Postgraduate transitions

Exploring disciplinary practice

Robin Mellors-Bourne, Anna Mountford-Zimdars, Paul Wakeling, Julie Rattray and Ray Land

In partnership with
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>3</td>
</tr>
<tr>
<td>Executive summary</td>
<td>4</td>
</tr>
<tr>
<td>1 Introduction</td>
<td>8</td>
</tr>
<tr>
<td>2 Project aims and research themes</td>
<td>9</td>
</tr>
<tr>
<td>3 Methodology and implementation</td>
<td>9</td>
</tr>
<tr>
<td>3.1 Desk research</td>
<td>9</td>
</tr>
<tr>
<td>3.2 Secondary data analysis and sample identification</td>
<td>9</td>
</tr>
<tr>
<td>3.3 Institutional strand</td>
<td>10</td>
</tr>
<tr>
<td>3.4 Individuals strand</td>
<td>11</td>
</tr>
<tr>
<td>4 Underpinning knowledge about differential progression to PG study</td>
<td>11</td>
</tr>
<tr>
<td>4.1 Transitions to postgraduate study</td>
<td>11</td>
</tr>
<tr>
<td>4.2 Timing of decision-making about transitions</td>
<td>12</td>
</tr>
<tr>
<td>4.3 Key factors and support underpinning transitions</td>
<td>12</td>
</tr>
<tr>
<td>4.4 Models of transition</td>
<td>13</td>
</tr>
<tr>
<td>4.5 The current project</td>
<td>15</td>
</tr>
<tr>
<td>5 Trends in progression to PG study</td>
<td>15</td>
</tr>
<tr>
<td>5.1 Methodology</td>
<td>15</td>
</tr>
<tr>
<td>5.2 Trends by discipline</td>
<td>16</td>
</tr>
<tr>
<td>5.3 Trends by institution</td>
<td>18</td>
</tr>
<tr>
<td>5.4 Trends by ‘department’</td>
<td>24</td>
</tr>
<tr>
<td>5.5 Modelled ‘departmental effects’</td>
<td>29</td>
</tr>
<tr>
<td>6 Institutional perspectives</td>
<td>34</td>
</tr>
<tr>
<td>6.1 Institutional strategies and PG study</td>
<td>34</td>
</tr>
<tr>
<td>6.2 Rationales for PG study</td>
<td>35</td>
</tr>
<tr>
<td>6.3 Promotional and inspirational activity</td>
<td>36</td>
</tr>
<tr>
<td>6.4 ‘Push’ and ‘pull’ activities</td>
<td>39</td>
</tr>
<tr>
<td>7 Relating institutional perspectives and PG participation data</td>
<td>40</td>
</tr>
<tr>
<td>7.1 Correlating PG-supportive cultures and transitions data</td>
<td>40</td>
</tr>
<tr>
<td>8 Conclusions and recommendations</td>
<td>41</td>
</tr>
<tr>
<td>8.1 Recommendations</td>
<td>43</td>
</tr>
<tr>
<td>9 Bibliography</td>
<td>44</td>
</tr>
</tbody>
</table>
Acknowledgements

The research team would like to acknowledge Higher Education Funding Council for England’s (HEFCE’s) Analytical Services Division, especially Hannah White, for manipulating and modelling the participation data used in this project. We also appreciate the supportive role of the Higher Education Academy (HEA) and the project steering group as this innovative and perhaps ambitious (in hindsight) project evolved. It should be stressed that the interpretations and opinions in this report are those of the authors, and may not reflect the policy positions of these bodies.
Executive summary

In spring 2015 the Higher Education Academy (HEA) commissioned the Careers Research and Advisory Centre (CRAC) with colleagues from King’s College London and the Universities of York and Durham to investigate disciplinary and institutional variations in rates of transition to postgraduate study in the UK. The research aimed to explore what underlies these differences and identify practice that results in more students progressing to postgraduate study, chiefly from institutional perspectives.

Background

Much of the recent significant growth in postgraduate study in the UK has been driven by higher numbers of international students, especially for taught postgraduate (PGT) provision. Some key organisations in the higher education (HE) sector, including the HEA, are concerned that this overall picture of growth masks a declining trend for UK-domiciled students to progress beyond undergraduate (UG) study. This is important when the UK economy requires an ever more highly skilled workforce and postgraduate (PG) qualifications are required to enter some key professions. There is also evidence that rates of participation in PG study show significant variations with demographic factors, including gender, ethnicity and socio-economic background that, in turn, will limit access to those professions.

A review of existing literature indicates that while much is known about progression to first-degree (UG) study, our understanding of transitions to PG study is limited. There is a growing literature from the student perspective, exploring their motivations and decisions whether or not to engage in PG study, and what influences this. This indicates that perceived career and intellectual benefits, costs (in money and time) and academic requirements are taken into account when students assess whether to invest in pursuit of a higher-level qualification. Much less is known, however, about the part institutions themselves play in influencing these decisions. There is little evidence of the extent to which students are encouraged by their academic departments, or others, to identify or consider opportunities for PG study, or how effective those activities are.

