entry route and age were also found to be significant variables in how PGT study was being funded. The concerns for the sector are twofold: firstly, the sustainability of informal funding methods such as *parental/guardian* support and the disadvantages and inequities caused to those who are unable to access this form of funding; secondly, stratified debt levels with those from disadvantaged backgrounds accruing the highest levels of debt as a result of any formal government-backed loan that is introduced.

Impact of debt on undertaking PGT study

The findings in this chapter demonstrate the impact that debt has on how individuals perceive PGT study and are able to participate in it. Respondents were very worried about accruing further debt as a result of PGT fee levels and living costs. It is important to note that they were students who graduated under previous funding regimes and not the £9K-a-year system. It is feasible to presume that a £9K-a-year student would be even more concerned about accruing additional debt, thus impacting further on their ability to participate and fund higher level study.

Through the scholarship element of the project, many PEP scholarship recipients reported that without the fee financial support, study at this level would have been much more difficult and in some cases, not possible. However, as highlighted in Chapter 3, many recipients offered a scholarship declined it due to not being able to cover the other costs associated with the degree.

Changes in attitudes towards fees

Respondents reported that as they progressed in their studies, their attitude towards the importance of the fee level increased. Two general reasons cited by respondents included an increased sense of *value for money* due to their experience of *expectation versus reality*, and underestimating the associated study costs at the start of their studies. The importance of the fee level was particularly vital for UK domiciled respondents due to their high debt levels in comparison to EU and OS respondents as well as those from the lower social classes who were less likely to be able to access parental financial support. In light of the current discussion about variable fees, the challenge for institutions will be in demonstrating value for money for their courses and managing the expectations of students regarding their anticipated employability outcomes as a result of them undertaking the course as highlighted in chapter 5.

Financial support

A substantial number of respondents reported difficulties in paying the costs associated with their studies. The living costs such as accommodation, food and travel were the most cited as being problem areas. Discounts, whether for alumni or high-achieving undergraduate students entering PGT study, were cited as helpful initiatives to support students to enter higher level study. Financial anxiety is not conducive for the student in enabling them to concentrate and succeed in their studies. The challenge for institutions is how can they provide fair, equitable, affordable and sustainable financial incentives for students to participate in PGT study such as offering discounts or scholarships, and develop support mechanisms that help the student manage their financial affairs?

Viable funding options for PGT study

The respondents overwhelmingly stated that the most viable funding option for them when they started their studies would have been a mixed method option in order to keep their PGT debt levels low. The government's suggestion that any state-backed postgraduate loan

scheme that was implemented would have to be paid at a rate of 9% alongside any existing undergraduate loan (also repaid at 9%) was not viable or feasible for them. Respondents felt that combining an UG and PG loan and repaying it at 9% over a longer period of time was a much more viable option. Although 9% or even 18% may not be viewed as a significant amount to be deducted from a low salary before tax, the amount greatly increases as the graduate's salary rises, which commonly happens with age. However, this often occurs when the individual experiences increased life costs such as buying a home, having children and paying higher tax levels. The challenge for government and the sector is to create a sustainable and viable funding method that provides the individual with an affordable opportunity to participate in PGT study as well as enabling them to be active citizens in society. Any funding activity needs to be seamlessly linked with the effective and flexible delivery of PGT courses.

I. Summary

This chapter has highlighted a number of areas that could benefit from further research when considering financial support for students undertaking this level of study. They include:

- exploring a range of sustainable funding mechanisms that provides fair opportunity to engage;
- exploring the debt levels of £9K-a-year graduates and their attitudes towards debt and undertaking further education;
- exploring and understanding the relationship between financial anxiety levels of PGT students, completion rates and qualification outcomes;
- exploring the impact of high levels of debt for the individual, society and the economy.

7. Learning and Teaching

There is extensive knowledge of learning and teaching behaviour and practice at undergraduate level, but limited, albeit increasing, knowledge of postgraduate taught study. The Entry to Study survey explored students' experiences of previous learning and teaching methods, their understanding of academic feedback and their preferences, as well as their expectation, of learning at PGT level. The majority of the findings in this chapter are from this survey. The focus groups explored the students' actual experience of learning and teaching on their course. Where appropriate the PTES 2015 findings are reported.

a. Key points

Expectation of how to study at postgraduate level

- Just under two fifths of the aggregate sample *did not know what to expect* when studying at PGT level.
- Second generation and UK respondents were more likely to have an expectation of how to study at PGT level.

Previous academic feedback

- The most common type of academic feedback received in their previous studies was *written feedback (hard copy)* and then *face to face (with the tutor individually).*
- Use of technology such as *email* and *Turnitin* was not commonly experienced.
- The most preferred method of receiving feedback for both assessed and non-assessed work was *face to face with tutor (individually).*
- UK respondents were more likely to prefer *written feedback (hard copy)* for assessed work compared to their EU and OS counterparts.
- Almost all of the respondents stated that they had always collected and read their previous academic feedback and used it to improve their previous assignments.
- Male respondents were more likely to have approached a tutor to discuss the feedback compared to females, and female respondents were more likely to have never thought about asking for feedback.

Current academic feedback expectations

- Respondents felt that receiving *regular academic feedback* in their studies was the most important activity and the least was *discussing feedback with fellow students outside of class*.
- Respondents felt that the most helpful type of academic feedback they could receive on their work was *written comments* on assessed work followed by *ongoing informal discussions with a tutor outside of class.*
- Respondents' preference for academic feedback was *face to face with the tutor individually* and *written feedback (hard copy).* The least preferred were *face to face in a group* and *audio*.
- Full-time respondents were more likely to prefer *face to face individual feedback* compared to part-time respondents.
- Part-time respondents were more likely to prefer *email feedback* compared to full-time respondents.
- Half of the respondents expected to receive comments on their feedback within *1 to 2 weeks*.
- The expected timeframe of receiving feedback was reflected in the method of giving feedback (e.g. up to three days by *email*; one week by *face to face*; up to a month by *written hard copy*)

Contact and independent study hours

- Respondents at PGT level expected that as their contact hours decreased the number of independent study hours increased.

Preferred method of learning and assessment

- Respondents preferred *learning both in groups* and *independently*, but when it came to assessment they preferred to be individually assessed.
- Respondents coming from the Russell Group university were more likely to *prefer studying independently* compared to those coming from other type of universities.
- Part-time respondents were more likely to prefer *studying independently* and be assessed individually compared to those who were full-time.

Learning strengths

- Respondents who rated their skills as *very strong* did so in the areas of organising their ability to *study independently*, *numeracy* and *literacy*.
- Respondents who were under 25 years of age or male were more confident about the *knowledge of their subject* compared to those above 31 years of age or who were female.
- Females were more likely to rate higher their ability to *organising their study independently* than males.
- There were no major generational, domiciled or route into study differences.

b. Expectation of how to study at PGT level

Source: Entry to Study survey

Of the aggregate sample, 62.2% respondents had an expectation of how to study at postgraduate study compared to 37.8% who did not. Second generation respondents reported that they were more likely to know what to expect (65.8%) in comparison to first generation (59.2%). No major differences were found between respondents in the different social classes, those coming from different routes into study and between different age groups.

UK domiciled respondents were more likely to have an expectation on how to study at postgraduate level (65.4%) in comparison to EU respondents (54%). This may be due to them having an understanding the UK higher education system. The lower expection by EU respondents may be due to only 22.6% having previously studied in the UK.

In terms of subject discipline, physical science respondents were the most likely to have an expectation of how to study (69.9%) and computer sciences (54.4% the least).

Respondents were asked if they intended changing their learning behaviour at postgraduate level as a result of their prior learning experiences. Their qualitative responses fell into four broad themes: time management, autonomous learning, interactions with teachers and peers, and career-focused learning. The sub-themes are presented in Table 88.

Table 88. Expected learning behaviour changes

Themes	Sub-themes
Time management	More study hours outside the classroom Respect deadlines Daily study Balance study with work
Autonomous learning	Research own sources of information
Interactions with teachers and peers	Study in groups Meet the tutors more often
Career focused learning	Getting involved in volunteering and societies Linking studies with industry demands and opportunities

c. Previous academic feedback experience

Source: Entry to Study survey

Feedback is recognised as a key activity in facilitating learning, hence the inclusion in the annual PTES run by the HEA. This section reports the respondents' understanding of feedback and their previous experience of it from the Entry to Study survey.

i. Understanding the purpose of academic feedback

The respondents were asked to state what they understood by the term academic feedback. Their answers fell into four main themes: comments, content, grade/marking, and assessment of academic staff (by students). The sub-themes for each one of these themes are showed in the Table 89 below.

Table 89. Purpose of feedback

Themes	Sub-themes
Comments	*Purpose of the comments* Qualitative assessment Achievements Improvements Feedback as a learning process Regularity *Type of comments* Written comments by teachers Individual feedback Peer feedback Group feedback
Content	Academic content Writing style Referencing
Grade/Marking	Quantitative assessment Academic standards Level of knowledge
Assessment of academic staff	Course assessment Students' satisfaction

ii. Previous types of academic feedback

Respondents were asked to identify all the different types of academic feedback that they had received previously (see Table 90). *Written feedback (hard copy)* (73.1%) was the most common type of feedback received, followed by *face to face (individually)* (52.7%) then *face to face as group* (33.2%).

Table 90. Types of academic feedback received

Type of academic feedback	Aggregate sample
Written feedback (hard copy)	73.1%
Face to face with tutor (individually)	52.7%
Face to face with tutor (as a group)	33.2%
Via email	31.6%
Written feedback via Turnitin	17.0%
Via an internal intranet site	13.5%
Audio (verbally recorded)	3.8%
Video feedback	1.0%

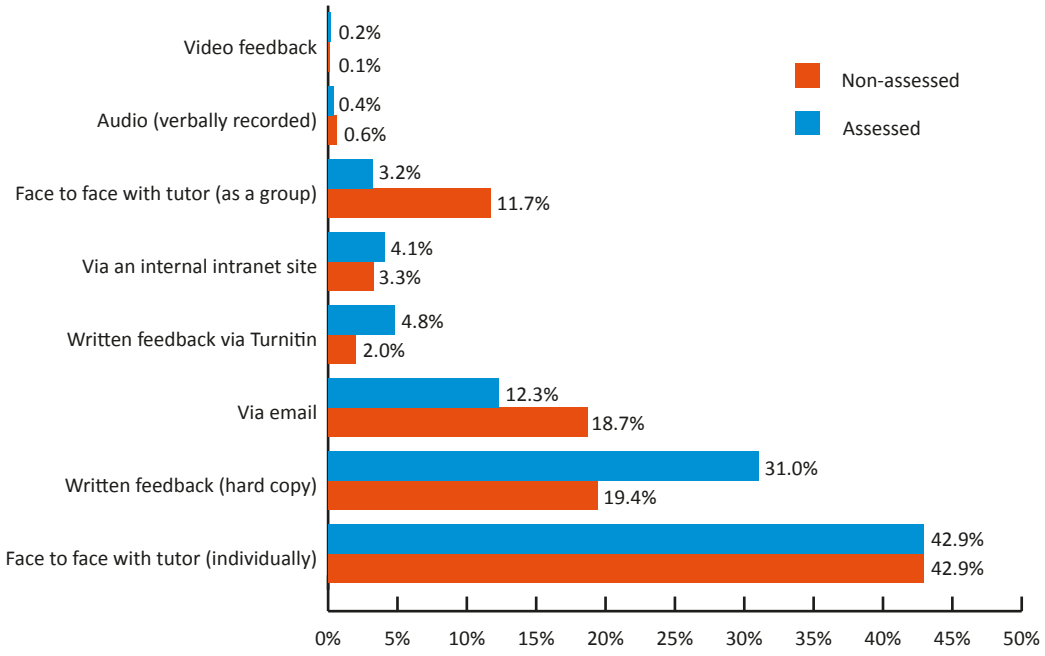
When analysed by a range of variables, a number of noticeable differences emerged.

- Biological sciences respondents were more likely to have received *written feedback (hard copy)* (81.2%) in comparison to engineering respondents (66.4%) and computer science respondents (63%). The other disciplines ranged between 69% and 81%.
- Biological sciences respondents were also more likely to have received *written feedback via Turnitin* (25.6%) in comparison to engineering and computer science respondents (11.9% and 10.1% respectively). The other disciplines ranged between 10.3% and 26.8%.
- Computer science respondents cited *face to face with tutor (individually)* more frequently (61.1%) than engineering and technology respondents (46% and 31.7% respectively). The other disciplines ranged between 51.7% and 56.3%.
- *Feedback via email* was more cited by computer science (40.4%) and biological science (35.6%) respondents in comparison to those studying engineering (23.8%). The other disciplines ranged between 31% and 32.5%.

iii. Previous academic feedback method preferences

The most preferred method of receiving academic feedback for assessed work was *face to face with tutor (individually)* followed by *written feedback (hard copy)* (see Figure 16). These two ways of receiving academic feedback were also the most preferred for non-assessed work followed by *feedback via email.* It is interesting to note that the most common method of receiving feedback cited above is not the primary preference. Also, in an age of technology, traditional methods such as *face to face feedback* still appear to most popular rather than IT approaches.

Figure 16. Academic feedback method preferences



When analysed by a range of variables, a number of noticeable differences emerged.

- Computer science respondents were more likely to prefer *feedback via email* for their assessed work (16.8%) than those studying physical sciences (7.8%).
- Biological science respondents were more likely to prefer *written feedback (hardcopy)* (26.2%) in comparison to engineering and computer sciences respondents (15% and 13.5% respectively).
- UK respondents were more likely to prefer *written feedback (hardcopy)* for assessed work (36%) in comparison to EU and OS respondents (22.5% and 23.9% respectively).
- *Feedback via email* was more likely to be favoured by OS respondents (19%) than UK respondents (8.5%). This was also the case for non-assessed work (similar figures).
- Female respondents were more likely to prefer *written feedback (hardcopy)* for assessed work (38.4%) than males (26.6%), but male respondents were more likely to prefer *face to face with tutor (individually)* (46.4%) in comparison to female respondents (37.3%).
- Male respondents were more likely to prefer *feedback via email* (20.8%) in comparison to female respondents (15%).
- Biological and physical science female respondents' first preference for feedback on assessed work was *written feedback (hard copy)* (40.8% and 43.0% respectively). For females in all other disciplines it was *face to face (with tutor individually).*

iv. Previous use of feedback and tutor discussion of academic feedback

Of the aggregate sample, 94.3% of the respondents said that they *always collected and read academic* feedback. And of these, 96.8% stated that they used the given academic feedback to improve future assignments.

Of the 73.2% respondents who stated that they had approached a tutor to discuss their academic feedback, the most commonly cited reason was that they *wanted more feedback on how to improve their mark*. Only 7.6% stated that they had done so because *they did not understand the feedback*, 11.8% *did not agree with the mark* and 3.2% *did not agree with the feedback.*

Of the 26.8% respondents who stated that they had not approached a tutor, the top two most commonly cited reasons were *I got the grade I expected* (61.4%) followed by *I understood the written feedback (*53.5%). However, 28.6% stated that they *did not feel comfortable asking about the feedback*, 23.7% that they *had not thought about asking for feedback,* 10.9% stated that it was *not worth the effort* and 10.6% said that their tutors were *hard to contact.* Only 1.5% stated that they did not contact a tutor because *they did not agree with the mark*.

When analysed by a range of variables, a number of differences emerged.

- Male respondents were more likely to have *approached a tutor* (77.2%) compared to female respondents (66.4%).
- Female respondents (29.4%) were more likely than males (18.4%) to say that they *never thought of asking about the feedback* when asked to cite the reasons for not having approached a tutor.
- UK respondents were more likely to have approached a tutor to get *more feedback on how to improve the mark* (78.5%) in comparison to EU respondents (64.7%).
- EU respondents (25.5%) were more likely to have approached a tutor because *they did not agree with the feedback* in comparison to UK and OS respondents (8.9% and 12.2% respectively).
- UK respondents (65.8%) were more likely to mention having *got the expected grade* when asked to cite the reasons for not having approached a tutor in comparison to OS and EU respondents (50.5%).
- UK respondents stated that they were also more likely to *have understood the written feedback* (61.7%) than OS respondents (41.2%). This could be due to lack of understanding as a result of language barriers.

d. Current academic feedback expectations

Source: Entry to Study survey

i. Academic feedback activities

Respondents were asked to rank in order of importance which academic feedback activities were the *most* or *least important* to receive during their course. The findings shown in Table 91 highlight that for 56% of the aggregate sample *getting regular academic feedback* was the most important feedback activity to receive followed by 25.1% *wanting to know what they did well and what they could improve*. For 44.7%, *discussing feedback with students outside of class* was the least important, followed by 24.1% citing *receiving feedback that is encouraging and raises my confidence levels*.

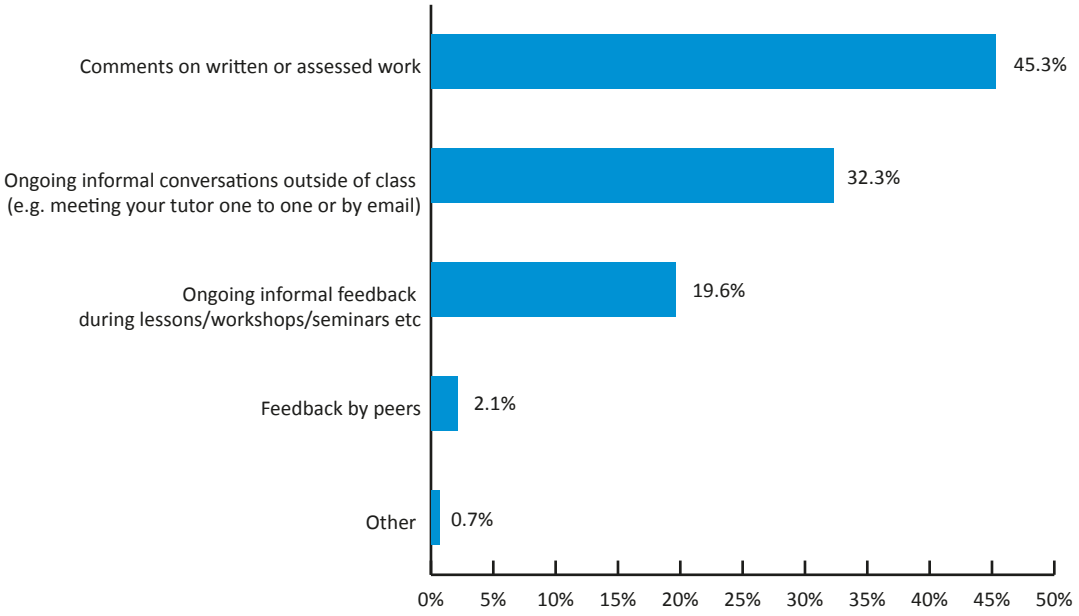
Table 91. Most and least important academic feedback activities

Academic feedback activity	Most important first ranked	Least important sixth ranked
Getting regular academic feedback	56.0%	1.7%
Discussing feedback with fellow students in the class	4.3%	17.9%
Discussing feedback with fellow students outside of class	2.0%	44.7%
Telling me what I did not do well and how to improve	25.1%	1.3%
Telling me what I did correctly	3.0%	10.0%
Receiving academic feedback that is encouraging and raises my confidence	9.6%	24.1%

ii. Most helpful type of academic feedback

Respondents were asked what the most helpful type of academic feedback on their work would be in their current postgraduate studies. For the aggregate sample, the most commonly cited responses were *comments on written or assessed work* (45.3%), followed by *ongoing informal feedback outside of class* (32.3%) (see Figure 17).

Figure 17. Most helpful type of academic feedback



No differences were found for mode of study, route into study, discipline and age. However, statistical differences were found when previous university was analysed. Respondents coming from a UK university (non-Russell Group and not the same as their current university) were more likely to have cited *ongoing informal conversation outside of class* (40.6%) in comparison to respondents studying at the same university (30.3%) and respondents coming from a non-UK university (30.5%). This may be due to the different learning and teaching experiences of their previous institution.

iii. Academic feedback at PGT level preference

Respondents were asked to rank in order of importance which type of academic feedback they would prefer to receive during their PGT course. The findings shown in Table 92 reflect their preferences as in their previous studies with 38.6% of the aggregate sample preferring academic feedback *face to face on an individual basis* followed by 34.5% preferring *hard copy written feedback*. Again, receiving feedback *via audio* was the least preferred method followed by receiving feedback *face to face with the tutor in groups*.

Table 92. Academic feedback at PGT level preference

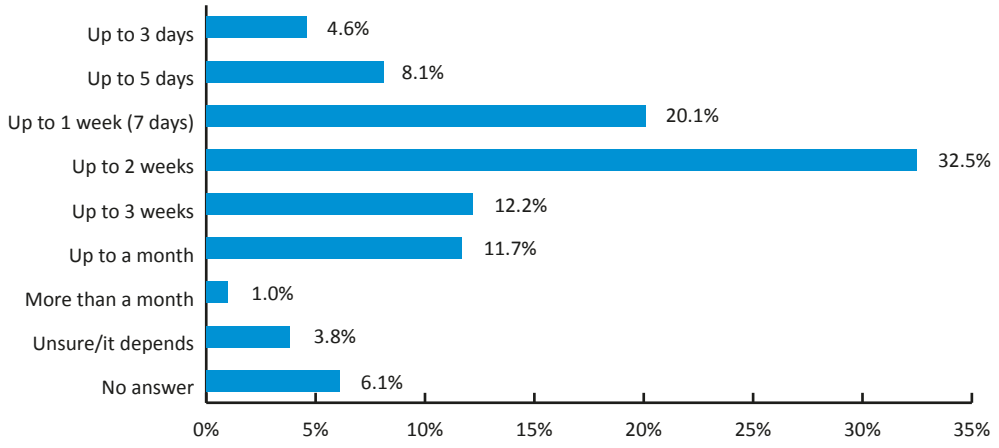
Academic feedback method	Most important first ranked	Least important 7th ranked
Face to face with tutor (individually)	38.6%	1.6%
Written feedback (hard copy)	34.5%	1.4%
Via email	15.8%	0.7%
Written feedback via Turnitin	6.9%	10.6%
Via an internal intranet site	2.1%	7.8%
Face to face with tutor (as a group)	1.6%	32.6%
Audio (verbally recorded)	0.5%	45.3%

When analysing preference and mode of study, 22.1% of part-time respondents were more likely to rank first that they preferred receiving feedback *via email* compared to 14.5% of full-time respondents. Full-time respondents were more likely to rank first that they preferred *face to face individual feedback* with 40.3% compared to part-time respondents with 29.9%.

iv. Timeframe in receiving academic feedback

Respondents were asked to state how soon after handing in an assignment at PGT level they expected to receive academic feedback. This question was an open one and the time periods have been grouped by the responses received. For 32.5% of the aggregate sample, the most expected time frame was *up to two weeks* and for 20.1% it was *up to one week* (see Figure 18). It is unclear whether the timeframes were shaped by their previous study experience, set by their current university via pre-entry information or orientation/induction, or whether they just felt that it was a reasonable period of time.

Figure 18. Timeframe in receiving academic feedback



When different variables were analysed, a number differences emerged.

- OS and EU respondents were more likely to expect feedback *up to one week* (29.3% and 29.7% respectively) compared to UK respondents (13.9%).
- UK respondents were more likely to expect feedback *up to two weeks* (38.9%) in comparison to OS respondents (20.5%).
- Respondents coming straight from work were more likely to expect to receive feedback in *up to five days* (10.6%) than respondents coming straight from university (5.8%).

- Respondents coming straight from university were more likely to expect to receive feedback in *up to a month* (17.1%) than respondents coming straight from work (8.4%).
- Part-time respondents were more likely to expect to receive feedback in *up to two weeks* (43.7%) compared to full-time respondents (30.3%).
- Full-time respondents were more likely to expect to receive feedback in a timeframe of *up to one week* (21.5%) than part-time respondents (13.1%).
- Computer science and physical science respondents were more likely to expect to receive feedback *within two weeks* (38.9 and 38.9% respectively) in comparison to mathematics and engineering respondents (10.3% and 26.9% respectively).
- Biological science and physical science respondents were more likely to expect to receive feedback *within one month* (21.2% and 16.7% respectively) in comparison to engineering and computer sciences respondents (6.2% and 4.3% respectively).

Source: Focus groups

When academic feedback was raised, respondents generally reported that the feedback was provided in an adequate timeframe.

> *I've found some of our feedback has been very timely, excellent and useful but in other modules it's been hopeless…. Hard to obtain…..so the feedback we're getting is….. so different, yeah it depends on the lecturer really, yeah, it'd be nice if it was a bit more consistent….*

v. Method of returning academic feedback within a specific timeframe

Table 93 below presents how respondents expected to receive their feedback within a chosen timeframe. Respondents were asked to select one method and one timeframe. The table doesn't reflect their overall choice of preference as described in section iii above, but their expectation.

The findings suggest that respondents expect to receive a certain type of feedback dependent on the timeframe. For up to one week, respondents stated that feedback *via email and face to face (individually)* were the most expected means of receiving feedback. As the timeframe lengthens these methods reduce and others are chosen as the most expected. For example, the *use of Turnitin* and *written hard copy* for feedback becomes the most expected method *up to a month*. Feedback using an *internal intranet site* or *audio feedback* are not expected methods.

Table 93. Method of returning academic feedback within a specific timeframe

Length	Written feedback via Turnitin (114)	Written (hard copy) (418)	Via email (263)	Via an internal intranet site (40)	Audio (verbally recorded) (4)	Face to face with tutor (individually) (233)	Face to face with tutor (as a group) (19)
Up to 3 days	3.6%	12.5%	51.8%	3.6%	1.8%	26.8%	0%
Up to 5 days	4.1%	23.5%	34.7%	4.1%	0%	32.7%	0%
Up to 1 week	9.4%	28.2%	25.7%	1.2%	0%	30.2%	4.1%
Up to 2 weeks	10.3%	41.8%	24.2%	4.5%	0.3%	16.6%	2%
Up to 3 weeks	15.4%	49.7%	14.1%	3.4%	0%	16.8%	0.7%
Up to a month	14.9%	52.5%	11.3%	5.0%	1.4%	13.5%	0%
1 month plus	0%	41.7%	33.3%	8.3%	0%	16.7%	0%

e. Current feedback experience

This section reports the feedback experience of respondents from the six participating institutions in PTES 2015 and the focus groups across the 9E Group.

Source: PTES, 2015

The respondents in the PTES 2015 stated that generally they had received a good experience in assessment and feedback (see Table 94). Of the aggregate sample, 70.8% stated that *the criteria used in marking had been made clear in advance*; 69% agreed that the *assessment arrangements and marking had been fair*; and *70.8%* felt that *feedback on the work (written or oral) had been useful*. As in previous annual PTES reports, *feedback on the work has been prompt* (58.3%) showed the lowest levels of agreement. There was little difference between the aggregate, the post-1992 universities and Russell Group samples' findings. The findings in Table 94 are indicative of the findings across the sector in PTES 2014.

Table 94. PTES feedback responses of six PEP partners

Feedback	Aggregate	UK	EU	OS
The criteria used in marking have been made clear in advance	70.8%	71.8%	65.1%	72.5%
Assessment arrangements and marking have been fair	69.0%	72.3%	59.2%	70.1%
Feedback on my work has been prompt	58.3%	56.3%	52.3%	64.4%
Feedback on my work (written or oral) has been useful	70.8%	73%	62.4%	72.8%

Source: Focus groups

The feedback from the focus groups raised a number of issues that could part explain the findings above. Many respondents had a positive experience relating to their feedback.

> *I do feel like I get good feedback from tutors, probably more so than my UG degree.*
>
> *Compared to my undergraduate degree, I feel like we get more feedback now, which is really helpful. They're [the tutors] a lot more approachable than my last university, it was very, traditional, a lot more academic. But everyone's really friendly, open door policy, and, feel like I can ask any question when I want to and get an honest answer.*
>
> *…….and I think also the coursework feedback tends to be a bit more in depth because it's at a bit of a higher level as it were… I feel maybe it's that the lecturers respect you more and treat you more of an equal because you're kind of you're getting into the higher end of degree learning, as it were.*

For those respondents who had experienced issues, they related to the quality of feedback.

> *PGT feedback is different as the tutors are quite harsh with marking …… They provide less help and have limited time to devote to help.*
>
> *I think there is a gap in the way they give us the marks and the feedback we get from them. I think it's not balanced.*
>
> *Some lecturers will give you all the feedback broken down, and then some lecturers will give you a couple of words like you're meant to go in and talk to them, but they actually don't expect you to go in and talk to them and get confused when you do.*
>
> *With regards to feedback – I think this has been really rather limited. I would have liked to have gone through the exam or at least had the opportunity to ask questions about it afterwards, as there were several questions I wasn't sure if I got right or not, or why a different answer might have been correct. I'm left not really knowing what I got right and what I didn't.*

f. Contact and independent study

Source: Entry to Study survey

Respondents were asked to state how many contact hours with teaching staff they expected to receive each week and how many independent study hours (by themselves or with other students) they expected to undertake per week on their course and why.

Contact

Of the aggregate sample, 37.1% of respondents expected to have between *0 and 4 hours* of contact hours with academic staff, 28.2% between *5 and 10 hours*, and 24% between *11 and 20 hours* (see Table 95). Of the respondents who provided a reason for their expectations, the most cited reason was the information provided by course timetable. Previous study experience was the most cited reason for respondents expecting *0–4 hours* of contact per week.

Table 95. Expected contact hours and reasons why

Hours	Aggregate sample (N=1,195)	Told this at an open day	Read it in the course literature	Seen the course timetable	Assumption based on previous study	Told it during induction	None of these
0-4 hours	37.1%	4.0%	2.9%	14.5%	42.8%	9.0%	26.8%
5-10 hours	28.2%	2.5%	4.4%	46.8%	30.1%	7.6%	8.5%
11-20 hours	24.0%	5.8%	4.7%	54.0%	23.4%	5.8%	6.2%
Over 21 hours	3.0%	0%	5.7%	57.1%	28.6%	2.9%	5.7%
Unsure	7.7%	0%	1.5%	9.1%	6.1%	3.0%	80.3%

Independent study hours

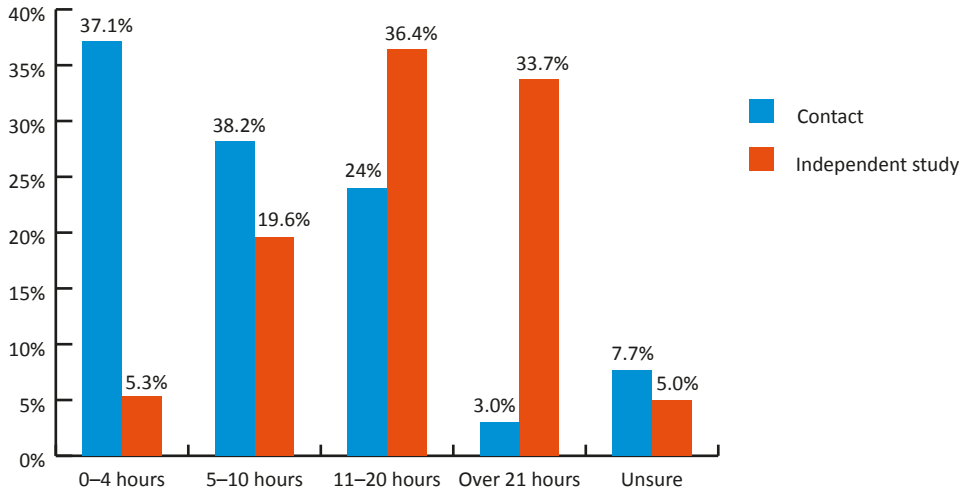
When asked how many hours they expected to study independently each week, 36.4% of respondents cited *11–20 hours*, and 33.7% cited *over 21 hours* (see Table 96). Again, previous study experience was the most cited reason to explain the expected number of independent study regardless of the number of hours.

Table 96. Expected independent study hours and reasons why

Hours	Aggregate sample (N=1,199)	Told this at an open day	Read it in the course literature	Seen the course timetable	Assumption based on previous study	Told it during induction	None of these
0–4 hours	5.3%	10.2%	6.8%	6.8%	37.3%	5.1%	33.8%
5–10 hours	19.6%	3.7%	5.0%	10.6%	56.4%	6.4%	17.9%
11–20 hours	36.4%	2.9%	5.6%	8.5%	54.9%	7.6%	20.5%
Over 21 hours	33.7%	5.2%	7.3%	7.6%	53.5%	12%	14.4%
Unsure	5.0%	-	-	2.4%	14.2%	2.4%	81.0%

Figure 19 shows the visual representation of the respondents' expectations of contact and independent hours. As the contact hours decrease, the number of independent study hours generally increases.

Figure 19. Contact versus independent study hours



Source: Focus groups

When contact and independent study was discussed in the focus groups, the general perception was that, at PGT level, more independent study was expected and it was helpful.

> *There's definitely, from my experience, less contact and more personal learning… but that's what I expected from this level.*
>
> *The contact hours are much less and they are expecting you to do more independent research, which is nice, and you're more on your own rather than sticking to the curriculum.*

g. Preferred method of learning and assessment

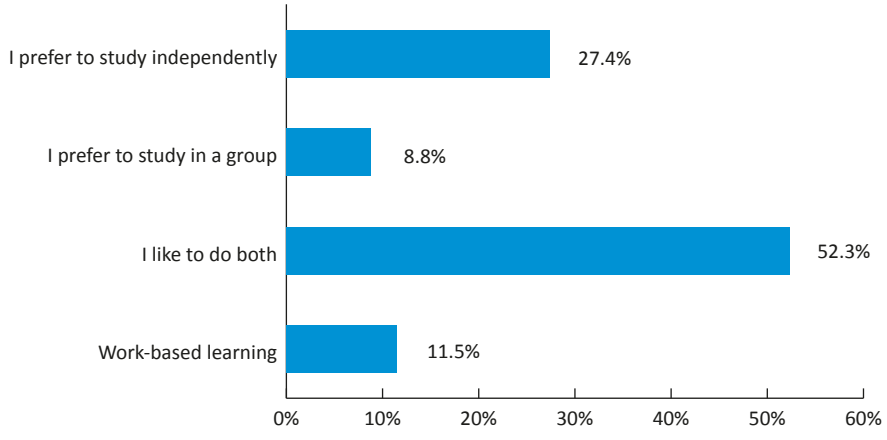
This section looks at current respondents' preferred method of learning and assessment.

Source: Entry to Study survey

Preferred learning method

Respondents in the Entry to Study survey were asked to select a response that most represented how they would prefer to learn on their course. The most preferred type of study for 52.3% of the sample was a mix of *independent* and *group study* followed by *independent study* (27.4%) (see Figure 20).

Figure 20. Preferred study method



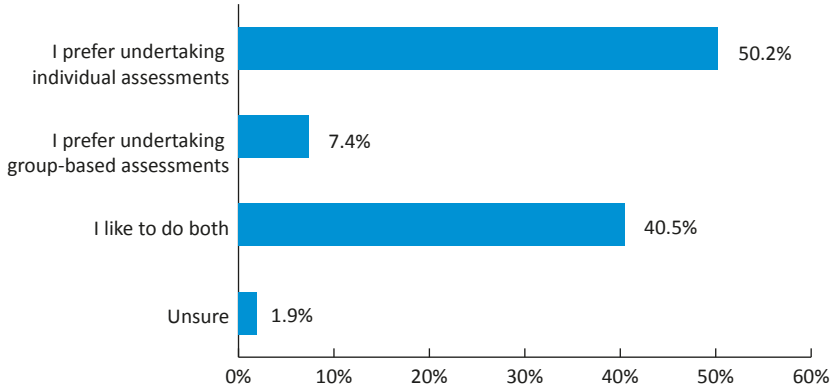
When analysed by different variables, there were noticeable differences.

- More full-time respondents preferred *both study methods* (54.6%) compared to part-time respondents (40.9%).
- Part-time respondents (39.9%) cited a substantially higher preference for *independent study* compared to those who were full-time (24.5%) respectively. This is not surprising as independent study provides more flexibility.
- Female respondents were more likely to prefer *independent study* (31%) than males (25.3%) and less likely to prefer *group study* (5.1%) compared to males (10.9%).
- Respondents coming from a Russell Group university preferred *independent study* (42.3%) followed by *both study methods* (38.5%). Respondents coming from a non-Russell Group university preferred both methods of study (52.6%) followed by *independent study* (29.8%).
- Technologies respondents were more likely to prefer *work-based learning* (35%) in comparison to all the other respondents.
- Physical science and computer science respondents were more likely to prefer *independent study* (30.9% and 33.2% respectively) than engineering respondents (20.2%).

Preferred assessment

Of the respondents, 50.2% preferred to undertake individual assessments and 40.5% preferred a combination of individual and group-based assessments (see Figure 21).

Figure 21. Preferred assessment



When analysed by different variables, there were noticeable differences.

- Part-time respondents were more likely to prefer *individual assessments* (66.2%) than full-time respondents (46.9%).
- Full-time respondents were more likely to prefer a combination of *both assessment methods* (42.7%) in comparison to part-time respondents (19.9%).
- Full-time respondents were also more likely to prefer *group-based assessment* (8.3%) than part-time respondents (2.9%).
- Respondents coming straight from university were more likely to prefer *group-based assessments* (8.8%) in comparison to respondents coming straight from work (4.7%).
- Male respondents were more likely to prefer *group-based assessment* (9.2%) in comparison to female respondents (4.4%).
- Engineering respondents' most preferred method was a combination of both *individual and group-based assessments* (50.7%), which was substantially higher than for biological sciences (33.9%), physical science (38.1%) and computer science (36.1%) respondents.
- Engineering respondents were less likely to prefer *individual assessments* in comparison to all the other disciplines.

Source: Focus groups

When assessment was discussed in the focus groups, the advantages and disadvantages of group work assessments were raised.