Research aims and questions

The research addressed a number of key questions:

1. Are some institutions, or types of institutions, more effective than others in terms of higher levels of transition from UG to PG study?
2. If so, why and how does this happen? To what extent does it reflect encouragement of students to consider PG opportunities generally, and to what extent is it related to an institution’s recruitment to its own PG provision?
3. Which disciplines appear to be more effective in terms of increased levels of transition from UG to PG study, within these institutions, and/or more generally? What is the balance between institutional support for progression and support at a disciplinary level?
4. Do these issues apply only to transitions to PG study immediately after UG study or also to later transitions (i.e. ‘returners’ to PG study)? How do they intersect with issues such as the characteristics of UG study or the personal characteristics of students?

Method and approach

The project utilised a range of methods, incorporating desk research with large-scale data analysis as well as individual institutional case study research.

Extending from the literature review, desk research focused on what is already known about institutional practice, partly to inform the development of case study questions, utilising a call for evidence. A detailed exploration of Higher Education Statistics Agency (HESA) participation data was undertaken, with the help of the HEFCE Analytical Services Division. This identified trends in progression rates by type of PG study, institution, discipline, and by discipline and institution combined. A cross-classified multi-level model was used to identify disciplinary units within institutions with higher-than-expected rates of transition to PG study, accounting for student cohort and institutional differences, in which qualitative investigations could be undertaken to identify potential instances of good or effective practice supporting transitions.
A selection of these institutions was identified as a sample, with a further focus on a range of disciplines selected to be of interest: Biological Sciences, Business and Administrative Studies, Engineering and Technology, History and Philosophical Studies, and Law. Ten of the targeted institutions took part in the study, to varying extents.

**Research findings**

Analysis of the HESA data, and utilising the HEFCE multi-level model, revealed that:

- approximately 13% of UK-domiciled, full-time UGs graduating in 2012-13 progressed into PG study in 2013-14, confirming Destinations of Leavers from Higher Education (DLHE) survey results;
- significantly more students progress to PG within three years of first-degree graduation, and to a lesser extent more again up to five years post-graduation;
- institutions with the highest rates of transition to taught PG provision (PGT and other PG) tend to be small, specialist providers focusing on very specific disciplines such as Music or Art, and smaller institutions which are centres for teacher training. Institutions with the highest rates of transition to postgraduate research (PGR) provision are predominantly Russell Group institutions;
- these reflect strong and inter-related variations in progression rate with the type of PG study entered, UG discipline and institution type;
- modelled ‘departmental effects’ (i.e. higher progression rates than expected from the model, at UG disciplinary level) were larger and more significant for transitions to PGT than PGR, at least for the disciplinary contexts analysed.

Synthesis of perspectives obtained from representatives in the case study institutions indicated that:

- it was not always evident where responsibility lay for any institutional strategy for PG progression, especially to PGT study. There was some perceived weakness around strategies for PGT provision more generally, at least for UK students, as many saw PGT provision to be driven by international student recruitment, while PGR provision was seen as more strategic;
- there were few overt strategies in relation to encouraging transitions from UG to PG study *per se*, other than relating to recruitment to an institution’s own provision. This was reflected in what appeared to be very little activity that was intended specifically to promote PG study in general. This contrasted with strategies to enhance UG employability (upon which, in terms of graduate outcomes at least, the institutions are measured);
- other than where PG study was a well-established requirement to enter a profession – such as Law, Psychology, Teaching, or HE research – or for career progression (notably Engineering), institutions were not aware of or articulating strong labour market benefits of PG qualifications. Where such benefits were known, promotion of PG study could be seen as an integral element of an employability strategy;
- where PG study was promoted to UG students, this could be as part of the taught curriculum and/or the co-curricular programme, such as through the careers service. In practice, most institutions had employability modules within the curriculum but these tended to focus on immediate transitions to employment. Promotion of PG opportunities within the same institution was much more prominent than of other opportunities, but not all promotional avenues were routinely used even for the former;
- some institutions used informal mechanisms to expose students to PG research and researchers, such as during UG laboratory or practical sessions, and to a much lesser extent formalised taster opportunities (and in some cases research internship programmes). These predominantly operated in support of PG research study, not taught. There was considerable ‘informal’ promotion of an institution’s PGR opportunities to talented and engaged students in the institution;
- postgraduate recruitment and information events were held to raise the profile of PG study and especially to promote local opportunities. In some cases, these were postgraduate fairs that showcased opportunities from a range of different institutions, but not all institutions were prepared to host them;
- institutions’ careers services reported that they were happy to play a stronger role in displaying information about PG opportunities and providing information, advice and guidance (IAG) to those considering PG study, but did not see this as a priority in comparison with transitions to graduate employment.
Conclusions and recommendations

The research confirms that there are institutional, disciplinary and departmental differences in relation to rates of transition to different forms of PG study (rates include PG study in the same institution as the first degree or elsewhere in the UK).