> *As far as group work goes, I'm a little dubious. To work with, I'm fine with working with people, but I worry about, like, depending on them to reach a grade that I find comfortable with.*
>
> *Having to depend on the group is quite a worry, because we've got some notably weaker people on our course and it does drag your mark down. My average for my individual work is probably about 80 but then the group work is about 65, so it does impact on my degree.*
>
> *I prefer working on my own because of some of the group experiences that I've had. Because it counts towards a masters you'd think a lot of people would try and pull their weight, but unfortunately this hasn't been the case and it ends up making even more work for other people. This hasn't been my experience for all my group projects, it's just that the bad experiences with certain individuals have kind of tarnished my experience of group work on the whole, put it that way.*
>
> *We do a lot more group coursework than I'd actually like…… I think we've done maybe six pieces of group coursework out of all the work we have to do. It's good in one way because it's nice being able to work with people and I understand why they [universities] do it because you will be working with people in the real world. But I do feel a bit like a lot of our grades are then based on group work, which isn't really reflective of how good individuals are.*

h. Learning and teaching satisfaction

Source: PTES, 2015

The PTES 2015 findings showed that students were generally satisfied with their course, but lack of time and support from staff was an issue with only 64.7% and 72.8% (respectively) being satisfied (see Table 97). And of the aggregate sample, 63.9% stated that the workload on their course was manageable, meaning that one third had workload issues.

Table 97. Learning and teaching satisfaction

Teaching and learning issues	Aggregate	UK	EU	OS
Staff are good at explaining things	86.0%	88.3%	80%	86.4%
Staff are enthusiastic about what they are teaching	89.4%	93.5%	85%	86.6%
The course is intellectually stimulating	85.3%	89.6%	80.8%	82.1%
The course has enhanced my academic ability	86.0%	87.4%	82.1%	86.3%
The learning materials provided on my course are useful	79.3%	79.6%	73.6%	82%
There is sufficient contact time between staff and students to support effective learning	64.7%	67.3%	60.0%	63.8%
I am happy with the support for my learning I receive from staff on my course	72.8%	73.6%	65.3%	76.1%
The workload on my course has been manageable	63.9%	71.9%	68.9%	75.2%

Source: Focus groups

The issues raised in PTES 2015 were also raised in some of the focus groups. Some students provided very positive comments about staff support.

> *I always find that they come back quicker in responding to me whenever I've emailed any of them. I don't know if that's a difference in the staff though, but it might be because we've got a slightly closer relationship with them because there is less of you compared to undergrad. So obviously they know you a lot better and know, sort of, what you need from them and everything.*
>
> *We have our course leader, and we haven't got a very big course… there's probably about 15 of us, so it's like a large tutor group, I guess. So like, he'll give us advice a lot, we have him for lectures so we're always able to talk to him…. Yeah, it helps that we're a small course.*

However, others expressed frustration regarding communication and the provision of up-to-date and clear information.

Communication

I have found some of the lecturers a little unapproachable. I have been extremely frustrated at times with it all and it has not been an enjoyable process to date. I feel that the lecturers criticise your work very easily but then don't give you the time or guidance to make it better.

I'm struggling to keep up now. Some of the tutors are really good, but some of them make you feel that you are not worth their time, and you feel that they're there for... their research comes first and you come second. They have set hours in the week that you're allowed to see them and there's no leeway, whereas others are a lot more accommodating and so it depends who you get.

I turned up one day and I was sitting there and it was four minutes into the time that the lecture was supposed to have started and we had a text four minutes into the lecture time, 'the tutor's not available today; we're sorry for the inconvenience'.

Up-to-date and clear information

I just think a little bit more help with the assessments and making it clear what they are expecting and I think it was only recently that I've been given the marking criteria for masters level. That would have been useful in the start of the year as well as explaining the differences between masters and undergraduate.

I was really looking for maybe like recommended textbooks, and how they break the modules down, just so that I could read around there before I started to study, but that was not available. It just had brief summary of what the course was about but not a break down the modules we would be doing or things like that. So I think that could have been something to improve on knowledge of the course before we had started it.

We were undergraduates here and some of our lecturers have just repeated our last year undergraduate information, and a lot of it was just completely word for word and some of the slides totally outdated! We are doing a critical subject, we can't have outdated information.

The workload for some students proved problematic due to the intense workload and clashing coursework deadlines.

It's been a pretty intense workload and I thought the first term would be more difficult and then it would ease up in the second term. It turns out the second term is probably more difficult.

So from November last year through to Christmas, we had three bits of coursework due a week, because we have six modules running simultaneously and we had two or three pieces of coursework for each. It was quite hard doing that especially as the lecturers seemed to think that there wasn't that much work but they forget about all of the modules….

(…) it was just constant deadlines, most of them coinciding with one another, no kind of planning. I think there's no co-ordination or communication between the people that run the individual modules, and that's a problem. If they just got together and had one meeting at the start of the term and said, "Look, I'm going to set this deadline here," and then the other guys, you know, they arranged it so it wasn't all in the same week or all in the same month.

i. Learning strengths and weaknesses

Source: Entry to Study survey

Respondents were asked to rate their strength on a range of study skills using a Likert scale of *very strong* to *very weak* including an option for *unsure*. The majority of respondents stated that the various study skills required for PGT study were *strong* and/or *adequate* (see Figures 22–27). The most cited skills that the aggregate sample felt they were *very strong* in were in the areas of *organising independent study*, *literacy* and *numeracy*.

Figure 22. Quick assimilation of ideas

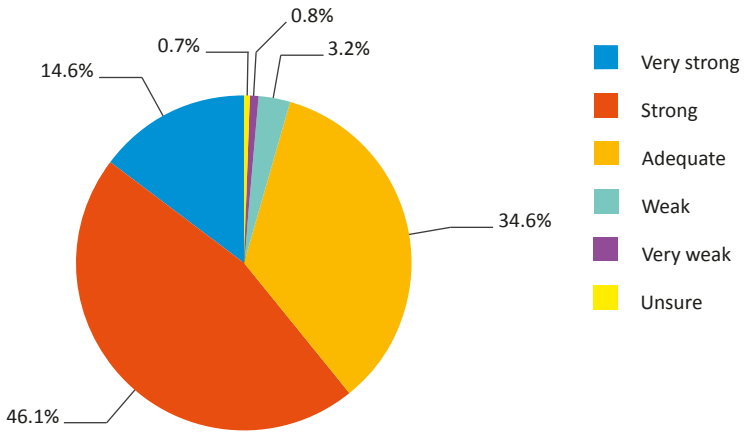


Figure 23. Organise independent study

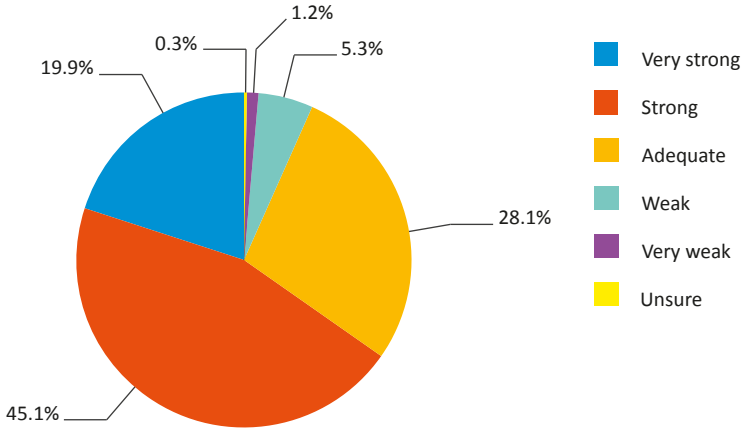


Figure 24. Study skills

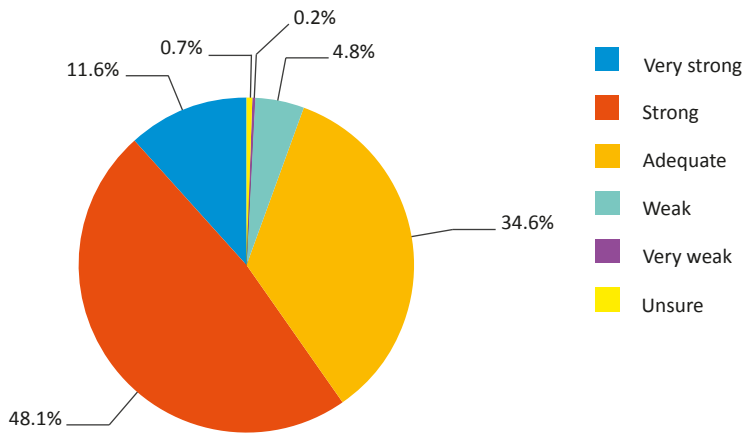


Figure 25. Knowledge of subject

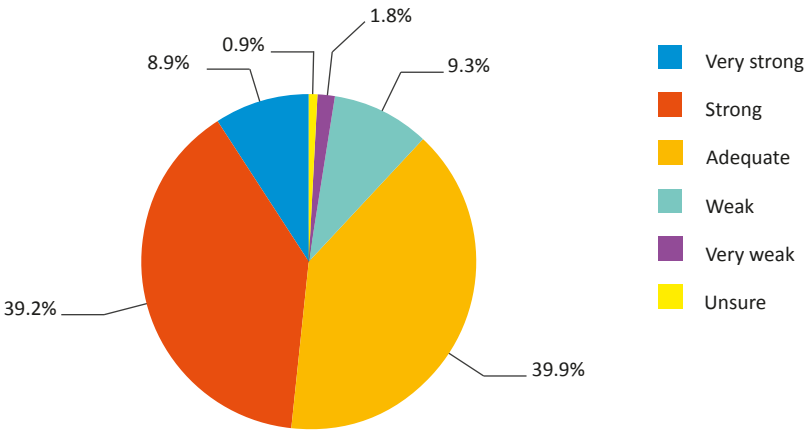


Figure 26. Literacy skills

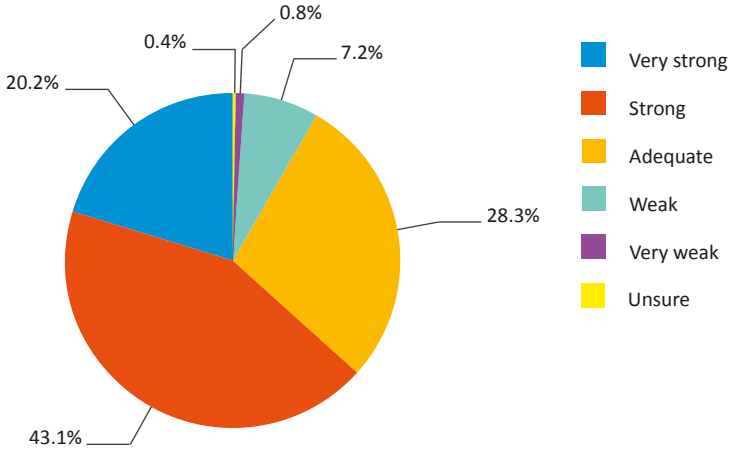
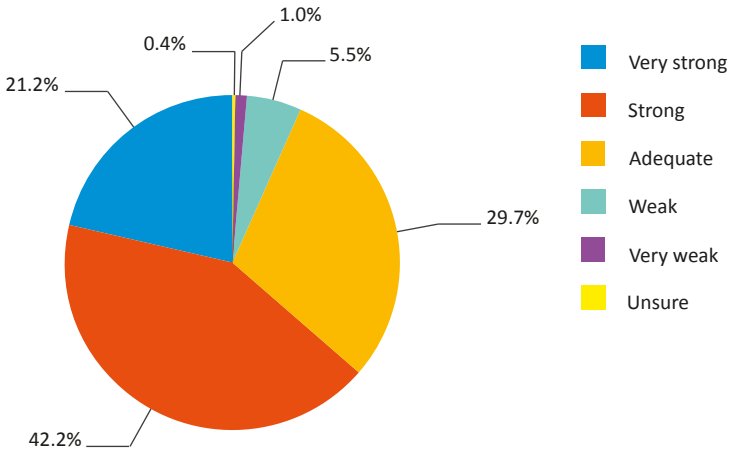


Figure 27. Numeracy skills



When the *very strong* and *very strong* responses were combined to provide a clearer picture of attitudes towards skill competencies, respondents were less confident about their *knowledge of the subject* in comparison with the other skills (see Table 98). All of the other skills were rated as *strong* or *very strong* by 59.7% to 65.1% of the sample.

Table 98. Very strong and strong responses of skill level

Skill	%
Quick assimilation of ideas	60.7%
Ability to organise my study independently	65.1%
Study skills (e.g. critical analysis)	59.7%
Knowledge of the subject I will be studying on this postgraduate course	48.1%
Literacy skills	63.2%
Numeracy skills	63.4%

When the different variables were analysed for the various skills, some differences emerged when analysing the combined *very strong* and *strong* responses.

Literacy and numeracy skills

- Part-time respondents were more likely to be confident about *literacy skills* (73.2%) compared to full-time respondents (61.2%).
- Female respondents were more confident about their *literacy skills* (67.6%) than male respondents (60.5%).
- Physical science respondents were more confident about their *literacy skills* (70.6%) compared to engineering (57.7%) and computer science respondents (57.7%). The other disciplines ranged between 48.3% and 68.7%.
- *Literacy skills* were stronger amongst UK respondents (72.9%) compared to EU (39.9%) and OS (52.6%).
- OS respondents (58.5%) were less confident about the strength of their *numeracy skills* compared to UK (66.2%).

Knowledge of subject

- Respondents under 25 years old were more likely to be confident about their *knowledge of the subject* (51.2%) compared to respondents between 31 and 40 (38.1%) and above 51 years of age (16.7% – other age groups ranged between 46.5% and 49.1%). This is not a surprising finding as 84.7% of respondents coming straight from university were under 25 years of age.
- Respondents who had studied at the same university as before were more likely to be confident about their *knowledge of the subject* in comparison to respondents coming to a new university.
- Biological science respondents were more confident about their *knowledge in the subject* (55.6%), in comparison to those studying computer sciences (39.4%).
- Male respondents were more confident about their *knowledge of the subject* (50.7%) than female respondents (43.5%).

Ability to organise

- Female respondents were more confident about their ability to *organise independent study* (71.4%) than male respondents (61.1%).

Quick assimilation

- Male respondents were more confident about their *quick assimilation of ideas* (66%) than females (51.5%).

Study skills

- Male respondents were more confident about their *study skills* (62.4%) than females (55.2%).
- OS respondents were less likely to state that their *study skills* were *very strong* or *strong* (59.1%) compared to EU (63.0%) and UK (63.0%).

Source: PTES, 2015

PTES asks students a range of questions relating to study support. In 2015, respondents in STEM at the participating PEP institutions stated that they were satisfied with the resources such as IT and library to support them in their studies (see Table 99). However, awareness of general support services such as health and finance was lower, with part-time respondents having the least awareness. However, in the Entry to Study survey, it was these services that the respondents stated they were less likely to use. If a respondent feels they have no need for certain support, then they are not going to make themselves aware of it.

Table 99. Satisfaction levels of resources and services

	Aggregate sample	UK	EU	OS	Full-time	Part-time
The library resources and services are good enough for my needs (including physical and online)	85.9%	83.2%	87.4%	88.5%	86.6%	83.3%
I have been able to access general IT resources (including physical and online) when I needed to	87.8%	85.7%	88.9%	89.9%	88.6%	84.8%
I have been able to access subject-specific resources e.g. equipment, facilities, software necessary for my studies	84.7%	84.8%	85.7%	83.9%	85.5%	81.7%
I am aware of how to access the support services at my institution e.g. health, finance, careers, accommodation	79.0%	77.3%	76.6%	82.6%	80.7%	71.5%

j. Comment

Understanding of what to expect at PGT level

The majority of respondents stated that they knew what to expect when studying at PGT level, but worryingly, one fifth did not. This chapter showed that student characteristics such as generational and domiciled status and the discipline being undertaken impacted on a student's understanding. The challenge for an institution is how to support a student body with such diverse backgrounds and individuals with multifaceted characteristics in the academic and non-academic learning spheres (Morgan, 2013b). For example, students who undertake study at PGT level in a language that is not their primary one can experience difficulties in effectively engaging with their course content and accessing appropriate support if there are inadequate mechanisms to enable them to do this. If they have other support requirements such as they are dyslexic and studying part-time, this can provide further challenges. Managing the learning and teaching expectations of the student and being able to identify individual student learning requirements at this level of study as student diversity increases will become increasingly challenging for an institution, as will ensuring that certain student characteristics (such as language barriers) do not impact on the learning experience of other students.

Assessment, feedback and the personalised experience

The majority of respondents liked to learn independently and in groups, but when it came to assessment, the preference was to be evaluated independently. Although the benefits of group work can be beneficial, it is not surprising that respondents do not want their assessment marks to be influenced especially negatively by other students when they have to pay a substantial amount for their course. Most of the respondents in this study appeared to understand what the term *feedback* meant in relation to their academic work and reported that read it in order to help future assignments. However, a common complaint amongst academic staff across the sector is that students are more interested in the mark than the

feedback. The timeliness of feedback was important for respondents, and they demonstrated an understanding in their expectations of the practicality of how quickly certain methods of feedback could be provided. For example, feedback within a week was acceptable via face to face, but if it was provided after four weeks then the expectation was it should be via written hard copy. Student characteristics such as mode of study and domiciled status influenced feedback expectations. The feedback preferences of respondents were quite traditional and appeared to reflect their previous learning experiences. The use of technology was not cited as a popular method of receiving feedback. The desire for face to face feedback reflects the respondents' belief that studying at PGT level should include a personalised study experience. The experience of feedback varied as highlighted in the focus group findings. Although respondents expected to undertake more independent study hours than actual contact hours, when they had the contact hours they wanted, it was seen to be beneficial. The challenge for institutions as PGT fee levels increase will be to deliver what students' see as value for money and their requirement for a personalised study experience to meet their expectations.

Perception of skills

Evidence suggests that low skill base levels for those entering higher education at undergraduate level can increase transition difficulties (Richardson, 2003) and students' expectations may be distorted by their previous study experience (Bamber and Tett, 2000). It is logical to assume that the same is applicable at postgraduate-level study. Recent research by Wakeling and Hampden-Thompson that explored the transition of students into PG study showed that although graduates with a first-class honours had the highest rate of progression to a higher degree, there were still high participation levels by students with lower-second- and third-class honours degrees, highlighting potential differences in knowledge and skill levels (Wakeling and Hampden-Thompson, 2013). The findings in this chapter showed that the perception of skill base strength differed between some demographic groups. And although the majority of the respondents in this research felt that they had a *strong* skill base, a student's perception of their skill strength may not necessarily accurately reflect their real ability. The challenge for institutions is identifying areas of weakness in a student's skill base, and bridging the gap by providing extra support when and where it is needed, from first contact through until graduation (Morgan, 2013b). For example, they could include topic refresher sessions prior to the commencement of study or within a module, or providing extra-curricula study skill sessions that are timetabled in a student's free time. Further research that tracks the entry qualifications and level achieved with students' PGT qualification outcome would benefit the sector's understanding of the impact of skills on the learning process.

k. Summary

This chapter has highlighted a number of areas that could benefit from further research when improving the learning and teaching experience of PGT students. They include:

- exploring and comparing learning experiences and expectations in Russell Group and non-Russell-Group universities;
- further research and the development of initiatives to help universities support different students' learning expectations, particularly part-time students and students coming straight from work; and
- tracking the entry qualification and level achieved with a student's PGT qualification outcome.

8. Employability

a. Key points

Student and employer attitudes to a postgraduate qualification

- Three quarters of all respondents stated that they believed employers valued a PG masters qualification more than an UG one. However, the majority of the employers stated that this was only sometimes the case. Employers valued more highly work experience and relevant skills than the academic qualification when having to decide between an eligible undergraduate candidate and an eligible postgraduate candidate for the same position.
- The majority of the companies that did not employ masters-qualified candidates considered this level of qualification not relevant for their business development, or they felt that the size of their company as it was too small.

Undertaking paid work during your postgraduate studies

- Over a third of the respondents intended working part-time short hours (less than 20 hours per week).
- UK non-PEP, first generation, and part-time respondents were more likely to intend to work full-time in comparison to those who were PEP or second generation or full-time.
- Respondents from social class 5 were also more likely to expect to work full-time than those from social class 1.

Skill development

- Respondents expected to develop a wide range of skills through undertaking their current PGT course.
- OS respondents were more likely to expect the course to provide *research networking opportunities*, and develop skills to enable them to *present themselves with confidence*, and increase their *confidence about independent learning skills* in comparison to UK and EU.
- Generally, full-time respondents were more likely to have higher expectations of skill development than those who were part-time.
- Respondents over the age of 30 years of age were less likely to expect to *develop employer networking opportunities* and *research papers writing skills*, and to *present themselves with confidence*.
- The majority of companies intended achieving their future skills requirements by offering their own apprenticeships, in-house training and through recruiting graduates with an undergraduate qualification. Recruiting graduates with postgraduate qualifications was not a relevant strategy to achieve the skills required for their future business needs.

Expected outcome of skills

- *Knowledge of the subject* was considered the most important skill by respondents to be developed in undertaking a postgraduate qualification. *Work experience* and *business awareness* were considered the least important by them. However, employers cited work experience as the most important shortlisting criteria, and limited work experience was pointed out as one of the most common issues when employing postgraduate candidates.
- Some employers agreed that a higher level of an employee's qualification did equate with a higher skill base. This was considered to be the case with particular academic-related skills such as *high-quality research/technical skills*, *subject-specific specialist knowledge* and *high-level analytical thinking/problem-solving skills*.
- The employers that did employ masters-qualified employees stated that they did this to obtain specific skills such as *subject-specific specialist knowledge*, *high-level analytical*

thinking/problem-solving skills, *high-quality research/technical skills*, and *new ideas to help innovate*. *Workplace professionalism* was not an expected skill, and *commercial awareness* was the least expected skill when employing postgraduate candidates.
- The most common issues when employing postgraduates were *limited work experience* and *unrealistic expectations of their role in the company*. In addition, graduates' *inability to demonstrate the required skills* and the *lack of required skills* were sometimes a critical issue for some of the companies.

Immediate postgraduate completion expectations

- Around two-thirds of the respondents expected *to find a job appropriate to their level of skill and knowledge.*
- The expectation to *find a job appropriate to level of skills and knowledge* was the most common expectation for both full-time and part-time respondents. However, this was the case for two-thirds of full-time and around one-third of part-time respondents. The second most cited expectation for part-time was *continuing with current role with their current employer* and for full-time it was to *progress into further study.*
- The expectation of progressing into further study (e.g. PhD) was the second most mentioned expectation amongst the respondents particularly for those who were OS domiciled.

Immediate postgraduate completion future impact and career area

- Respondents expected to be *able to enter a specialist role* and to *earn more money/be on a higher pay grade.*
- UK non-PEP respondents were more likely to expect to *earn more money* in comparison to PEP respondents.
- EU and OS respondents were more likely to expect to *take on more responsibilities* in comparison to UK.
- The majority of respondents expected to have a *career related to their postgraduate studies*.

Company collaboration with universities

- The majority of companies in the long survey had never engaged with universities.
- The most common collaborations for two of the nine companies were offering internships or a place as part of a degree, attending career fairs, and working with university careers services.
- Only one company had been offered the opportunity to contribute to the curriculum design/delivery of undergraduate or postgraduate courses by a higher education provider. This opportunity was considered important by many of the companies in order to keep universities up to date and to shape the work skills of graduates.
- The most cited barriers for this collaboration were *lack of management time*, *communication issues between universities and business*, and *lack of up-to-date practice.*

Priorities of higher education institutions in the perspective of employers

- The priorities of HE as most cited by the companies in the long survey were to *design and deliver courses that meet industry needs*, *ensure that programmes contain both theory and applied knowledge and skills* and *develop the personal and social skills* that graduates will need in adult life, particularly those related to lifelong skills development.

b. Employment expectations

Chapter 5 highlighted that amongst the motivations for undertaking a PGT STEM qualification was career advancement. The Entry to Study and Employers surveys asked students and employers about their attitudes towards postgraduate qualifications and the expected employment outcomes as a result. The focus groups explored in more detail the findings from these surveys. The findings are reported below.

i. Student and employer attitudes to a postgraduate qualification

Students

Source: Entry to Study survey

The Entry to Study survey asked whether respondents thought *employers valued a postgraduate qualification more than an undergraduate degree*. Of the aggregate sample, 75.8% of the respondents stated that they thought this was the case with 17.9% being *unsure*. Only 4.9% of the respondents thought that *employers valued a postgraduate qualification and undergraduate qualification in the same way*, and 1.4% felt that *employers are not interested in a postgraduate qualification*. The same patterns of answers were found for the PEP sample.

No noticeable differences were found for mode of study, route into study, generational status, domiciled status, gender and ethnicity. No age group effect was found to be important, but a lower proportion of respondents who were 41 years old and above agreed that *employers value a PG qualification more than an UG qualification*. In terms of discipline, mathematical sciences respondents were the ones most likely to be unsure how employers valued a PG qualification.

> *PG does prepare you more for work because you have to ask and take the initiative yourself more.*
>
> *You're expected to go and do that yourself like you would at work, find out information yourself, that's good I think.*
>
> *I think employers can respect you for having the determination to do a masters and invest in yourself.*

Employers

Source: Employers long survey

The Employers survey asked companies whether they would employ an applicant who had a masters qualification over someone who had an undergraduate degree for a post that only required an undergraduate qualification. Of the nine responses, two said *no and* seven said *sometimes, depending on the job required*. Explanations provided included:

> *Candidates are offered positions and are scored primarily against their ability to do the job -through proven work history. If the position requires an undergrad degree and both candidates are eligible, then they will be ranked based on aptitude and work experience. (Large-size company in digital and creative sector)*
>
> *Depends upon the total skill set and the ability of available candidates to demonstrate their ability to apply learning in the workplace. (Medium-size company in building and construction sector)*
>
> *Graduates are not always as well equipped for our jobs as they may think. Many are not 'work ready' and do not have relevant experience or skills. (Medium-size company in retail sector)*
>
> *As previously stated, creativity and talent are the most important aspects for us and we look at show reels and the personality of the candidates as much as qualifications. (Small-size company in digital and creative sector)*
>
> *We interview and look at what the candidate has to offer all round, taking account of verbal reasoning, commercial awareness and communication and teamwork skills. (Medium-size company in professional services sector)*

These findings were supported by how the companies stated they shortlisted their candidates. The first criterion for shortlisting for interview was *previous work experience* followed by *subject of qualification*. *Qualification level* was mentioned as the first criteria by only one employer (medium-size company in building and construction sector). When asked how important work-based experience was as part of a qualification (either at undergraduate or masters level), two employers stated it was *very important* and seven *important*.

Of the companies that did not have masters-qualified employees (three), the major reason for not employing these candidates was *it is not relevant for our business* (two) followed by *the company is too small* (one). Of the five companies that had masters-qualified employees, three stated that a masters qualification was *unimportant* (one large- and two small-size companies) and two stated it was *essential* (two medium-size companies). Explanations provided included:

> *Working experience is a priority, not their education. (Large-size company in digital and creative sector)*
>
> *To ensure the key people have required skills and are keen on continuous development. (Medium-size company in manufacturing sector)*

Only three companies stated that they intended employing graduates with masters' degrees in the future.

Source: Employers short survey

Of the 64 companies, 65.6% stated that they employed masters-qualified employees, and 34.4% did not. The reasons for not employing masters-qualified employees were: *it is not relevant for our business* (81%), the *company is too small* (9.5%), and *other reasons* (9.5%) such as *experience is more important than the qualification.*

ii. Undertaking paid work during your postgraduate studies

For many students at undergraduate and postgraduate level, undertaking paid work whilst studying is common place. Although it is generally recommended by the HE sector that students in full-time study should not undertake more than 15 hours a week of paid work, they often work longer. Study at postgraduate level is demanding so the research was keen to ascertain the extent of paid work that full- and part-time respondents undertook alongside their studies.

Students

Source: Entry to Study survey

Of the aggregate sample, 35.3% of the respondents stated that they intended working *less than 20 hours* per week. PEP respondents' intentions to work between *21-30 hours* a week were higher than those from the other groups (see Table 100). The percentage of EU and OS respondents that were *unsure* or *did not intend to work during their studies* was higher and likely due to visa and access-to-work issues. When the UK sample were compared, UK non-PEP respondents were more likely to work full-time and less likely to work *21-30 hours* a week than PEP respondents.

Table 100. Work intentions

Work intentions	Aggregate	PEP	UK non-PEP	EU	OS
Full-time 30 hours + a week	15.4%	15.4%	26.6%	6.7%	5.2%
Part-time 21–30 hours a week (long)	14.7%	24.9%	16.9%	8.1%	5.2%
Part-time less than 20 hours a week (short)	35.3%	36.4%	30.6%	23.7%	45.1%
Unsure	21.4%	14.4%	15.1%	40.0%	28.4%
No	13.2%	8.9%	10.8%	21.5%	16.1%

First generation respondents were more likely to intend to work full-time (18.2%) and part-time (long) (17.5%) than second generation respondents (12% and 11.7% respectively).

The most common work intention for respondents from all social classes was part-time (short) (see Table 100). However, when comparing the intentions to work full-time, social class 5 respondents were more likely to have this intention (32.1%) than those from social class 1 (10.1%).

When the aggregate sample was analysed by mode of study, expected noticeable differences emerged (see Table 101). Part-time study respondents' intentions to undertake paid work was higher than for full-time respondents, and full-time study respondents' intentions were higher for *part-time less than 20 hours a week or no work*. Understandably, full-time study respondents were also unsure about their intentions to work during their studies.

Table 101. Work intentions and study mode

Work hours	Full-time study	Part-time study
Full-time 30 hours + a week	5.4%	63.4%
Part-time 21–30 hours a week (long)	13.6%	19.0%
Part-time less than 20 hours a week (short)	40.7%	11.7%
Unsure	25.2%	2.0%
No	15.1%	3.9%

No differences were found between full-time UK respondents (PEP and non-PEP), but a higher percentage of part-time UK non-PEP respondents intended working full-time (72.9%) in comparison to PEP respondents (46.3%). When UK domiciled status and entry route into study were analysed, non-PEP respondents coming straight from work were more likely to work full-time (46.8%) than PEP respondents (31.6%). UK first generation non-PEP respondents were more likely to work full-time (31%) than UK first generation PEP respondents (15.2%). This may be due to the assistance by the PEP scholarship.

iii. Skill development

Students

Source: Entry to Study survey

Respondents in the Entry to Study survey were asked to indicate the extent to which they *agreed* or *disagreed* with a range of statements to determine which skills they thought their current course would develop. In Table 102 the *definitely agree* and *agree* responses have been combined.

Table 102. Skill development – combined definitely agree/agree responses

Skill development	Aggregate	PEP	UK non-PEP	EU	OS
Develop my research skills	94.9%	95.4%	94.8%	89.9%	96.3%
Develop my transferable skills	90.0%	92.5%	91.1%	83.3%	88.6%
Provide employer networking opportunities	77.6%	78.2%	72.1%	79.0%	83.2%
Provide research networking opportunities	74.4%	75.2%	69.5%	65.9%	83.0%
Provide practical experience in the subject area	87.8%	89.6%	87.7%	81.9%	87.8%
Develop my research paper writing skills	89.6%	90.6%	89.9%	85.5%	90.1%
Improve my confidence about independent learning	89.3%	90.9%	88.3%	82.6%	92.0%
Help me to present myself with confidence	81.1%	85.0%	81.0%	76.8%	92.6%
Improve my communication skills	86.2%	85.7%	82.9%	84.1%	90.9%
Provide confidence in tackling unfamiliar problems	86.5%	86.3%	88.0%	81.9%	86.4%
Help me reflect on my professional development needs	86.2%	87.0%	85.2%	80.4%	89.2%
Better prepare me for future employment	91.2%	92.5%	90.4%	86.2%	92.9%
Improve my employment prospects	93.1%	95.1%	93.4%	90.6%	9.02%

When domicile status was analysed:

- EU respondents were less likely to agree that their courses will develop their *transferable skills* in comparison to UK respondents.
- OS respondents were more likely to agree that the course will provide *research networking opportunities* and *help to present themselves with confidence* in comparison with other respondents; more likely to agree that it will improve their *confidence about independent learning* in comparison to EU respondents.

When age was analysed:

- Respondents aged 41–50 years old were less likely to agree that their degree will develop *employer networking opportunities* (63.4%) in comparison to respondents under 25 years old (79.7%).
- Respondents aged 41–50 years old were also less likely to agree that it will *help them to present themselves with confidence* (71.8%) in comparison to respondents under 25 (85.7%) and those between 31 and 40 (87.8%). The other respondents ranged between 83.3% and 85.2%.
- Respondents above 51 were less likely to agree that their degree will develop their *research paper writing skills* (61.1%), in comparison with all the other groups (ranged between 87.8% and 93%).

When mode of study was analysed, full-time respondents were more likely to agree that their degree will develop the following skills compared to part-time respondents (see Table 103).

Table 103. Expected different outcomes by mode of study

Expectation	Full-time	Part-time
Provide employer networking opportunities	80.4%	63.6%
Provide research networking opportunities	76.6%	63.6%
Provide practical experience in the subject area	89.4%	80.1%
Help me to present myself with confidence	86.9%	76.2%
Improve my communication skills	87.3%	81.1%
Better prepare me for future employment	92.2%	86.4%

No differences were found when generational status was analysed apart for *research networking opportunities*. Second generation respondents were more likely to agree that their degree will help develop research *networking opportunities* (77%) compared to first generation respondents (71.9%). No differences were found when gender was analysed apart from *confidence about independent learning*. Female respondents were more likely to agree that their degree will improve their *confidence about independent learning* (92.3%) in comparison to male respondents (87.4%). No differences were found when analysing the answers of respondents from different social class backgrounds and routes into study.

Source: PTES, 2015

Respondents in the 2015 PTES survey were asked to give their levels of agreement regarding the development of skills on their course. There were no differences between the aggregate, the Russell and post-1992 samples (see Table 104).

Table 104. PTES 2015 expected skill development

Type of skill development	Aggregate
As a result of the course I am more confident about independent learning	79.1%
My confidence to be innovative or creative has developed during my course	69.4%
My research skills have developed during my course	82.1%
My ability to communicate information effectively to diverse audiences has developed during my course	72.8%
I have been encouraged to think about what skills I need to develop for my further career	70.0%
As a result of the course I feel better prepared for my future career	73.7%

Employers

Source: Employers long survey

Companies were asked to rank how they were most likely to achieve the future skills required by their company (see Table 105). Only one company mentioned the intention to recruit graduates with a master qualification in their top three activities (medium-sized company in the professional services sector). The most common activities were apprenticeships and in-house training.

Table 105. Intended activities to achieve future skills requirements

First	Second	Third
Offer own apprenticeships and train in-house (3) More emphasis on training own staff (3)	More emphasis on training own staff (3) Recruit graduates with an undergraduate qualification (3)	Offer own apprenticeships and train in-house (2) Recruit graduates with an undergraduate qualification (2) Work with universities to tailor courses for your needs(2)
Offer own apprenticeships and train with an external provider (2)	Offer own apprenticeships and train in-house (1) Work with universities to tailor courses for your needs (1) Import from abroad with relevant vocational and educational structures(1)	Offer own apprenticeships and train with an external provider (1) More emphasis on training own staff (1) Import from abroad with relevant vocational and educational structures (1)
Recruit graduates with a masters qualification (1)		

iv. Key skills to develop

Students

Source: Entry to Study survey

Respondents were asked to rank in order of importance a range of skills that would be the most or least important to develop during their course. The findings shown in Table 106 highlight that for 54.3% of the aggregate sample*, knowledge of the subject* was the most important skill to develop and this corresponds with the finding in Chapter 7 (Learning and teaching) where a high number of respondents reported that their knowledge of the subject was *very weak* or *weak*. The least important skills to develop were *work experience* (27.8%), *business awareness* (21.3%) and *numeracy* (19.2%).

Table 106. Most or least important skills to develop in undertaking a postgraduate course

Type of skill	Most important first ranked	Least important 10th ranked
Business awareness	8.0%	21.3%
Communication	6.7%	0.7%
Information Technology	5.6%	10.2%
Knowledge of the subject	54.3%	0.3%
Leadership	4.0%	4.7%
Numeracy	0.9%	19.2%
Self-management	6.1%	4.0%
Problem solving	5.7%	2.8%
Team working	1.2%	9.0%
Work experience	7.4%	27.8%

Employers

Source: Employers long survey

When asked whether the increase in level of qualification equated with a higher skill base (all skills e.g. technical, professional and personal), five companies agreed, three disagreed and one was unsure. Of the respondents who felt that it did, four agreed that this was particularly the case for *high-quality research/technical skills*, and three agreed that this was the case for *subject-specific specialist knowledge* and *high-level analytical thinking/problem-solving skills,*

which are academic-related skills. Other types of skills that were more work related, such as *workplace professionalism*, *high-level communication and negotiation skills*, and *commercial awareness*, were not specifically linked to a postgraduate qualification.

Source: Employers short survey

The companies that did employ masters-qualified employees stated that they did this in order to obtain specific skills such as *subject-specific specialist knowledge*, *high-level analytical thinking/problem-solving skills*, *high-quality research/technical skills*, and *new ideas, help to innovate*. *Workplace professionalism* was not an expected skill, and *commercial awareness* was the least expected skill when employing postgraduate qualified candidates (see Table 107).

Table 107. Expected skills when employing postgraduate candidates

	Subject-specific specialist knowledge	High-level analytical thinking/problem-solving skills	High-quality research/technical skills	New ideas, help to innovate	Workplace professionalism	Guaranteed high-calibre candidates	High-level communication and negotiation skills	Future leadership potential	Commercial awareness
Agree	58.5%	56.1%	45.0%	41.5%	30.8%	26.3%	23.1%	22.5%	15.4%
Sometimes	36.6%	34.1%	37.5%	39.0%	33.3%	42.1%	46.2%	50.0%	35.8%
Disagree	0.0%	4.9%	5.0%	17.1%	28.2%	26.3%	25.6%	25.0%	38.5%
N/A	4.9%	4.9%	12.5%	2.4%	7.7%	5.3%	5.1%	2.5%	10.3%

A study by Connor et al. (2010) on behalf of the Council for Industry and Higher Education (CIHE) for the Department of Business Innovation and Skills highlighted that although employers did value the *analytical and problem-solving skills* which a masters degree is said to provide graduates, it was no indicator of *leadership potential* or *work wisdom* that were two of the key skills they were looking for in masters and doctorate graduates.

When asked if they had experienced any issues employing postgraduates, companies stated that the most common issues were *limited work experience*, *unrealistic expectations of their role in the company*, *inability to demonstrate the required skills* and the *lack of required skills* (see Table 108).