The research does identify some aspects of institutional practice that might encourage PG study progression. It was not able to determine the extent to which individual institutional or departmental activities resulted in (observed and/or modelled) increased transition rates, but there was some correlation between institutions or departments that made specific efforts to promote a culture encouraging further study and relatively high rates of transition. There was also little evidence that practices that were in place to support PG progression had been evaluated for their effectiveness.

Overall, however, we infer that encouragement of progression to PG study is not currently seen as a strategic priority for institutions, other than in terms of recruitment to their own (especially PGR) programmes. In this sense, some may not be aligned to sector concerns about potential declines in progression of UK students into PG education, or limits to the range of those who participate. Their strategies in relation to PG provision are, perhaps understandably, very local.

This situation is in contrast to strategies to enhance graduate employment outcomes, although ironically the established outcomes measure includes transition into PG study. This lack of strategy to promote PG study is presumably reflected in an apparent absence of a clear location of responsibility for activities that might promote PG study, and the more general lack of such activities. Some weakness in strategies for PGT provision to UK students probably also contribute to this.

Recommendations

Data and evidence

1. **Data awareness**: institutions’ staff reported a range of familiarity in terms of progression data, specifically HESA’s DLHE survey data. For some institutions and staff, this was a valuable source of information that could inform practice, whereas other respondents were not aware of their institutional DLHE data. A first step in supporting best practice in postgraduate transitions might therefore be to raise awareness of existing data sources that provide information about postgraduate transitions.

2. **Research with and dissemination of other data**: based on the experience of manipulating the HESA Student Record datasets underpinning this project, there is scope for further analysis of transition patterns for different cohorts and more systematic research of transitions over a period of time for particular cohorts. A strategy, and perhaps mechanism, could also be developed for the dissemination of subsets of these data to institutions. These derived HESA data are unknown to institutions or individual departments, both in terms of the proportions of students who transition to PG study (including within the institution) but also in terms of sectoral comparisons. It could be possible to derive sets of key information that could be made available to institutions that outline rates of transition and the demographics of those who transition. This could enable institutions and departments to develop a more informed approach to promotion of and recruitment to postgraduate study.

3. **Evaluation**: overall, there was a lack of systematic or long-term evaluation of initiatives designed to support postgraduate transitions. More effort in developing evaluative studies to understand the impact of particular initiatives supporting postgraduate transitions would be valuable.

4. **Enhancing understanding of the complexity of postgraduate transitions**: in devising or evaluating initiatives, it is necessary to be mindful of the complex ways in which interventions may work. For example, a work placement in industry may not only result in a more employable UG student but might also enhance their interest in postgraduate study, depending on that experience and whom they meet. Furthermore, in evaluating individual initiatives, it is also necessary to consider institutional, departmental and peer-group cultures and the gradual and complex character of transitions, which may be more difficult to quantify.
5. **Labour market information**: there seems to be a lack of available information which demonstrates the beneficial employment outcomes of postgraduate study, especially taught Masters programmes, despite the career-related motivations of most prospective students. Quantifying the labour market ‘pull’ for postgraduate-qualified graduates would be beneficial, as well as provision of more quantitative evidence of employment outcomes at programme level.

**Supporting postgraduate transitions**

1. **More promotion of postgraduate options**: the simplest recommendation for institutions is to do more, as most seem currently to do little, to promote the concept and potential value of undertaking postgraduate study to undergraduates and alumni. Promotion of postgraduate options outside the institution’s own provision will be a key part of this.

2. **Engaging with the student voice**: a number of potential areas of good practice were identified in this report, from the institutional perspective at least. It is important that the perspectives of the students themselves should be included in evaluations of practice and promotion of opportunities.

3. **Engage with known factors in decision-making**: this and other research shows that prospective students consider a range of factors when deciding whether to progress to postgraduate study. These include access to information; advice and guidance; personal links with academic staff; accreditation requirements for the discipline; labour market prospects; personal interest and ambitions; and financial issues and funding opportunities. Institutions that successfully support postgraduate transitions will be aware of these factors and consciously engage with them.

4. **Embed support initiatives**: the research found a range of initiatives that supported postgraduate transitions, although not all were embedded in curricula. The more that promotion of postgraduate options is embedded in routine teaching and learning, the more likely it is to be sustained.

5. **Use the available channels**: it was clear that not all opportunities are currently taken for the promotion of postgraduate opportunities, and careers services in particular seem to be an underused opportunity.

6. **Appreciate the disciplinary context of transitions**: there are great variations across disciplines in postgraduate transition rates. It may be useful for disciplinary groups or professional bodies to assist institutions to collaborate in supporting discipline-specific postgraduate information and support strategies.

7. **Supporting ethical transitions**: in light of growing awareness of tensions between altruistic ‘outreach’ and raising aspirations for postgraduate study on the one hand, and recruitment internally into institutional provision, it might be helpful for the sector to think about what ethical outreach and recruitment means. This could also consider how students from different backgrounds fare in access and progression to postgraduate study. Sector bodies like Supporting Professionalism in Admissions might be well placed to contribute in this regard.
1 Introduction

The Higher Education Academy (HEA) has commissioned the Careers Research and Advisory Centre (CRAC) and its project team to undertake research to increase its understanding of student transitions into UK postgraduate (PG) study and potentially identify and share effective practice by institutions and disciplines in supporting those transitions.