Table 108. Issues when employing postgraduates

	Graduates' limited work experience	Your difficulties competing for the best students with larger employers	Graduates' unrealistic expectations of role in the company	Graduates' knowledge too narrow focused or over-specialised	Graduates' difficultly adapting from an academic to non-academic environment	Graduates' inability to demonstrate the required skills	Graduates' lack the required skills	Graduates' knowledge too wide
Common	25.0%	20.5%	20.0%	7.5%	7.5%	5.0%	2.5%	2.5%
Sometimes	45.0%	23.1%	40.0%	40.0%	42.5%	57.5%	52.5%	12.5%
Rare	15.0%	28.2%	30.0%	42.5%	42.5%	30.0%	37.5%	72.5%
N/A	15.0%	28.2%	10.0%	10.0%	7.5%	7.5%	7.5%	12.5%

c. Immediate completion expectations and future impact

Students

Source: Entry to Study survey

Respondents were asked what they expected to happen immediately after they finished their postgraduate masters qualification.

i. Immediate completion expectation

Overall, the majority of the respondents expected to find a *job appropriate to their level of skills and knowledge* (see Table 109). The expectation of *progressing into further study (e.g. PhD)* was the second most mentioned expectation amongst the respondents.

Table 109. Immediate completion expectations

Expectation	Aggregate	PEP	UK non-PEP	EU	OS
I will find a job appropriate to my level of skills and knowledge	62.4%	65.2%	59.0%	67.6%	62.1%
I will progress into further study (e.g. PhD)	19.2%	18.0%	15.8%	16.2%	25.4%
I will continue with my current role with my existing employer	8.2%	4.9%	15.1%	3.7%	4.9%
I will go into a new role with my current employer	3.4%	2.0%	4.2%	2.9%	3.8%
I will be self-employed (including setting up my own business)	2.2%	2.3%	1.4%	1.5%	3.2%
Other	4.5%	7.5%	4.5%	8.1%	0.6%

When comparing UK respondents, UK non-PEP were more likely to expect to *continue with their current role in their existing company* than PEP. OS respondents were more likely to expect *to progress into further study* (25.4%) than the respondents from the other domiciled groups. As reported in the skills development section above (see Table 103), OS respondents were more likely to expect that their course would provide *research networking opportunities.*

The expectation to *find a job appropriate to level of skills and knowledge* was the most common expectation for both full-time and part-time respondents. However, full-time respondents were noticeably more likely to have this expectation (67.4%) than part-time respondents (38%). The second most cited expectation for part-time respondents was *continuing with current role with their current employer* (30.2%), but this was substantially lower for full-time respondents (3.8%). Full-time respondents second most cited expectation was *progress into further study* (20.5%) whereas for part-time respondents it was lower (12.7%).

Other differences included:

- First generation respondents were more likely to expect *continuing in their current role with their current employer* (10.8%) in comparison to second generation respondents (5.5%).
- Respondents coming straight from university were more likely to expect to find a *job appropriate to their level of skills and knowledge* (66.8%) and *progress into further study* (21.6%) in comparison with respondents coming straight from work (57.6% and 14.3% respectively).
- Respondents coming straight from work were more likely to *expect to continue with their current role* (17%) and *go into a new role with their current employer* (5.8%) in comparison

with respondents coming straight from university (2.3% and 1.5% respectively).

- Respondents aged 31–40 (51.1%) and 41–50 years (46.5%) were less likely to expect to find a *job appropriate to their level of skills and knowledge* in comparison to respondents under 25 years old (68.6%).
- Those under 25 years were less likely to expect to *continue with their current role with their existing employer* in comparison to the other age groups. This could be likely to be due to them not currently in employment or related to their course and/or future career aspirations.
- Physical science respondents were more likely to *expect to find a job appropriate to their level of skills and knowledge* (68.9%) in comparison to biological sciences (55.6%). The other respondents' expectation ranged between 60.7% and 64.2%.
- Biological sciences' respondents were more likely to expect to *progress into further study* (26.8%) in comparison with physical science and engineering respondents (16.2% and 15.5% respectively). The other respondents' expectation ranged between 19% and 28.6%. No gender and no social class differences were found for these expectations.

ii. Future impact

Students and employers were asked about their perception of the impact of a PGT qualification.

Students

Source: Entry to Study survey

Overall, the most cited expectation was *I will be able to enter a specialist role* followed by *I will earn more money/be on a higher pay grade than if I had not done the course* (see Table 110).

Table 110. Future impact

Impact expectation	Aggregate	PEP	UK non-PEP	EU	OS
I will be able to enter a specialist role	40.4%	55.1%	38.2%	31.6%	33.9%
I will earn more money/be on a higher pay grade than if I had not done the course	27.8%	21.3%	30.1%	32.4%	29.3%
I will take on more responsibilities	10.3%	3.9%	6.2%	11.0%	19.8%
I will stand a better chance of being promoted	9.8%	7.2%	11.4%	9.6%	10.3%
I will progress more quickly through my current pay band	5.7%	3.9%	7.1%	8.8%	4.3%
Other	6.0%	8.5%	7.1%	6.6%	2.3%

UK respondents were more likely to expect to be able to *enter a specialist role* in comparison to those who were EU and OS domiciled and were less likely to expect to *take on more responsibilities* than EU and OS.

When the UK sample was compared, UK non-PEP respondents were less likely to expect to *enter a specialist role* and more likely to expect to *earn more money* in comparison to PEP respondents. Other noticeable differences included:

- First generation respondents were more likely to expect a *better chance of being promoted* (12.7%) than second generation respondents (6.6%). No differences were found for respondents coming from different routes into study.
- Full-time respondents were more likely to expect to *enter a specialist role* (41.7%) and to *take on more responsibilities* (11.6%) than part-time respondents (33.8% and 3.9% respectively).

- Part-time respondents were more likely to expect a *better chance of being promoted* (19.6%) and to *progress more quickly through their current pay band* (8.8%) than full-time respondents (7.8% and 5% respectively). This is not surprising as part-time respondents may be more likely to be established in their workplace and their motivations could be related to their current employment.
- Females were more likely to expect to *enter a specialist role* (51.2%) in comparison to male respondents (33.6%).
- Male respondents were more likely *to expect to earn more money* (30.5%) and *take on more responsibilities* (12.7%) than females (23.4% and 6.4% respectively).
- Respondents under 25 years old were *more likely to expect to earn more money* (31.5%) than respondents aged 31–40 years (20.7%).
- Respondents under 25 years old were also less likely to expect *better chances of being promoted* (8.3%) than respondents between 41 and 50 years old (20%).
- Biological science (51.2%) and physical science (51.5%) respondents were more likely to *expect to enter a specialist role* and engineering respondents were more likely to *expect to take on more responsibilities* (16.5%) compared to other disciplines.

No differences were found when analysing social class.

Employers

Source: Employers long survey

Only one company had staff members who had studied for a masters qualification whilst working at the company, and two respondents were unsure about this situation. The company who had staff members in this situation had encouraged and supported it. The respondents reported that generally, the impact of the achievement of a masters qualification was reflected in an increase in salary and job promotion, but never in better pensions, share options or an increase in holiday allowance.

iii. Career area

Students

Source: Entry to Study survey

The vast majority of the respondents stated that they envisaged having a *professional career related to their postgraduate studies* after completion (see Table 111).

Table 111. Expected career area of PGT respondents

Expected career area	Aggregate	PEP	UK non-PEP	EU	OS
A professional career related to my postgraduate study	70.3%	69.4%	73.1%	71.5%	67.1%
A professional career not related to my postgraduate study	0.7%	0.7%	0.7%	1.5%	0.6%
Self-employment related to my postgraduate study	3.8%	6.2%	2.3%	2.9%	4.0%
Self-employment not related to my postgraduate study	0.5%	0%	0.3%	2.2%	0.3%
Continue in the career I was in before postgraduate study	5.0%	1.0%	7.5%	3.6%	6.0%
Academic career in higher education (either research/teaching)	7.0%	7.5%	5.4%	4.4%	10.0%
Research career in higher education	3.1%	2.8%	2.1%	3.6%	4.3%
Research career outside of higher education (e.g. industry, private research organisation/charity, public sector)	2.8%	3.3%	3.5%	1.5%	2.3%
Academic career outside of higher education (e.g. teacher)	0.5%	0.6%	0.5%	0%	0.6%
Unsure/undecided	5.3%	7.2%	4.5%	7.3%	4.0%
Other	0.8%	1.3%	0.2%	1.5%	0.8%

When comparing UK only respondents, PEP respondents were more likely to expect *self-employment related to their PGT studies* in comparison to those who were non-PEP. UK non-PEP respondents were more likely to expect to *continue in the career they were in before their postgraduate study*.

Although a *professional career related to their postgraduate studies* was by far the most cited expectation, some differences were found for discipline and age. Technology respondents were less likely to have a *career related to their postgraduate studies* (46.3%) in comparison to respondents from other disciplines (ranged between 64.3% and 75%). Respondents between 41 and 50 years old were less likely to cite this expectation (47.9%) in comparison to respondents in the other age groups (ranged between 55.6% and 72.2%).

Differences were found when analysing the option *continue in the career I was in before postgraduate study.* Respondents aged 41-50 years were more likely to have this expectation (25.4%) in comparison to other respondents (ranged between 1.5% and 11.1%). This was also the case for respondents coming straight from work (9%) compared to respondents coming straight from university (1.1%); respondents studying part-time (13.7%) in comparison to respondents studying full-time (3.2%); and first generation respondents (7.4%) in comparison to second generation respondents (2.4%).

No differences were found for gender and social class.

d. Company collaboration and engagement with higher education institutions

Companies were invited to comment on their past, current and prospective activities with universities, and the role of higher education institutions in educating students in a subject field.

i. Collaboration with universities

Source: Employers long survey

Companies were asked to provide their level of engagement with universities in a range of activities (see Table 112). The majority of the respondents hadnever engaged with universities, and the most common current collaborations for two companies were offering *internships or placements as part of a degree*, *attending career fairs*, and *working with university careers services*.

Table 112. Level of engagement with universities

Engagement	Currently do	Used to, but not anymore	Actively planning to do	No plans but would like to	Never done
Sponsored university students	-	-	-	1	8
Offered internships/industrial placements as a part of a degree/course	2	-	-	5	2
Attended university careers fairs	2	-	-	2	5
Worked with university career services to identify candidates	2	-	1	2	4
Sponsored/commissioned university research	-	-	-	3	6
Participated in knowledge transfer partnerships	-	-	-	1	8
Invited to comment on course development	-	1	-	3	5
Member of a university industrial advisory board	-	-	-	3	6
Supervision of masters research/ dissertations	-	-	-	3	6
Given guest lectures at a university	1	2	-	-	6

Only one out of the nine companies stated that it has been offered the opportunity to contribute to the curriculum design/delivery of undergraduate or postgraduate courses by a higher education provider, *by group participation within local business community* (medium-sized company in the information sector).

When asked about the barriers when contributing to the design of courses by higher education providers companies cited *lack of management time* (two), *communication issues between universities and business* (two), and *lack of up-to-date practice by universities* (one). Three companies cited that there were *no barriers*.

Finally, when asked about how important is it for industry to input into the curriculum design of universities in order to keep them up to date and to shape work-ready students, five companies said it was *very important*, one said *important* and three stated *sometimes important*. Respondents were invited to elaborate on their answers.

Very important (medium-sized company in the information sector):

> *I see little point in preparing students for exams and theory when they are unable to translate this into real-world practice. It is surely essential to input real-world scenarios and information to the curriculum to help prepare them.*

Sometimes important (medium-sized company in the building and construction sector):

> *Relevance to industry; we work with colleges of FE, so would like input at that level.*

ii. Priorities of higher education institutions

Source: Employers long survey

Companies were asked to rank what should be the top three priorities of higher education institutions when educating students in a subject field. The most cited priorities, out of 10 options, were *design and deliver courses that meet industry needs*, *ensure that programmes contain both theory and applied knowledge and skills* and *develop personal and social skills they will need in adult life, particularly those related with lifelong skills development* (see Table 113).

Table 113. Priorities of higher education institutions, according to company's perspective

First	Second	Third
Design and deliver courses that meet industry needs (5)	Ensure that programmes contain both theory and applied knowledge and skills (4)	Develop personal and social skills they will need in adult life, particularly those related with lifelong skills development (5)
Ensure that programmes contain both theory and applied knowledge and skills (3)	Design and deliver courses that meet industry needs (3)	Increase students' awareness of labour market opportunities (2)
Teach knowledge and skills subject development only within the context of the subject qualification (1)	Increase students' awareness of labour market opportunities (1) Relate the material being taught to how it is used in the economy (1)	Ensure that programmes contain both theory and applied knowledge and skills (1) Engage students in company-related projects (1)

e. Comment

Disconnect between students and employers value of PG qualification

This chapter highlights the disconnect between students' and employers' perception of the value of a postgraduate qualification. Students saw the qualification as providing them with a significant advantage in the employment market due to the acquisition of higher level skills and knowledge and felt that work experience was one of the least important skills to be developed when undertaking a PGT course. For the employer regardless of size, *work experience* was cited as the most important shortlisting criteria and *limited work experience* was pointed out as one of the most common issues when employing masters-qualified graduates. The Federation for Small Business state that 99% of the companies that sustains the UK economy are small and medium-sized enterprises (SMEs) and point out that these companies have a different recruiting framework compared to large companies. Recruiting is a very strategic decision for SMEs as it is part of a long-term development business plan that is about adding different skills to the existing workforce rather than adding more people (Pollard, 2014). This disconnect between student and employer perception of value and actual requirement for the necessity of PGT-qualified graduates needs to be addressed by the HE sector via its recruitment marketing campaigns and future discussion on the purpose of postgraduate taught education. As fee levels increase, unless students see the direct benefit of their qualification in terms of employer 'need', they may be inclined to participate in alternative forms of continuous professional development especially if provided by the company in which they work.

Skill development

Employers stated that they felt universities should design and deliver courses that meet industry needs, and that develop the students' soft skills required for the workplace. There is the tension within the sector regarding the purpose of HE; is it for general learning or is its purpose to equip business and industry with a skilled workforce? Employers felt that engagement between companies and universities was important, but amongst the

participating employers, it was very limited. The employers within the surveys stated that they intended fulfilling their future employments requirements through apprenticeships and in-house training.

f. Summary

This chapter has highlighted a number of issues that universities could develop to enhance their undergraduate and PGT courses. They include:

- providing more opportunities for the student to obtain relevant course-based work experience; and
- working with business and industry more closely to develop course content that is current and applicable.

9. Integrated study

The Integrated survey was not part of the project's original remit, but was added in an attempt to understand and determine the drivers that encourage participation in this type of qualification and any impact, if any, that it has on PGT enrolments.

a. Key points

Funding an integrated course

A student loan was the primary method of funding an integrated course for the majority of all UK domiciled respondents and nearly three quarters of EU.

Finding out about an integrated course

The most cited reasons by respondents for finding out about the course were the *UCAS search facility* followed by *parents and friends* then *university prospectus*. Encouragement at *university open and admissions days* was negligible.

Reasons for choosing an integrated course

The top three reasons cited for choosing an integrated degree were *attracted to depth of it*, followed by *liking the sound of it*, then *wanting/needing to undertake a masters degree for a chosen career. Obtaining a student loan to do a masters degree* was a not cited as an important driver.

Benefits of an integrated course

The majority of respondents were aware of the benefits of an integrated degree when they applied for it. The top three benefits cited were *it will get them a better job on graduation*, followed by *it will increase the chances of getting a graduate job*, then *it is a requirement for professional registration.* Of the respondents who cited that it would give them a higher salary, all were in the age group 18–21 years.

Future study intentions

A third of the aggregate sample anticipated undertaking further study sometime in the future with those between 25 and 35 years of age more likely to consider it than 18–25 year olds.

b. Setting the scene

Between 2002/3 and 2013/14 enrolments on integrated masters degrees across all disciplines in English HEIs grew by +122 % (HESA, 2015b). It is argued that the growth in integrated degrees is in part due to successive governments committing resources and support for these degrees because business and industry value and benefit from the knowledge and skills that students with these qualifications possess, especially work-ready skills, as a result of placement opportunities. However, recently some commentators have suggested that the growth is due to students being attracted to these courses because the masters element is funded through the loan scheme at 'undergraduate' level (e.g. Else, 2014) and that universities are developing integrated courses as a way of guaranteeing an income stream. The reality is that the sector does not categorically know the drivers for the growth in this area or whether there is a correlation between the increase in popularity for these types of qualifications and the general decrease in PGT enrolments.

What is an integrated degree?

An integrated masters degree (e.g. MEng, MMath, MPhys, MPsych, MSci, MChem, MBiol, MGeol, MPlan, MLaw, MDes, MArt) is an undergraduate degree combined with an extra masters year. The first three years of study are often the same as a bachelors degree followed by an additional year of study at a masters degree level. With many courses, a placement or sandwich year can also be undertaken. The degree is only conferred at the end of study as a full masters – an intermediate bachelors degree is not awarded. Students can transfer on to the course from a bachelors if they meet the academic requirements or transfer from an integrated to a bachelors if they do not wish to continue on an integrated route. Integrated masters are most common in scientific disciplines. At institutional level, these courses are managed alongside undergraduate degrees, with UK and EU students able to obtain funding for fees and loans via the Student Loans Company.

Importance of understanding the growth in integrated degrees

In terms of statistical calculation, integrated enrolments and qualifications achieved are reported within the undergraduate rather than postgraduate statistics. As a result, it is challenging to analyse and understand the 'postgraduate' enrolment landscape and student experience with any accuracy without examining this qualification, hence this project exploring the motivations of STEM students undertaking an integrated degree. As only the English universities within the project participated in this strand, all HESA data reported in this chapter is from English HEIs. MPharm integrated degrees that come under 'Science' in the HESA statistics and are technically coded as 'Allied to Medicine' were also included in the Integrated survey as they are a popular integrated degree on a national level as well as in four of the project's participating universities.

Growth in integrated degrees

Even with the issues relating to Bologna, enrolment growth amongst EU and Overseas students has been substantial in integrated degree participation with the percentage growth within each being almost double that of UK (see Table 114).

Table 114. English HEI integrated enrolments statistics by domiciled status 2002–2014

% within domiciled	2002-3	2004-5	2006-7	2008-9	2010-11	2011-12	2012-13	2013-14	Growth 02–14
UK	29,570 85.8%	31,200 84.0%	35,675 81.8%	42,310 81.9%	52,845 80.9%	56,900 80.8%	58,990 81.0%	62,220 81.4%	*+110.5%*
EU	1,580 4.7%	1,810 4.9%	2,435 5.6%	3,100 6.0%	4,265 6.6%	4,770 6.7%	4,865 6.7%	4,920 6.4%	*+211.4%*
Overseas	3,285 9.5%	4,125 11.1%	5,485 12.6%	6,235 12.1%	8,175 12.5%	8780 12.5%	8,975 12.3%	9,320 12.2%	+183.7%
Total	34,430	37,135	43,595	51,645	65,285	70,450	72,830	76,460	*+122%*

Source: statistics provided by HEFCE, 2015b

However, it is important to note that the growth in integrated enrolments is not reflective of undergraduate enrolments in England as since 2011/12 there has been a decline of -11.8%. This pattern of decline is also reflected in the overall UK undergraduate enrolment figures and can be partially attributed to the declining population of UK 18 year olds. Integrated enrolments in STEM disciplines such as engineering and computer science have experienced steady growth reflecting the general increase in undergraduate and postgraduate participation (up to 2010), but others such as biological sciences (MBioSci) and subjects allied to medicine

(MPharm) have expanded dramatically, especially in OS enrolments. When the enrolment figures for all English HEIs are examined by domiciled status, there has been noticeable growth amongst EU students in biological, mathematical and computing sciences and for overseas students in the areas of allied to medicine and physical sciences.

Reasons for growth

As well as the explanation already suggested for growth, at the start of this chapter, there are other possible contributory reasons. Firstly, integrated degrees provide a critical route for professional recognition such as chartered status for engineers. For MPharm, the removal of the restriction of only 23 institutions being able to run courses resulting in a number of new schools of pharmacy being established and accredited by the General Pharmaceutical Council (GPhC) allowed and led to greater student participation.

The noticeable increase in EU and OS students undertaking taking integrated degrees in English HEIs may be as a result of them seeing the UK system as a method of circumventing the Bologna 3+2 requirement or they may view it as a way of meeting the Bologna requirement if they undertake four years of study and a placement year (five years of study). Although an MPharm student is only undertaking a four-year course within an HEI, the post-study Pre-registration one-year requirement in order to qualify as a pharmacist does fulfil Bologna (4+1). It is interesting to note that OS enrolments are substantially higher in some discipline areas and this could be attributed to their governments supporting them to study in the UK in order to be equipped with the relevant skills their country needs and what they cannot learn within their own country.

When the integrated enrolments are examined between 2002/3 and 2013/14, although the data continues to demonstrate growth, the year-on-year percentage growth has noticeably decreased, especially since 12/13 when £9K-a year-fees were introduced (see Table 115). This does not support the argument that students are strategically undertaking an integrated degree to fund a masters qualification.

Table 115. Change in integrated enrolments by year

Year	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14
enrolments	34,430	36,420	37,135	41,465	43,595	48,710	51,645	57,640	65,285	70,450	72,830	76,460
% change		+5.8%	+2.0%	+11.6%	+5.1%	+11.7%	+6.0%	+11.6%	+13.3%	+7.9%	+3.4%	+5.0%

Source: statistics provided by HEFCE, 2015b

c. Funding and motivations

Integrated students across eight of the English participating universities were asked how they were funding their course and what had been their motivations in pursuing an integrated degree.

Funding of the course

For 87.6% of UK and 72.2% of EU domiciled students, a *student loan* was cited as the primary method of paying for their course, followed by *parents/guardians* with 7.4% and 16.7% respectively. For Overseas respondents, 70.8% were relying on *parent/guardian* support followed by 12.3% having some type of *scholarship*. It is important to remember that a student's domiciled status does not always equate with the fee level they pay, hence the difference between reported domiciled status and funding methods.

Finding out about the course

The survey asked how respondents had found out about their course. The top three reasons cited by the respondents on how they found out about the course was firstly the *UCAS subject search facility* (36.5%), followed by being *told about it via parents and friends* (21.5%) and thirdly they *found out about it from the university prospectus* (15.5%) (see Table 116).

Table 116. Finding out about an integrated degree

Reason	Aggregate (608)
I was told about it by a parent/family friend	21.5%
I was told about it at a university open/admissions day	7.6%
I found out about it from a university course booklet	15.5%
I used the UCAS subject search facility	36.5%
I was told about it at school by a teacher/careers adviser	9.2%
I was told about it by work colleagues	2.8%
I was told about it by my university tutor after I started another course	4.9%
Other	2.0%

The reasons for choosing the course

Respondents were asked to rank their top three reasons (out of 13 options) for choosing to undertake an integrated degree. All the responses for the 13 options are reported in Figure 28. The top three most cited options given for reasons one, two and three are highlighted in Table 117. Being *attracted to the depth of the course*, *liking the sound of it* and *wanting or needing to undertake a masters degree* were the key drivers. When the data was analysed by discipline, similar findings were found.

Table 117. Top three ranked reasons for choosing an integrated degree

Rank	Reason 1	Reason 2	Reason 3
1	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 29.2%	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 20.9%	I liked the sound of it 17.1%
2	I liked the sound of it 20.6%	I wanted to undertake a masters-level course 17.9%	I wanted to undertake a masters-level course 15.0%
3	I didn't have a choice as I need it to have it for my chosen career 14.2%	I liked the sound of it 14.5%	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 12.1%

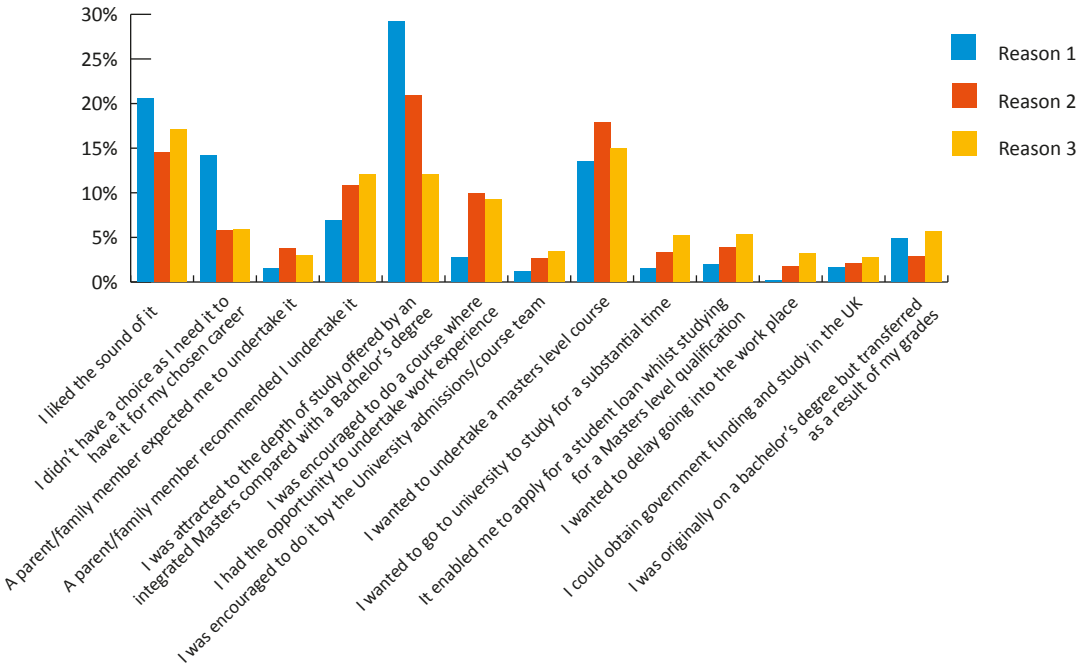
When analysed by year of study the reasons cited are similar to the aggregate sample (see Table 118). One of the options least cited was it *enabled me to apply for a student loan whilst studying for a masters degree*. Of all respondents, only 2% cited this for reason one with nine respondents being in Year 4, 3.9% for reason two with 10 respondents being in Year 4 and 5.3% for reason three with 10 respondents being in Year 4. All respondents were UK domiciled. It is noticeable that this option increases slightly in citation between reason one and three. Of the respondents who were in Years 1 to 3 and were of UK/EU domiciled status, thus studying under the £9K-a-year fee regime, the percentage was less per reason than the overall sample with 1% for reason one, 3.3% for reason two and 5.1% for reason three respectively.

Table 118. Top three ranked reasons by year for choosing an integrated degree –Reason one

Rank	Year 1 (154)	Year 2 (118)	Year 3 (142)	Year 4 (195)
1	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 33.3%	I liked the sound of it 30.5%	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 30.3%	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 27.8%
2	I liked the sound of it 18.3%	I was attracted to the depth of study offered by an integrated masters compared with a bachelors degree 24.6%	I liked the sound of it 17.6%	I liked the sound of it 18.6%
3	I didn't have a choice as I need it to have it for my chosen career 15.7%	I wanted to undertake a masters-level course 11.0%	I didn't have a choice as I need it to have it for my chosen career 16.2%	I wanted to undertake a masters-level course 15.5%

The findings demonstrate that undertaking an integrated degree because funding covers a masters degree was not a motivation for these respondents in undertaking an integrated degree, especially those in Years 1–3 required to pay £9K-a-year course fees. Reasons such as *wanting to delay going into the workplace*, *parental expectations* and *wanting to study at university for a substantial period of time* were also not cited as significant reasons for undertaking an integrated degree (see Figure 28).

Figure 28. All the ranked reasons for choosing an integrated degree

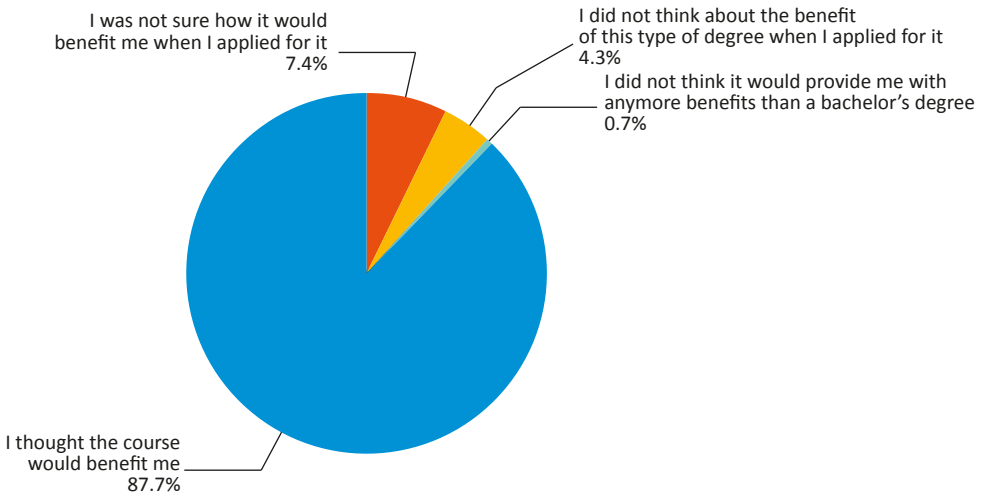


Benefits of an integrated degree

Integrated degrees are often promoted by institutions and professional bodies as providing *added* value and benefits compared to a bachelors degree, but it is unclear due to a lack of research whether applicants are aware of this when they apply for the course.

When asked about the benefits of an integrated degree, of the aggregate sample, 87.7% of respondents stated that they had thought about the benefits this type of degree would provide when they applied for it (see Figure 29). Of the 7.4% who had been unsure about the benefits when they had applied, only one respondent continued to feel that there was no added value and they were in Year 4. Ten were still unsure and nine of these were in Years 1–3. When analysed by discipline, there were no differences in attitude towards value of an integrated degree.

Figure 29. Benefit awareness of an integrated degree



When respondents were asked to rank the top three reasons of how they felt the degree would benefit them, the primary response was that it would provide better job and career prospects (see Table 119).

Table 119. Expected benefits of obtaining an integrated degree

Rank	Reason 1	Reason 2	Reason 3
1	I feel it will provide better job and career prospects after graduation 47.0%	I feel it will provide better job and career prospects after graduation 27.9%	I feel it will increase my chances of getting a job after graduation as masters degrees are preferred by some companies 26.4%
2	I feel it will give me some added knowledge and skills that a bachelors degree would not 26.8%	I feel it will increase my chances of getting a job after graduation as masters degrees are preferred by some companies 18.0%	I feel it will give me a higher salary after graduation 17.2%
3	I feel it will provide a more straight forward route towards my professional registration 14.8%	I feel it will provide a more straight forward route towards my professional registration 17.6%	I feel it will give me some added knowledge and skills that a bachelors degree would not 12.1%

Earning a high salary after graduation was not ranked in the top three for reasons one and two by the respondents, but it was cited in sixth place for reason one with 2.8%% and fourth in reason two with 14.%. Of those that cited earning a higher salary for reason one, all were in the 18–21 age group. Of those who ranked it in second for reason three, all respondents were under 30 years of age. There were no discipline or gender differences.

One of the added value and benefit characteristics often cited of an integrated degree is the opportunity to undertake a work placement and provide the student with ready-to-work skills. Of the sample, 36.3% were undertaking or intended undertaking a placement of some kind and of these, 58.3% were undertaking one that was a year long. For 20.2% of the respondents, the placement was *less than five weeks* and for 5.8% *between five and 10 weeks*. Of the 15.7% who cited *Other*, the placement ranged from a varying number of days per week, month and semester to block sessions such as 12 weeks over the summer.

The reasons cited by those not undertaking a placement were, firstly, *it is not available for my course* with (50.5%), followed by *I did not think about it as an option when I applied* (16.2%), then *it delays entry into the workplace* (14.4%) and lastly *I cannot afford to undertake a longer study period* (13.6%). Of the 5.4% of respondents who cited *Other* the majority reason given was that they had been unable to secure a placement.

When analysed by discipline, the top two reasons provided by all disciplines (excluding MPharm and MPharmSci as not applicable) were similar in that *they could not afford it*, *had not thought about it when applying* or were *concerned about it delaying entry into the workplace* (see Table 120). The MPharm respondents' main reason for not undertaking a placement as part of their degree is expected as students undertaking this integrated course who wish to become pharmacists are required to complete a full-time, four-year course followed by a separate one-year pre-registration placement.

Table 120. Reason for not undertaking an integrated degree placement by discipline

Discipline	Reason 1 within discipline	Reason 2 within discipline
MChem (14)	Did not think about it when I applied 50.0%	Cannot afford an extra year of study 21.4%
MComp (20)	Delays entry into the workplace 35.0%	Cannot afford an extra year of study 30.0%
MEng (63)	Delays entry into the workplace 46.0%	Cannot afford an extra year of study 31.7%
MPharm (246)	No available for my course 73.6%	Did not think about it when I applied 12.2%
MPharmSci (39)	Other reason 38.5%	Did not think about it when I applied 23.1%
MSci (5)	Did not think about it when I applied 60.0%	Cannot afford an extra year of study 40.0%
MMaths (2)	Did not think about it when I applied 100%	-

When the MPharm respondents are excluded from the sample and domiciled status and intention to undertake a placement are examined, 55.5% of UK respondents, 25% of EU and 66% of OS stated they intended undertaking a placement of some kind. Due to sample size the significance could not be tested.

Of the 53 respondents who stated that they *could not afford to undertake a longer study period,* this reason was a more common factor cited for respondents in the age groups of 30 and above, but again due to sample size the significance could not be tested.

Future study intentions

The Entry to Study survey (see Chapter 4) highlighted that of the 1,226 STEM masters respondents across 11 universities, only 9 reported that their highest qualification was an integrated degree thus raising the question of whether the increase in integrated participation impacts on the level of masters enrolments. Due to this finding, the survey wanted to explore integrated students' attitudes towards further study. Respondents were asked whether they anticipated undertaking a further masters degree at some point in the future and for what reason. This question was added after the pilot at the lead university, so the sample size for this question is 370 rather than 609 respondents. Of these respondents, 31.6% stated that they did anticipate undertaking further study. Reasons cited for this included *wanting to move into research, undertaking a business-related course, desire to specialise their knowledge*, *to stay ahead of upcoming graduates* and *to develop themselves*. When analysed by age, respondents in the age groups 26–30 and 31–35 were more likely to consider undertaking further study compared to the 18–25 age group, but due to sample size, the significance could not be tested.

Of the 68.4% of respondents who stated they had no intentions of going onto further study, reasons included *further qualifications are not needed for their chosen career*, *one masters degree is enough*, *an integrated degree is superior to an MSc*, and they are *tired of studying*. Financial reasons were cited by only one respondent.

Respondents who expressed an interest in undertaking further study were asked what sources of funding they intended to use to enable them to do this. Of the 31.6% of respondents who were considering undertaking further study, 174 different methods were cited and these are highlighted in Table 121. Obtaining a student loan was cited 52 times, thus accounting for 29.9% of all responses, and parental support was cited 17 times, thus only constituting 9.7%.

Table 121. Intention of funding future study

Rank	Method of funding	Aggregate (117)
1	Student loan	29.9%
2	Employer sponsorship	17.8%
3	Government sponsorship (UK,EU,OS)	14.9%
4	Self-funding	11.5%
5	University sponsorship/scholarship	10.9%
6	Parents/guardians	9.8%
7	Don't know	3.5%
8	Spouse/partner	1.7%

When the funding method was examined by year, there were noticeable differences in some of the options selected between the years of study (see Table 122). As the level of study increased, more respondents stated that employer and self-funding were the most likely sources of funding with loans and scholarship/studentships noticeably declining.

Table 122. Method of funding future study by year of study

Year of study	Loan	Employer	Self-funding	Parents	Scholarship/ studentship
Year 1 (33)	22	4	2	6	8
Year 2 (24)	12	4	4	4	3
Year 3 (25)	11	6	2	4	3
Year 4 (35)	7	17	12	3	5
Total (117)	52	31	20	17	19

d. Comment

Increase to circumvent funding

The concern reported in certain areas of the HE sector that students are undertaking integrated degrees because they can obtain funding to do a masters degree via the student loan system was not borne out by the findings of the Integrated survey; neither was the suggestion that universities are proactively encouraging applicants to apply for these courses during open and admissions days. Interestingly, of the small number of respondents who had cited obtaining funding to do masters study via the student loan scheme as a motivation for choosing the course, the majority were in Year 4 of their studies, all were UK domiciled and their fees were under the prior funding regime of £3,500 per year.

At the time the survey was been undertaken, the government announcement on a possible student loan scheme at PG level had been made, but it is uncertain as to the impact this had on the responses and indeed if the respondents were aware of it when completing the survey. As the level of study increased, there appeared to be awareness that funding future study via a loan was not viable and an understanding that other methods were required. It is unclear whether they have come to this understanding via careers advice through their university or other methods.

The finding that undergraduate respondents assume that they can obtain a loan for PG study is not surprising. The data from the Stuart et al. Barriers Review of 2008, which was one of the first studies to explore this area, also found that the primary method cited by students who were thinking of going on to PG study and were in their final year of undergraduate study

across all disciplines at two post-1992 universities intended funding it by a student loan. As found in this project and the Barriers Review, after funding future PG study via a *loan*, the methods cited were *salary*, then *parents and guardians*, followed by *savings* and then some kind of *scholarship* or *sponsorship*. This finding suggests that undergraduate students appear to have a lack of understanding of the availability of funding at postgraduate level. *Professional career development loans (PCDL)* are not easily obtained, as reported in Chapter 7.

As the Entry to Study survey found, *loans* are an insignificant method of funding PG study by current masters students with *parental funding* being cited as the primary source of funding (33.1%) followed by *savings* (26.6%) then *salary/personal income* (18.3%) and *loan* 14% (see Chapter 6). There appears to be a disconnect between what undergraduate respondents assumed was available and what actually was obtainable.

Integrated increase impacting on decline in postgraduate enrolments

Unlike the taught masters degree and other postgraduate qualifications, integrated degrees show no sign of declining in enrolments, although the pace of growth has slowed. As the findings in this chapter show, respondents appear to be aware of the benefits of this qualification whether obtained via UCAS, the university, or friends and family. What was not explored via the survey, thus remains unclear, is whether the transfer of information regarding the benefits is more efficient for this type of course because it is managed and processed as an undergraduate course.