The total number of students enrolled on PG programmes provided by UK higher education (HE) institutions has seen growth of around 25% in the last decade (Universities UK 2012). PG-level provision is a critical portion of the UK’s education exports, with over 60% of current students on taught postgraduate (PGT) programmes being of international domicile. Strong growth in international PG student numbers has to some extent masked a recent decline in the number of UK-domiciled entrants to PGT programmes. This decline is of concern and has resulted in a raised level of interest by the UK Government and some HE sector bodies in policy and practice around transitions to PG study. Particular fear has been expressed in some quarters of the UK HE sector that demand from within the UK for PG study could decrease as a result of higher tuition fees paid by UK undergraduates since 2012 and the resultant debt they hold as graduates (Mellors-Bourne et al. 2014a).

The contributions made by postgraduates to the UK economy and society are well-recognised in terms of their support for the UK’s research base and high-skilled labour force. PGT courses are also increasingly a critical entry pathway into certain professions including law, teaching and academic research.

In response to these concerns and heightened policy interest, HEFCE has provided enhanced funding to HE institutions to stimulate the current PG market and undertake research to broaden and deepen the evidence base in relation to PG study, including finances, demand and access, progression and participation. It also introduced the ‘Intentions after graduation’ section of the National Student Survey, to understand student motivations better, and has funded a series of research studies into transitions to PGT (i-graduate 2013; Mellors-Bourne et al. 2014b), and postgraduate research (PGR) study in England (Mellors-Bourne et al. 2014a) as well as undertaking its own research (HEFCE 2013) and making international comparisons (Clarke and Lunt 2014).

A particular aspect of this growing scrutiny relates to access to and participation in PG-level education. Following several decades of attention and initiatives to widen participation in undergraduate (UG) higher education, progression to UG programmes has become more equal over time (although lower participation rates still remain from more socio-economically disadvantaged families). However, concern has been raised because inequalities are known to exist in progression to PG study (HEFCE 2013). Milestones in the development of this agenda have been reports by Milburn (2012), the NUS (2012), the Sutton Trust (Lindley and Machin 2013) and 1994 group (2012). These reports highlight a lack of rigorous research into transitions to PG study, as well as social equity and economic concerns regarding a potential waste of individual talent in not having greater UK-domiciled participation in PG study. The HEA has published research in this area identifying striking differences in PG participation for different types of participants, including women and ethnic groups (Wakeling and Hampden-Thompson 2013).

This suggests that talented students from less advantaged backgrounds may not be accessing, or be able to access, PG education. This limits the total potential benefit to be derived from PG provision. There are some signs that graduates from less advantaged backgrounds may be less willing than others to extend the level of study-related debt that they already hold from UG study (Wakeling et al. 2015). There is also concern about their access to information, advice and guidance concerning available study opportunities and programmes, and whether they have sufficient understanding of how PG education can enhance employment opportunities and self-development.

This raises questions of the extent to which all types of prospective PG student make informed decisions about PG study, and whether this limits transitions – which in turn would not only limit fulfilment of their academic potential and professional aspirations but also wider benefits to the economy and society.

The HEA’s research revealed that some institutions have markedly higher proportions progressing to PG study than others, as well as differences between different disciplines. This new project was commissioned
to investigate and understand aspects of differential progression from UG to PG study, institutionally and by discipline, as well as in relation to student type.

2 Project aims and research themes

The aim of the project was to develop an enhanced understanding of the transitions of UK-domiciled, full-time, graduates from UK higher education institutions (HEIs) into different forms of postgraduate provision in the UK. In particular, it aimed to focus on identifying the practices by HEIs, and within disciplines, that result in an increased proportion of their undergraduates and recent graduates pursuing PG study.

A number of potential research themes and questions were in mind in designing this investigation:

> Which HE institutions (or types of institutions) are more effective in terms of increased levels of transition from UG to PG study, why and how?
>  
> • To what extent does this reflect support or inspiration for more of the students to consider PG opportunities generally, and to what extent is it related to the institution's promotion of or recruitment to local PG opportunities?
> • Does this apply only to immediate transitions to PG study or also to transitions that are not immediate?

> Which disciplines are more effective in terms of an increased level of transition from UG to PG study, within those institutions, and more generally?

> Within institutions, what are the relative impacts of disciplinary support for progression as opposed to institutional support through, for example, information, advice and guidance services?

> To what extent does differential progression intersect with issues such as mode of study, type of degree or the personal characteristics of students?

3 Methodology and implementation

A multi-method approach was conceived to undertake the project, comprising a series of phased activities within a number of broad strands:

1. desk research to ground the work in current theoretical and empirical knowledge;
2. analysis of data from existing HESA datasets to identify differential rates of transition to PG study and select a potential sample of institution/discipline combinations for investigation;
3. in-depth research to obtain institutional perspectives on support for transitions to PG study, informed by stakeholder perspectives;
4. distillation of good practice that supports increased participation in PG study and the development of case studies with which to demonstrate and share it;
5. additional research with recent graduates and students to obtain their perspectives on that practice.