The Integrated and Entry to Study surveys suggest that respondents with an integrated degree are less likely to proceed onto PGT-level study, thus removing them from the pool of possible PGT applicants. This could in part be a contributory factor in the decline in PGT enrolments, especially amongst those who are UK domiciled. The increase in EU and OS domiciled participation across English HEIs has undoubtedly contributed to the increase in integrated enrolments and has helped sustain undergraduate enrolments in general.

Future of integrated degrees

Integrated degrees are currently managed as an undergraduate course and financial support for UK and EU students is provided via the Student Loans Company. If a future PGT loan scheme is rolled out under similar arrangements then in terms of funding it becomes irrelevant whether an individual undertakes a masters degree via an integrated qualification or a traditional bachelors followed by a masters degree. Growing integrated offerings across all disciplines with workplace options included not only has the potential to provide greater opportunity to sustain the PGT market and provide more choice for students, but it also can help with aligning degrees with Bologna.

In the past two years, government has placed much emphasis on the importance and the development of apprenticeships in business and industry as a way of improving productivity and competition. Although the Federation for Small Business states that most of its members do not require masters graduates (see Chapter 8), the development of apprenticeship schemes where students can progress through the different levels up to that of masters may change that attitude and could impact on the development and uptake in popularity of integrated degrees. At present, there are only a small number of apprenticeship courses in operation up to masters level. As HEIs aim to work more closely with business and industry in developing appropriate apprenticeship courses to meet the skill gap, some integrated degrees may start to straddle the traditional and apprenticeship structures in response.

e. Summary

The findings in this chapter suggest that integrated degrees provide benefit for the individual as well as business and industry. Suggestions for further exploration include:

- exploring the benefits of increasing integrated offerings across non-traditional disciplines such as arts, humanities and social sciences;
- building closer working relationships with business and industry in non-traditional integrated disciplines; and
- increasing the number of integrated degrees with placement options.

10. Future challenges and moving forward

The themed chapters in this report have illustrated the complexities of the expectations and experiences of PGT study by applicants, students and employers, and provided some specific suggestions in how to address them. This chapter focuses on the overarching challenges that delegates attending the PEP National Dialogical Conference in July 2015 felt the HE sector faces in widening and sustaining the PGT market across all disciplines. It was felt that if the government and HE sector wish to develop and implement effective sustainable strategies to widen access to PGT study to enable greater participation across different demographic groups who have lower participation rates (e.g. lower social class students), then a range of activities need to occur and a number of approaches adopted in order to achieve this aim. These are discussed below.

Increased knowledge

Who participates?

Developing future policy requires accurate information and a comprehensive understanding of why individuals participate in PGT study, who participates, barriers to access, progression and completion, and where participation occurs including location and type of university. This knowledge is not currently available although some of these broad questions have started to be explored. Wakeling and Hampden-Thompson (2013) *Transitions to Higher Degrees across the UK* report where they examined in detail the movement of full-time UK and EU domiciled undergraduate students to postgraduate study using national data provided by HESA is an incredibly valuable piece of research. However, they were unable to analyse the same information for students entering postgraduate study after having a break or coming from overseas due to absence of this data.

A key aim of the PEP project was to obtain some of the missing knowledge through capturing an extensive amount of quantitative and qualitative information from applicants and students across the various transition PGT stages. The chapters in this report have given insight into the motivations, barriers, challenges, expectations and experiences of those pursing PGT study. However, the project consisted of 11 universities and STEM-related disciplines only. Although some of the findings are quite unambiguous, it would be wrong to make the assumption that the findings are applicable across the sector.

This study highlights that discussion and further exploration of what *widening participation* means at PGT level, generational status and social class need to be more comprehensively examined. It is unknown whether these characteristics, which are recognised as being influential at undergraduate level, are at postgraduate. However, the various chapters in this report have highlighted some notable findings for these groups in terms of route into study, funding, expectations, perceptions, attitudes and engagement issues. For example, respondents from social classes 1 and 2 were more likely to be second generation students, coming straight from university, funded by parents/guardians, studying full-time, knowing what to expect and less likely to work during their studies. Respondents in social classes 3 and below were more likely to be first generation, coming from work or another form of entry route, studying part-time, less likely to know what to expect and more likely to work alongside their studies. Added to this, UK domiciled respondents all reported substantially higher levels of previous study debt compared to their EU and OS counterparts. Interestingly, the perception of debt was also higher for lower social classes, even though the debt levels were similar to those in the higher social classes. These different perceptions, funding methods and expectations related to finance are reflected in the anxiety levels with respondents of lower social classes being generally more

anxious, which is not conducive for successful participation, progression or completion. Further research into these areas will help inform the development of sustainable and effective policy at institutional and national level when considering how to widen participation.

At present, there is no effective and comprehensive national PGT admissions process as at undergraduate level, which is acknowledged as being highly beneficial. If the sector signed up to a national postgraduate admission system then the critical information on applicants and students that is currently lacking could be comprehensively collected. The difficulty faced by the project in collecting applicant data was highlighted in Chapter 2 and these findings have formally been passed onto UCAS for consideration in their discussions about developing a more effective PGT national admissions process. A national admissions process could also potentially reduce the admissions procedure costs for a university. At PGT level, it is very hard for an institution to accurately predict enrolment numbers due to the lack of knowledge of where else the applicant has applied and their *real* ability to participate as opposed to their *intention*. This was very much highlighted in the Non-Enrolment Groups A–D survey results. Within the project's lead university, the estimated *conservative* cost in time for processing the applications of STEM PGT non-enrollers by academic and administrative staff was around £55,000. This excludes overhead costs such as space and associated costs.

Impact of accurate data and knowledge

It is recognised that effective management in HE relies on accurate data and knowledge. If an institution is able to identify the changes in its student body quickly and accurately, it is able to adjust, adapt and link the support it provides in the academic and non-academic spheres. For example, a course, as a result of a more proactive university marketing strategy, may experience an increase in overseas participation in a particular year. Having immediate access to accurate data enables accommodation, language support services and the learning and teaching experience in and out of the classroom to be adjusted straightaway to meet the changes in the student body and support requirements.

The project through its various data collecting activities has highlighted the complexity of the PGT student's life and their individual support requirements. Accurate data enables an institution to obtain a better understanding of their student body therefore enabling them to provide targeted and inclusive support. For example, if a university has a large number of PGT students on a course who live in excess of 25 miles away, the teaching timetable, where possible, could be adjusted to ensure that the majority of lessons are clustered into full days so the cost of travel for the student is reduced.

Postgraduate study is one of many activities the student has to balance, and their engagement in their studies and their student experience will be determined by their individual and often complex circumstances. In recent years, research suggests a student's success is linked to their sense of *belonging* with an institution. One model, proposed by Liz Thomas (Thomas, 2012), suggests that *belonging* is as a result of being engaged in a range of activities across different academic and non-academic spheres. However, Kate Thomas's new alternative model suggests that it is more influenced by factors such as a student's individual motivation, discipline, profession, cohort and private sense (Thomas, 2015). This model more accurately reflects how students in this study felt about their PGT-level study. This is an important finding as it will impact on institutional approaches when supporting students and helping them engage and belong.

Expectations of PGT study by students and employers

Chapter 8 highlighted the disconnect between students' expectations of the benefits that a PGT qualification would provide compared to employers. Whilst students believed that a PGT qualification will improve their chances of getting a graduate job, provide more career choices, and that it is more valued by employers than an undergraduate degree (also Stuart et al., 2008; Wells, 2011; Soilemetzidis et al., 2014), this study and other recent research suggests that a PGT qualification is not essential for many employers and does not necessarily provide the relevant skills needed for the workplace (Connor et al., 2010; Marginson et al., 2013; Mellors-Bourne et al., 2014). There needs to be an understanding of what generates these expectations of applicant and students and what the accuracy of those expectations are in reality. There is substantial evidence highlighting the benefits of possessing an undergraduate degree on salary and other benefits over a lifetime, but insignificant evidence, as a result of the recent high number of postgraduate taught entrants into the job market, to suggest that this is also the case. Longitudinal studies would be helpful to provide accurate insight into this area.

The findings also suggest that it is important to determine the role of various stakeholders in the credential inflation of qualifications. Has it been government and employer driven with the HE sector responding or has it been the HE sector recognising market opportunities and applying known undergraduate outcomes to an unknown PGT market? A major challenge in handling credential inflation when widening and sustaining the sector in the future will be managing student and employer expectations through marketing processes, which is backed up by evidence. The HEA have taken the project's Entry to Study survey into its portfolio, which, if rolled out across the sector, will substantially assist in obtaining a more accurate picture of PGT student expectations across the sector and different disciplines.

Approaches to widening and sustaining the PGT sector

Self-correcting

One approach in widening and sustaining the sector, as has commonly occurred at undergraduate level, is to do nothing, as the market will naturally correct itself. The findings from the project partly support this tactic. Some respondents in the focus groups stated that they had delayed entry into PGT level study until the economic climate and their personal finance situation improved.

Unstable employment environment

> *I was worried that if I left my full-time job, I would struggle get a job after my studies because the industry is really struggling. This is why I chose the part-time route. But it is still hard…….*

No financial access to fund study

> *I delayed my postgraduate studies so I could save up enough money to do it. You know…I am an adult and I really didn't want to ask my parents for help…*

Combination

> *I was made redundant and didn't have enough money to pay for my studies and there was no financial help available, so I waited until I got a job.*

However, it is important to note that the findings above are contrary to what is perceived to happen at undergraduate level, where it is argued that when there is a downturn in the economy, demand for higher education generally goes up as *individuals who lose their jobs, or fear low prospects for employment in declining economies, see a university or college degree as a means to better employment prospects* (Douglass, 2010:4). It is essential to undertake further analysis into this area and take this difference into account when developing future PGT expansion and sustainability strategies.

The UK has been in recession since 2009 and the participation at PGT level across all disciplines has declined as Table 123 illustrates. However, when comparing available enrolment data of the UK's market competitors, Australia, Canada and the USA, their enrolments have continued to rise even with similar economic difficulties suggesting that other factors than economic could be impacting on UK participation.

Table 123. Comparative international enrolment figures 2003–2013

Country	2003/4	2009/10	2010/11	2012/13	Percentage change between 2010-13
Australia	257,769	307,973	320,455	347,069	+8.3
Canada	142,800	185,526	192,924	203,727	+5.6
UK	523,825	578,705	588,720	536,440	-8.8
USA	2,431,117	2,862,391	2,937,454	2,947,000 (projected)	+0.3

Source: Australia (DET, 2014a,b,c,d): Canada (STATCan, 2011,2014a,b,c): UK (HESA,2015c,d,e, f):USA(NCES, 2013a,b,c).

When examining the UK's most up–to–date PG enrolment data (no available competitors data), although UK enrolments in 2012/13 dropped below the 2008/9 participation figure (536,810), there was an increase in 2013/14 (539,440).

Some institutions have managed to sustain their PG enrolments in the current economic climate so could be inclined to adopt the self-correcting approach. However, all countries within the UK have experienced difficulties and as Figure 30 illustrates, no English region has been immune from the decrease in participation. Of the 130 HE institutions in England, 74 have experienced a decrease in enrolments. When the data is presented like this, regional variations become more pronounced. The North West and South West regions have experienced the largest reduction in enrolments, the East Midlands the largest increase in overseas enrolments and the West Midlands is the most stable with only a 0.7% reduction. Further research into these regional variations are warranted in order to understand if there are any specific regional issues that need to be taken into account when planning future policy.

Figure 30. PG enrolment decrease by English region and domiciled status between 2010/11 and 2013/14

North East
5 universities
3 gone down = 60%
Actual enrolment change = -6.6%
UK = -15.2%
EU = +4.1%
OS = +5.7%

East Midlands
9 universities
6 gone down = 66.6%
Actual enrolment change = -7.1%
UK = -7.8%
EU = -6.1%
OS = +46.0%

East
10 Universities
5 gone down = 50%
Actual enrolment change = -6.8%
UK = -2.5%
EU = -17.0%
OS = -9.8%

North West
14 universities
9 gone down = 64.3%
Actual enrolment change = -22.4%
UK = -27.5%
EU = -18.5%
OS = -0.7%

West Midlands
12 universities
5 gone down = 41.6%
Actual enrolment change = -0.7%
UK = -3.0%
EU = -0.3%
OS = +3.6%

London
39 universities
18 gone down = 46.2%
Actual enrolment change = -7.7%
UK = -8.7%
EU = -3.9%
OS = -7.2%

Yorkshire
11 universities
8 gone down = 72.7%
Actual enrolment change = -9.5%
UK = -8.1%
EU = -24.3%
OS = -9.3%

South West
12 universities
11 gone down = 91.6%
Actual enrolment change = -21.3%
UK = -28.0%
EU = -21.7%
OS = +2.0%

South East
18 universities
9 gone down = 50%
Actual enrolment decrease = -4.3%
UK = -7.8%
EU = -1.4%
OS = +5.8%

Red = largest decrease
Green bold = smallest decrease

(Statistics derived from HESA, 2015g,h)

Wait for the government PGT loan scheme

An argument to explain the PGT decline in enrolments in the UK is that when the graduate job market is weak, the barriers that have reduced at undergraduate level in enabling people to study (e.g. funding schemes) have been passed up to postgraduate level. In 2009, John Denham, the former Secretary of State for Innovation, Universities and Skills, commented:

> *…as taught masters increasingly become an additional pre-employment qualification, there is concern that the gap we are closing as we widen participation for first degrees may open again if the best employment is only open to those who can fund their MSc or MA.* (cited in Wakeling, 2009:22)

The finance findings in Chapter 6 partly support this statement. In the 2014 autumn statement, the government announced its intention to introduce a new loan system for postgraduate taught masters students. The consultation period, which started in March 2015, was extended to cover postgraduate research. The announcement confirming the implementation of a PGT loan scheme for individuals up to the age of 60 years of age was announced in the autumn statement on 25 November 2015, but no details have yet been confirmed. The lateness of the announcement will impact on institutions recruitment and marketing strategies for 2016/17 and could lead to limited uptake by applicants.

It is unclear as yet whether the Postgraduate Support Scheme Phase 2 (see Chapter 3) that was designed to be a bridging mechanism to a new loan scheme and to help sustain enrolments levels has been successful in stemming the decline. Realistically, information on its impact on disciplines and demographic groups will not be known until after universities submit their 2015/16 HESA returns. The financial anxieties caused by fee levels and living costs highlighted by the respondents in 2015 study could be reduced with the assistance of a loan.

However, the challenge for the sector is whether a government-backed loan scheme will be sufficient and desirable enough to encourage participation. As Chapter 8 highlights, the majority of respondents in the Finance survey did not hold the view that a government-backed loan scheme paid back at a rate of 9% and concurrently with any undergraduate loan was viable. Their preference was a mixed funding option that comprised a number of methods such as a small loan, discount and use of savings. It is not known what students who completed their undergraduate studies under the current £9K a year funding regime feel about accruing further debt in order to undertake PGT-level study and what they feel the overarching benefits of further study will provide them with. This is critical research that needs to be undertaken.

Whilst many institutions in the sector have waited for the government funding announcement, some institutions have taken the step of exploring and engaging in alternative student funding methods. This includes offering discounts to non-alumni (see Project Briefing Paper 11 online) and engaging in activities with funding organisations such as Student Funder, Future Finance and Prodigy who offer loans to individuals who are unable to access career development loans or other forms of funding (e.g. parental assistance). At present, there is insufficient evidence to reach a conclusion on the uptake and benefits of these alternative funding models.

Adapt and create new markets

Due to the expectations of students, declining enrolments and the response to PGT qualifications by employers, questions such as are the sectors current PGT STEM offerings sustainable? Are courses in need of adaption and can new markets successfully be created? And if so, how could this be achieved? Any changes undertaken will need to create easier access to PGT study and flexible pathways between qualifications with targeted support throughout the different PGT transition stages in order to foster success at this level of study. It is expected that employability outcomes, as is already the case at undergraduate level, are

likely to become increasingly important and influential at PGT level especially if fee levels are linked to employability outcomes (see 'Extend differential fee concept' section below).

Adaption

Dual routes
Some courses could be adapted to become more flexible through offering dual routes. For example, at Plymouth University, a student registered on a masters degree can transfer within a specific timeframe onto a Masters of Research if they find it is a better match for their skill base and desired outcome. Flexibility to enable students to transfer between different types of PGT courses will provide pathway options for students who feel they made incorrect study choices and potentially support completion rates.

Accrediting modules not a course
If modules were accredited instead of the course, it would provide flexibility to run them as short courses. This approach could encourage employers for paying for and releasing employees to undertake modules that are relevant to their business skill needs and it would provide a recognised standalone qualification for the individual that they can put towards their continuing professional development. This approach allows individuals to engage in further study that fits in with work and study demands. It will take time and commitment by institutions and professional bodies, but this approach, which is already in existence in the nursing discipline, could be a successful way forward in creating sustainability.

Different study delivery
In order to expand (with limited cost) or to maintain (due to low take up) part-time courses, HEIs often run them alongside full-time delivery during the day. Although this enables the course to continue to be *operational*, the delivery mode can cause attendance issues and therefore are not popular. It would be judicious to investigate the decline of part-time enrolments alongside changes in delivery patterns to ascertain whether this is a key factor in the decline of part-time enrolments.

At PGT level, the use of technology could be utilised more efficiently in the delivery of material. For example, the traditional lecture format could be adapted so that lectures were recorded and the student undertook this learning activity as part of their independent study. Their contact hours would concentrate on small-group work providing them with a focused forum in which to ask questions and fully understand the topic. This approach could help students balance their study, work demands and personal commitments as well as assisting with their travel costs, which was identified as a major expense for respondents in the study. There is uncertainty in the sector as to the benefits of using a MOOC format (e.g. flexibility, create a dynamic archive, accessible anytime and anywhere) against the known disadvantages (e.g. limited face to face engagement, study isolation, discussion challenges, credibility perceived by employers), but this is another delivery pattern for discussion and exploration.

Target new markets

Increase of the integrated degree
Integrated degrees are a UK qualification and, as Chapter 9 highlights, are becoming increasing popular amongst applicants. Business and industry are said to value the skills and knowledge this qualification provides graduates. This study found that those with integrated qualifications were significantly less likely to go on to further masters study. With the introduction of a government loan scheme for PGT study, the concern that the growth in integrated degrees is to circumvent funding becomes irrelevant. This provides two opportunities: firstly, to expand integrated qualifications across a range of non-traditional integrated disciplines; secondly, if

one- year placements are undertaken, it helps adhere to Bologna requirements. At present, integrated degrees are recorded within the undergraduate statistics. If the masters-level enrolment figures are counted within the PGT statistics, the enrolment figures would provide a more accurate reflection of masters participation especially when comparing enrolments with international competitors.

Mature
The majority of the UK PGT population is traditionally drawn from those under 30 years of age. The sector faces the challenge of the under 18 year old population continuing to decline until 2020 thus reducing the pool of applicants entering undergraduate study and feeding through to PGT level. However, there is a substantive graduate pool of those over 30 that the sector has previously not targeted, but could tap into if the PGT product offered was desirable and affordable. The new PGT government loan scheme, which is accessible to individuals up to 60 years of age, makes this a possible growth area. Furthermore, as the population in the UK of early retired individuals with disposable incomes rises, so could the growth in the enjoyment of learning increase.