The following sections describe the extent to which these intended project strands were delivered within the project as reported here.

3.1 Desk research

A focused literature review was undertaken to ensure that the project incorporated up-to-date policy and scholarly thinking in relation to transitions to PG study. National and international research was reviewed, paying particular attention to any evidence for reasons behind differential rates of progression by students, or different groups of students, and/or disciplinary differences, and explanatory mechanisms concerning choice, framing and decision-making in deciding whether to stay in or leave education after UG level.

3.2 Secondary data analysis and sample identification

HESA Student Record data for UK-domiciled UGs and PGs was acquired by HEFCE for the period 2002-3 to 2012-13, and entrants to PG study in 2013-14. HEFCE has developed a cross-classified multilevel model for entry to PG study, based on institution and discipline, using a range of personal and study characteristics. This was used to identify trends in difference between institutions and disciplines, and both combined, in
order to identify apparent ‘high performers’ in terms of a higher rate of progression of UGs to PG study than predicted by the model. Within this report, indicative results and trends from the data are presented, but not institutional-level results.

The data informed the selection of a working sample of institutions, and disciplines within them, upon which to focus the in-depth institutional research. The sample was designed, on a highly purposive basis, in relation to:

1. apparent high performance in facilitating progression to PG study;
2. coverage of a range of key disciplines of interest;
3. a range of institutional types and locations.

It was agreed at the outset of the research that a focus should be made on positive practice – that is, ‘high performers’ in terms of progression to PG study. It was also agreed that, for simplicity, there should be a focus on a small selection of disciplines which would span HEA’s disciplinary clusters (Arts and Humanities, Health and Social Care, STEM\(^1\) and Social Sciences). On this basis, a sample of 14 institutions was identified, which included a range of different types and locations of institution, and within each of which there would be an attempt to focus investigation on one or two target disciplines in which the institution had relatively high rates of progression to PG study.

As the model data progressively emerged, which was on the basis of JACS Subject Groups, the initial targeting of disciplines had to be refined, as the available data did not fully support the chosen disciplines. At the same time, it had to evolve pragmatically along with institutional engagement. The disciplinary approach reported here, which differs somewhat from the original intention in relation to the HEA’s clusters, is the practical culmination of what was achievable as the project progressed.

3.3 Institutional strand

The key objective of research with HEIs was to investigate and identify policies and practice that facilitated a comparatively high progression rate from first degree to PG study (compared with the overall rates for institutions and/or disciplines). In addition, to identify good or innovative practice in institutions outside the sample, a wider call for evidence was conducted in parallel with the work with sample institutions.

3.3.1 Investigations within the institutional sample

The 14 institutions comprising the in-depth research sample were invited to participate in this research. The process was initiated through invitations at Pro-Vice-Chancellor (PVC) level, highlighting that on the basis of analysis of HESA data, their institution was a ‘high performer’ in terms of progression to PG study in one or two stated disciplines. Very low levels of response were initially received to these invitations, although a pilot study in one institution was successful in obtaining engagement and interviews with a relevant PVC and senior faculty in the discipline targeted.

With repeated effort to engage senior staff in the targeted institutions, a gradual increase in engagement was achieved, to the point that ten institutions were engaged over a period of several months (to the extent that at least one interview took place). In practice, the depth of engagement varied from a single interview with a PVC, or other nominated senior staff member, up to a series of four interviews in one institution that obtained a variety of perspectives. The limited engagement also had some impact on the extent to which the intended disciplinary focus could be maintained.

The picture that gradually but consistently emerged from this progressively wider engagement was that not all the intended in-depth research work would be viable. The perspectives that were obtained from interviewees are summarised in this report, but did not lead to identification of many clear examples of good practice that could be distilled or shared. Our perceptions of the reasons for this are given in the remainder of this report.

\(^1\) Science, Technology, Engineering and Mathematics
3.3.2 Call for evidence

A brief ‘call for evidence’ was circulated through a variety of networks, which invited senior HEI staff to identify possible areas of their policy and/or practice that they believed were effective or innovative in supporting progressions to PG study. The text in the call highlighted that the intention was to focus on policy or practice which inspired greater numbers of UGs to consider and pursue PG opportunities generally, rather than activities that purely promoted an institution’s own PG provision (i.e. recruiting its own students to its PG programmes).

Although CRAC has significant experience of implementing calls of evidence of this nature, and high levels of engagement with institutions in research projects as a result, the call drew very few responses. Within those few responses received (which was literally only a handful), two responses described activities recruiting the institution’s own students to its PG provision. Two others highlighted that they were not aware whether there was effective practice within their institution and were currently undertaking research related to this, and specifically the role of information, advice and guidance (IAG) in transitions to PG, as part of a HEFCE-funded Postgraduate Support Scheme project. Unfortunately the timing of the respective projects meant that they did not yet have results that they could share with us.