Apprenticeships Level 7
In autumn 2011, the government launched the Higher Apprenticeship Fund to support the development of a new wave of apprenticeship frameworks to Level 7. The frameworks are designed to include a blend of professional qualifications and a new, nationally recognised wider skill qualification with content taking learners through Level 5–7. The framework will provide an alternative progression route to high-skill careers and chartered status. This is a new and growing area that institutions could develop, thus providing a vocational route for learners. It would provide benefit for both the individual and the sector.

Extend differential fee concept

Across HEIs, differential fees are already in existence. The difference in the *banding* of fees commonly found within institutions is not that vast and often varies by just a few hundreds of pounds. There are a cache of PGT courses such as the Masters of Business Administration (MBA) that have traditionally charged significantly higher fees because of their perceived value in the job market in terms of accessing post-study employment and in achieving a higher salary over a lifetime. The challenge for the sector in light of the debate for increasing PGT fee levels across all disciplines is how that can be successfully achieved in the face of declining PGT enrolments, reduced government funding and demand by students for a high-quality student experience and guaranteed employment outcomes, as highlighted in Chapter 8. There are three suggested routes in determining fee levels.

- *Route one*: all fees should be linked to *potential* achievable salary. The issues relating to this route include who determines what courses will demand certain salaries, and how price sensitive can the HEI market be if the demand for graduates in certain disciplines fluctuates in terms of need? The individual may not be able to achieve the potential salary due to circumstances outside of their control, but they will still bear the weight of the cost. This approach will reinforce the view that cost equals perceived value.
- *Route two*: it should be based on cost of delivery, meaning that an MSc in Biomedical Science will have a higher fee than MA in English Literature. This could help open up new markets such as the *mature learner* mentioned above, but there would need to be a break relationship between 'cost' and 'perceived value'. Concerns include that this could put learners off, especially if they do not see a financial gain, although it may be a requirement for their chosen field or profession, and individuals may seek a PGT qualification in a cheaper course just to obtain a higher level qualification.
- *Route three*: cross-subsidisation should continue, thus allowing a range of courses to

be charged at the same fee level. For many institutions, this would be a continuation of what is currently happening, but this approach will realistically mean that fee levels across all disciplines will increase as funding is reduced, thus potentially putting off learners in certain disciplines that are already struggling to recruit.

Routes one and two will create financial stratification in terms of debt levels as well as 'cost' versus 'perceived value' issues unless it is managed effectively. All routes could be non-viable options for individuals, therefore impacting on widening and sustaining participation at PGT level. A negative aspect of the massification of higher education is the argument that flooding the market with first degree graduates without the relevant jobs available has resulted in them being overqualified and underemployed (Coldwell, 2013; Abel et al., 2014; Lister, 2014). With the expansion of postgraduate study, this problem has been pushed up to PGT level and instead of HE being a social mobility enabler, it is creating negative mobility issues that is also leaving a generation massively in debt as a result of education costs (Watson, 2005; Kamenetz, 2006). This leads to the concern about how these individuals can be active and contributory citizens in society in terms of home ownership, pension investment and disposable income to put back into the economy especially when England has the highest HE fees in the industrialised world (Walker, 2015).

Looking inwards as well as outwards

There was an understanding that as well as considering the key issues already mentioned above, the sector needed to look inwards at itself if it was to achieve sustainability. The most pressing overarching question was deemed to be what PGT study is for and its purpose? Is it primarily to provide an educated workforce, be a feeder into doctoral and academic study or be a business that generates a substantial amount of money for the UK economy? This then impacts on related challenging questions such as should a university develop a niche or be generic in its offerings; be more research, teaching or vocational focused and even should it retract the number of courses it offers and students it teaches at this level of study? The expansion and widening of PGT study in the future needs to be developed on a solid foundation of direction, which it was felt has not happened effectively to date. There was unease about the credential inflation of qualifications and discussion about if and how it was beneficial to re-establish the undergraduate qualification as the primary qualification for an educated workforce, leaving the PGT qualification as a continuing professional development tool rather than a requirement to obtain a job.

Conclusion

Many of the issues, challenges and concerns raised at the National Dialogical Conference that have been highlighted in this chapter demonstrate the complexity facing higher education regarding its PGT market. Tackling the difficult questions and issues posed in this chapter in a Jacuzzi approach (from all directions) seems to be a logical way forward. The Postgraduate Experience Project has been an extensive study that has given an insight into the expectations, experiences and outcomes of applicants, students and employers. It has provided valuable baseline data and a research framework that can be used in the UK to further understand PGT-level issues. This research will hopefully assist the sector in managing expectations and helping institutions develop a high-quality provision across academic and non-academic spheres that are both inclusive and sustainable. The findings illustrate that funding does affect access, engagement, persistence and success; that education does change people's lives; and that the sector can make a difference in encouraging inclusivity through evolving and adapting what it does. It is appropriate that this report finishes with the words of a PEP scholarship recipient who when talking about postgraduate education, regardless of stakeholder role, said:

> *You can't change where you are from or what has happened in the past, but you can change where you are going and what you want to be.*

11. Recommendations

Understanding applicant and student transition behaviours

- Further examination of whether the factors for choosing a university between the 9E and Russell groups are reflective across the sector and the impact it may have on marketing and recruitment strategies.
- Further research on motivations of graduates under the £9K-a-year scheme entering PGT STEM study.
- Further research on social class and generational status as part of the widening participation debate.
- Consideration of a more effective sector-wide admissions system for PGT applications.
- Sector-wide data review to identify useful data and standardisation of data collection.
- Introduction of CRM systems to enable applicant behaviour to be effectively analysed and analysis of data produced by existing CRM systems already in use.

Financial issues

- Explore a range of sustainable funding mechanisms that provides fair opportunity to engage.
- Explore the debt levels of £9K–a-year graduates and their attitudes towards debt and undertaking further education.
- Explore and understand the relationship between financial anxiety levels of PGT students, completion rates and qualification outcomes.
- Explore the impact of high levels of debt for the individual, society and the economy.
- Undertake longitudinal research into the long-term benefits of PGT-level study.

Employability and product development

- Provide more opportunities for the student to obtain relevant course-based work experience.
- Work with business and industry more closely to develop course content that is current and applicable.
- Explore the benefits of increasing integrated offerings across non-traditional disciplines such as arts, humanities and social sciences.
- Build closer working relationships with business and industry in non-traditional integrated disciplines.
- Explore the benefits and viability of increasing the number of integrated degrees with placement options.

Social scientific research is and always will be tentative and imperfect. It does not claim to transform economics, sociology, and history into exact sciences. But by patiently searching for facts and patterns and calmly analysing the economic, social, and political mechanisms that might explain them, it can inform democratic debate and focus attention on the right questions. It can help to redefine the terms of debate, unmask certain preconceived or fraudulent notions, and subject all positions to constant critical scrutiny.

Thomas Piketty, Capital in the Twenty-First Century (2014:3)

References

Abel J.R., Deitz R., and Su Y. (2014) Are Recent College Graduates Finding Good Jobs? Current Issues in Economics and Finance, *Federal Reserve Bank of New York*, Volume 1, Issue 20.

Andrews, B. and Wilding, J.M. (2004) The relation of depression and anxiety to life stress and achievement in students. *The British Psychological Society,* 95 (4), 509–521.

Bamber, J. and Tett, L. (2000) Transforming the learning experiences of non-traditional students: a perspective from higher education. *Studies in Continuing Education*. 22 (1), 57–75.

Boorman, S. and Ramsden, B. (2009) *Taught Postgraduates: market trends and opportunities,* London: Universities UK.

Coldwell W. (2013) A PhD with your coffee? Barista serving your drink might be better educated than you are, *The Independent*, 22nd October.

Connor, H., Forbes, P. and Docherty, D. (2010) *Talent Fishing -what businesses want from postgraduates,* London: DBIS.

Department for Business, Innovation and Skills (2011) *Higher Education: Students at the Heart of the System.* Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32409/11-944-higher-education-students-at-heart-of-system.pdf (Accessed 8 July 2013)

Department for Business, Innovation and Skills (2015) *Higher Education: Consultation on support for postgraduate study*. London: DBIS.

Department of Education and Training (2014a). *Table 2.1: All Students by Age Group and Broad Level of Course, Full Year 2004.* Online, available at:https://docs.education.gov.au/search/site/All%20enrolments%202004 (Accessed 26 April 2015)

Department of Education and Training (2014b) *Table 2.1: All Students by Age Group and Broad Level of Course, Full Year 2009.* Online, available at: https://docs.education.gov.au/search/site/All%20enrolments%202009 (Accessed 26 April 2015)

Department of Education and Training (2014c) *Table 2.1: All Students by Age Group and Broad Level of Course, Full Year 2010.* Online,available at: https://docs.education.gov.au/search/site/All%20enrolments%202010 (Accessed 26 April 2015)

Department of Education and Training (2014d) *Table 2.1: All Students by Age Group and Broad Level of Course, Full Year 2013.* Online, available at: https://docs.education.gov.au/search/site/All%20enrolments%202013 (Accessed 26 April 2015)

Department of Trade and Industry (1998), *Building the knowledge driven economy*. Online, available at: www.berr.gov.uk/files/file32392.pdf (Accessed on 25 November, 2009)

Douglass, J.A. (2010) *Higher Education Budgets And The Global Recession: Tracking Varied National Responses And Their Consequences,* University Of California: Berkeley.

Else, H. (2014) Surge in popularity of two-in-one degree courses. Online, available at: https://www.timeshighereducation.com/news/surge-in-popularity-of-two-in-one-degree-courses/2014853.article (Accessed on 1 August 2014)

Green, H. (2005) What has happened to postgraduate taught (PGT)? *News,* UK Council for Graduate Education. February, p48.

Hatt, S., Baxter, A. and Tate, J. (2005) Who benefits from widening participation? A study of targeting in the South West of England. *Journal of Further and Higher Education.* 29 (4), 341–51.

Higher Education Commission (2012) *Postgraduate Education -An Independent Inquiry by the*

Higher Education Commission, London: HEC.

Higher Education Statistics Agency (2013a) Table 1 - All students by HE institution, level of study, mode of study and domicile 2011/12. Online, available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 February 2013)

Higher Education Statistics Agency (2013b) Students by subject of study, first year indicator, mode of study and level of study 2011/12. Online, available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 February 2013)

Higher Education Funding Council for England (2015a) Intentions After Graduation Survey (IAGS) Available at: www.hefce.ac.uk/sas/pg/iags/ (Accessed on 12 August 2015)

Higher Education Funding Council for England (2015b) English HEI Integrated enrolments statistics provided by the Analytical Services Directorate, HEFCE.

Higher Education Statistics Agency (2015c). *All students by HE institution -Table 1 - level of study, mode of study and domicile 2003/04.* Online. Available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 May 2015)

Higher Education Statistics Agency (2015d). *All students by HE institution -Table 1 - level of study, mode of study and domicile 2008/9.* Online. Available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 May 2015)

Higher Education Statistics Agency (2015e). *All students by HE institution -Table 1 - level of study, mode of study and domicile 2011/12.* Online, available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 May 2015)

Higher Education Statistics Agency (2015f). *All students by HE institution -Table 1 - level of study, mode of study and domicile 2012/13.* Online, available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 May 2015)

Higher Education Statistics Agency (2015g). *All students by HE institution -Table 1 - level of study, mode of study and domicile 2010/11.* Online, available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 May 2015)

Higher Education Statistics Agency (2015h). *All students by HE institution -Table 1 - level of study, mode of study and domicile 2013/14.* Online, available at: https://www.hesa.ac.uk/index.php/content/view/1973/239/ (Accessed 23 May 2015)

Kamenetz, A. (2006) *Generation Debt: Why now is a terrible time to be young, New York:* Riverhead Books.

Lister, M (2014) *An evidence based student experience*, PEP Steering Group, 27 February, London: Kingston University.

Machin, S. and Murphy, R. (2010) *The social composition and future earnings of postgraduates,* London: Sutton.

Marginson, S., Tytler, R., Freeman, B. and Roberts, K. (2013) *STEM: Country comparisons*. Report for the Australian Council of Learned Academies.

Mellors-Bourne, R., Hooley, T. and Marriott, J. (2014) *Understanding how people choose to pursue taught postgraduate study,* Cambridge: Careers Research & Advisory Centre.

Millward, C. and Creasey, E. (2013) Understanding and Stimulating the Taught Postgraduate Economy, Paper presented at UKCGE Annual Conference, *'Master Class: the changing face of PGT in a research-intensive environment'*, Birmingham, 1–2 July.

Morgan, M (2011) *Improving the student experience -a practical guide for Universities and colleges,* Oxon: Routledge.

Morgan, M. (2013a) *Individual Project Report - Understanding prior feedback experiences of new postgraduate taught (PGT) STEM students' and their expectations and attitudes towards PGT level study at a 1992 institution,* York: HEA.

Morgan, M. (2013b) Supporting Student Diversity in Higher Education – a practical guide, Oxon: Routledge.

Morgan, M. and Jones, J. (2013) Improving the Postgraduate Taught Student Experience: why understanding the expectations and attitudes towards study of your student body is so important, Paper presented at *NEON Summer Symposium*, Bedford University, Bedford, 20–21 June.

Morgan, M. (2014) Patterns, Drivers and Challenges pertaining to Postgraduate Taught Study- an international comparative analysis in *Journal for Higher Education and Research Development*, 33 (6) p1150–1165.

National Centre for Education Statistics (2013a). *Table 168. Enrolment, staff, and degrees conferred in postsecondary institutions participating in Title IV programs, by level and control of institution, sex, and type of degree: Fall 2003 and 2003-04.* Online, available at: http://nces.ed.gov/programs/digest/d05/tables/dt05_175.asp (Accessed 23 May 2012)

National Centre for Education Statistics (2013b).*Table 195.Enrolment, staff, and degrees conferred in postsecondary institutions participating in Title IV programs, by type and control of institution, sex of student, type of staff, and type of degree: Fall 2008, fall 2009, and 2008-09*. Online, available at: http://nces.ed.gov/programs/digest/d10/tables/dt10_195.asp (Accessed 23 May 2015)

National Centre for Education Statistics (2013c) *Table 303.80. Total postbaccalaureate fall enrolment in degree-granting postsecondary institutions, by attendance status, sex of student, and control of institution: 1967 through 2023.* Online, available at: http://nces.ed.gov/programs/digest/d13/tables/dt13_303.80.asp (Accessed 23 May 2015)

Piketty, T. (2014) *Capital in the Twenty-First Century,* London: Harvard University Press.

Pollard, D. (2014) The needs of the small business by the Federation of small businesses, presentation at the *Postgraduate Experience Project Steering Group*, Kingston University, Kingston, 27 November 2014.

Richardson, D. (2003) *The transition to degree level study.* York: The Higher Education Academy.

Robinson, R. (2014) Postgraduate Finance –Barclays Bank, presentation at the Postgraduate Experience Project Steering Group, Kingston University, Kingston, 27 February 2014.

Soilemetzidis, I., Bennett, P. and Leman, J. (2014) *The Higher Education Academy Postgraduate Taught Experience Report (PTES)* York: HEA.

Statistics Canada (2011) *University enrolment by registration status 1997-2004 table 1*. Online, available at: http://www.statcan.gc.ca/daily-quotidien/051011/dq051011b-eng.htm (Accessed 26 April 2012)

Statistics Canada (2014a) *Postsecondary enrolments by institution type, sex and program groups (Both sexes) Postsecondary 2nd and 3rd cycle education or equivalent 2009/10.* Online, available at: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ74a-eng.htm

Statistics Canada (2014b) *Postsecondary enrolments by institution type, sex and program groups (Both sexes) Postsecondary 2nd and 3rd cycle education or equivalent 2010/11.* Online, available at: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ74a-eng.htm

Statistics Canada (2014c) *Postsecondary enrolments by institution type, sex and program groups (Both sexes) Postsecondary 2nd and 3rd cycle education or equivalent 2012/13.* Online, available at: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ74a-eng.htm

Stuart, M., Lido, C., Morgan, M., Solomon, L. and Akroyd, K. (2008) *Widening participation to postgraduate study: decisions, deterrents and creating success* York: Higher Education Academy.

Tinto, V. (1988) Stages of Student Departure: Reflection on the Longitudinal Character of Student Leaving. *Journal of Higher Education*. 59 (4), 438–55.

Thomas, L. (2002) Student retention in higher education: The role of institutional habitus. *Journal of Education Policy*. 17(4), 423–442.

Thomas, L. (2012) *Building student engagement and belonging in Higher Education at a time of change: A summary of findings and recommendations from the What Works? Student Retention and Success programme*. London: Paul Hamlyn Foundation and HEFCE.

Thomas, K. (2015) 'Rethinking Belonging through Bourdieu, diaspora and the spatial' *Widening Participation and Lifelong Learning*, Vol 17:1 37–49.

Tobbell, J., O'Donnell, V. and Zammit, M. (2008) *Exploring practice and participation in transition to postgraduate social science study,* York: Higher Education Academy.

Universities UK (2013) *The funding environment for universities: An assessment,* London: Universities UK.

Wakeling, P. (2005) La noblesse d'etat anglasie? Social class and progression to postgraduate study. *British Journal of Sociology of Education*. 26 (4), 505–22.

Wakeling, P. (2009) *Social Class and Access to Postgraduate Education in the UK: A sociological analysis PhD Thesis,* Manchester: The University of Manchester

Wakeling, P. and Hampden-Thompson, G. (2013) *Transition to higher degrees across the UK: an analysis of national, institutional and individual differences*, York: HEA.

Walker, P. (2015) England has highest university tuition fees in industrialised world, survey finds. Online, available at: http://www.theguardian.com/education/2015/nov/24/uk-has-highest-undergraduate-tuition-fees-in-industrialised-world-survey-finds?CMP=fb_gu (Accessed 1 December 2015)

Watson, D. (2005) what I think I know and don't know in Duke, C and Layer G (eds) *Widening participation: Which way forward for English higher education*, NIACE: Wales.

Wells, P. (2011) *The Higher Education Academy Postgraduate Taught Experience Survey - PTES 2011,* York: Higher Education Academy.

Wong, J.G.W.S., Cheung, E.P.T., Chan, K.K.C., Ma, K.K.M. and Tang, S.W. (2006) Web-based survey of depression, anxiety and stress in first-year tertiary education students in Hong Kong, *Australian and New Zealand Journal of Psychiatry*, 40 (9) 777–782.

Woodrow, M. (1998) *From Elitism to Inclusion: Good Practice in Widening Participation in Higher Education.* London: CVCP.

The Postgraduate Experience Project (PEP)
collaborative university partners:

Kingston University (lead university)
University of Brighton
Coventry University
The University of Edinburgh
University of Lincoln
Manchester Metropolitan University
University of Portsmouth Higher Education Corporation
Plymouth University
University of South Wales
Teesside University
University of Wolverhampton

For further information on the Postgraduate Experience Project, visit: www.postgradexperience.org or contact Michelle Morgan on michelle.morgan@kingston.ac.uk

Designed and produced by: Sarah Jeal, Anna Jannepalli, Viola Wang
Published by Marketing and Communications, Kingston University,
Yorkon Building, Kingston Hill, Kingston upon Thames KT2 7LB, England

X(15.147)B