3.3.3 Stakeholder perspectives

Interviews were conducted with a range of stakeholders to obtain broader perspectives on issues relating to progression to PG study, and any insights into the activities of institutions in supporting progression, as well as into labour market drivers for PG study. During the lifetime of this project, a number of events took place that showcased findings from the Postgraduate Support Scheme. Members of the project team attended a number of these events in order to obtain any information available about good practice in supporting PG transitions.

3.4 Individuals strand

In the absence of much specific institutional ‘good practice’ supporting progression on which students’ or graduates’ perspectives might be obtained, the anticipated strand of research with current PG or UG students, or other recent graduates, was not pursued. Although it would have been possible to obtain their perspectives on decision-making and information or support for progression to PG study more broadly, a number of recent research studies have been completed based on individuals’ perspectives, including by members of the project team, and it was not thought that further interviews would add much value to this.

The extent of institutional engagement, and resultant lack of detailed research with individuals who would have represented a range of different student types, also meant that there could be very little focus in this report on issues in relation to student characteristics.

4 Underpinning knowledge about differential progression to PG study

4.1 Transitions to postgraduate study

In recent years, there has been increasing research into issues around transition into higher education (e.g., Heirdsfield et al. 2008; Hultberg et al. 2009; Kift et al. 2010; Tobbell and O’Donnell 2013a, 2013b). The majority of this work has tended to focus on the transition to UG study (Haggis and Pouget 2002; Macaro and Wingate 2004; Walker et al. 2004) while there has been less emphasis on those students who progress to PG study, whether taught or research-based in nature (Jepsen and Neuman 2010; Tobbell and O’Donnell 2013a; 2013b; Wakeling 2005; Zimdars 2007).

When transition to PG study has been considered, the focus has tended to be on the barriers and/or enablers, from the student’s perspective, that support or inhibit this transition (Varhegyi and Jepsen 2009). These authors note that much of the research considering issues of PG transition has explored the participation patterns of specific groups or occupations within society (Brown 2004; Davis et al. 2008; Lang 2007; Ling-Yi 2006; Scarbecz and Ross 2007; Vryonides and Vitsilakis 2008). These studies also, typically,
tend to gather data from students who have already made the decision to progress to PG study or are already engaged in it. They rarely explore the forerunners of these decisions and the factors that prompt students to consider PG study as an option in the first place (Jepsen and Neuman 2010; Neuman 2003; Varhegyi and Jepsen 2009). One key exception to this was the HEA’s review of transitions into PG study, which considered patterns of participation in higher degrees at a national and institutional level in the UK (Wakeling and Hampden-Thompson 2013).

The aim of this review of existing literature was to consider what is known about transitions from UG to PG study, giving particular emphasis to the role of the institution within this process. It is not intended to provide an exhaustive account of published research exploring the issue from the student perspective but rather looks at the intersection between institutional practices and student choices. It also considers the extent to which the different models of transition identified by Gale and Parker (2014) could be used as a potential framework for thinking about research into the role of the institution in the context of PG transitions.

Jepsen and Neuman (2010) suggest that HE institutions would benefit greatly from a more extensive evidence-base relating to the patterns of participation in PG study. They suggest that institutional processes and practices would be enhanced if the institutions had access to more robust data showing rates and trends of participation by different groups within the population, including information about where students are recruited from and retention rates (see also Wakeling 2005). Jepsen and Neuman (2010) argue, however, that this is only part of the picture, and that research needs to consider not only rates of participation but also those factors that influence students’ decisions to engage in PG study and what the institutions do which fosters and supports these decisions.

4.2 Timing of decision-making about transitions

Varhegyi and Jepsen (2009) suggest that there are three crucial time-points at which students make decisions about HE: prior to entry, during their UG study and then at the end of their first-degree course. The first of these time-points is associated with the decision to attend university at all and, if so, where to study (Kim 2004; Wilson 1997). The second opportunity comes during their period of study and relates to choices of what to study or areas of specialisation, such as choice of major or honours options (Altonji 1993; Berger 1988; Callender and Jackson 2008; Grogger and Eide 1995; Jepsen and Neuman 2010). The final time-point is at the end of the programme of study when most students decide whether to continue with their studies or enter the employment market (Jepsen and Neuman 2010). It is this point that concerns us in this particular study.

4.3 Key factors and support underpinning transitions

Research relating to the factors that influence students’ decisions about continuing to PG study was summarised in a brief literature review for HEFCE by Mellors-Bourne et al. (2014b), which also proposed a model for decision-making.

Researchers have also suggested that some factors in PG decisions are stable over time, such as entry qualifications or course costs, while others might be seen as less stable, namely, course content or approaches to delivery (Jepsen and Neuman 2010). They also suggest that the factors that contribute to students’ decisions also relate to the nature of the discipline, citing the example of Psychology, which has a certification requirement for professional practice in the form of an accredited PG programme qualification. Thus the professional nature of the discipline might provide a ‘push’ factor encouraging students to move from UG to PG study. Jepsen and Neuman (2010) note, however, that while the professional nature of certain disciplines may provide a push towards PG study, the choice of the route in which to specialise may relate to both stable and unstable factors as outlined above. They found that lecturers talking about progression to PG study had relatively little influence on students’ decisions of what specialism to pursue during the third year of a four-year first-degree programme. However, Neumann and Boutcher (2004, 2005, 2006, and 2008) did note that participation in a research-based dissertation during the final year of study was associated with the decision to progress to doctoral study, with students commenting on the relationship with the supervisor as an influencing factor within this.
Together, these studies of postgraduate transition support the view that there is a general lack of knowledge about how the institutions themselves support students’ decision-making processes in relation to choices of PG (see also Wakeling and Hampden-Thompson 2013). It is not clear from the academic research literature from where students get information about PG study to support decision-making. HEFCE has undertaken research in the area of PG decision-making, in attempt to understand information needs and the current state of information provision in the UK (Mellors-Bourne et al. 2014b; i-graduate 2013), which suggests that prospective students consider the most useful potential informants to be academic staff in the institutions providing the PG opportunities, rather than information they obtain within their first-degree institution. On the other hand, these reported that prospective students already within an institution had better access to information than those 'outside' HE (such as in employment) who were considering a return to study, which suggests that the role of information or support within their first-degree institution is also important.

Several researchers suggest that information about PG study typically comes from individual staff members who identify ‘gifted’ students whom they believe to be capable of doctoral-level study (Thomas 2002; Neumann and Boucher 2008). Varhegyi and Jepsen (2009) report in their study of business undergraduates there was a clear lack of knowledge and awareness about opportunities for PG study in their field and the costs, timing, content and nature of such programmes. Students reported being unsure of where to get information about PG study should they be interested, and were not provided with it as a matter of course on their current programmes. This prompted Varhegyi and Jepsen to call for universities to take a more proactive approach to the promotion of PG study as a relevant and viable career choice.

The issue of greater proactivity in relation to promoting PG study options has also been raised in research within a recent Postgraduate Support Scheme project led by the University of Sheffield, which included ‘Information, advice and guidance’ and ‘Understanding the student’ research strands. Within the latter, CRAC undertook detailed qualitative research with recent graduates who had made positive and negative decisions about progression to PGT study (Mellors-Bourne 2015).

4.4 Models of transition

Tobbell and O’Donnell (2013) have suggested that one possible explanation for the lack of research attention is that while transition to UG study, or in other areas of education, may be considered to be difficult or troublesome for students, the shift to PG study may be perceived by institutions and researchers as somehow less traumatic or challenging for students. They suggest a perception within HE that students who progress to PG graduate study do so as well-developed individuals who have a clear sense of themselves as autonomous and independent learners who have reached a point in their academic studies where they are ready to take the next step (O'Donnell et al. 2010; Toddle and O'Donnell 2010; Tobbell and O'Donnell 2013). However, this perception of students being ‘ready’ is inconsistent with research reporting the lived experiences of PG students, which frequently characterises them as anxious and stressful with no clear sense of direction or identity (Haggis 2002; Littleton and Whitelock 2005; Magano 2011). It is also questionable according to Scott et al. (2011), in a report to the HEA, who highlight the need for formative assessment and feedback as a means to facilitate successful transitions to PGT study.

If Tobbell and O’Donnell (2013) are correct in their assertion that HE institutions view transitions to PG study as less troublesome than those to UG study, then we might expect them to place less emphasis on this aspect of transition and focus their attention on the initial transition into HE, which the review of the literature would seem to support. Where consideration of PG transitions is discussed, what is evident is that the particular view of the nature of the transition may influence the approach that the institution takes.

Gale and Parker (2014) have suggested that when considering research into student transitions we should think of it as falling into three distinct areas – induction, development and becoming – and that the particular view of transition that an institution holds will influence how it develops, implements and organises institutional policies and practices around transition. Those who see transition as being about inducting new students into the academy, and to studentship in general, will focus on the first year and tend to see transition as about a fixed point in time (Burnett 2007; Gill et al. 2011; Kift et al. 2010; Krause and Coates 2008; Nelson et al. 2005; Wilson et al. 2009). This approach to transition is argued to be institution-led and to take very little account of the students within the system (Lynch 1989; Thomas 2002). Rather it is a process of acculturating or socialising students into existing practices, as opposed to being a co-
constructed experience through which students and institutions develop a shared and integrated view of HE (Lynch 1989).

The second model of transitions that Gail and Parker (2014) suggest from the literature is transition as development. In this model the idea of identity is emphasised, with the individual adopting or developing their identity as a student (Ecclestone 2009; Ecclestone et al. 2010). It draws both on notions of becoming a student and the nature of identity within the academic discipline as a way of thinking about the identity transformation that the individual needs to undergo in order to succeed in HE (Rice et al. 2009; EEBB 2005). Both the induction and developmental approaches to transitions see the process as linear, but whereas the induction model emphasises this as a progressive and smooth pathway the developmental model sees the transition as happening in a series of stages (Gill 2012).

The different models outlined above have implications for the ways that institutions approach transition (Gale and Parker 2014). The induction approach to transition places considerable emphasis on the situated aspects of transition, new modes of learning or a different social experience (Hultberg et al. 2009). It gives rise to approaches to transition that focus on the acquisition of a series of academic and study skills associated with successful participation in HE and an introduction to student life in general. In contrast, the developmental approach – with its emphasis on the individual and internal identity shifts – focuses on the idea of mentoring and self-evaluation as a means of integrating different views of the self with notions of HE (Quinn 2010). Thus the first model emphasises the organisational approach to transition (Quinn 2010) and the latter the social inclusion approach (Brownlee et al. 2009; Quinn 2010). We can see evidence of both of these approaches as the dominant models underpinning institutional policies relating to UG transitions in HE (Gale and Parker 2014).

These models would also seem to explain institutional practices relating to PG transition, as well emphasising the ideas of acculturation and skill acquisition. Many HEIs provide support and training programmes for PG students once they have enrolled on a PGT course or embarked on a PGR degree, suggesting that the point of transition is viewed as a fixed point at the start of the programme, rather than seeing the transition as something that starts before the student determines to participate in PG study at all.

If Varhegyi and Jepsen (2014) are correct in their claims that institutions need to do more to raise the aspirations of their UG students and encourage them to consider PG study, then they need to adopt a model of transition that recognises a more gradual and oscillating transition that starts during the undergraduate years.

The third model of transitions – the becoming approach – identified by Gale and Parker (2014) might be useful as a means of conceptualising transition to PG study and as an underpinning approach to policies relating to this phase of transition. This model is one that rejects the notion of transition as something disabling or as representing a time of crisis but rather it is one that emphasises transition as a normal part of everyday life (Barron et al. 1999; Cohen and Ainley 2000; Ecclestone et al. 2010).

Ecclestone et al. (2010) argue that not all students find transitions anxiety forming, and that when anxieties do arise this does not necessarily represent a negative experience. The becoming approach to transitions does not view the transition as representing a linear or sequential experience but rather as something that is experienced on a daily basis. They emphasise the notion that students’ identities are challenged on a regular basis as they move between the different spaces they inhabit, including home, university and work, for example (Hughes et al. 2010; Kimura et al. 2006; Quinn 2010). According to this model, students construct and reconstruct their academic identities in much the same way that they do their social identities, in a more fluid and temporal way. In this type of model the introduction of an identity ‘themselves as postgraduate’ as part of their experiences as an UG student might allow them to start constructing that identity and consequently see a possible move to PG study as something that they aspire to.

Those adopting a becoming approach to transitions argue that other approaches take a normative view of transitions as they develop policies and practices designed to support transition and this results in a system that permits some students to be successful and others to experience failure at the point of transition (Couldry 2009; Sellar and Gale, 2011). These researchers argue instead for an institutional approach to transition which recognises that transitions are neither linear nor about individual shifts from one identity to another, but rather they are integrative as they deal with multiple identities and experiences simultaneously.
They are associated with a shift in individual subjectivity as students navigate and negotiate new places and spaces and ways of being (Gale 2012; Quinn 2010). Gale (2011, 2012) argues that HE needs to be more flexible in its approach, valuing what students bring with them to the learning situation and using this cultural capital (Zepke and Leach 2005) to create a more supportive system. Such an approach to transitions, particularly PG transitions, would build on the students’ existing attributions and identities and start to integrate possibilities for new identities in the form of ‘the postgraduate student’ into both the taught and hidden curriculum as a means of raising awareness of and aspirations to PG study.

4.5 The current project

The current project attempts to identify aspects of institutional policies and practices that might be designed to raise students’ awareness of, or aspirations to engage in, PG study. While it is not specifically looking for evidence that institutions have adopted any one of the three models outlined above, these models may be useful in providing a framework for thinking about the place of PG transitions within HEIs. Much of the research discussed in this review indicates that institutions might be adopting either an induction or developmental approach, which does not seem to sit well with the idea of institutions as providing the antecedents of the decision to participate in PG study. The third model identified by Gale and Parker (2014) would seem to have some utility - emphasising, as it does, the integrated notion of transition - but the extent to which such an approach is evident within institutions’ policies and practices is yet to be determined.

5 Trends in progression to PG study

5.1 Methodology

Student Record data for undergraduate and postgraduate qualifiers was obtained from HESA by the HEFCE Analytical Services Division for the period 2002-3 to 2012-13, and for entrants to postgraduate study in 2013-14. These data were used to measure the extent to which UK full-time first-degree qualifiers progressed into PG study.

An initial analysis took place of full-time, UK-domiciled first-degree qualifiers in the 2012-13 academic year to see how many of them enrolled in a PG programme in the UK (i.e. at any institution, full-time or part-time). This gave an indication of the extent of ‘immediate’ transition to PG study, of different types, directly after graduation with a first degree.

Subsequent analyses were undertaken to investigate transitions within three years of graduation and five years respectively. For the former, first-degree qualifiers in 2010-11 were used as the base group to identify those enrolling in PG programmes in 2011-12, 2012-13 and 2013-14. For the five-year analysis, qualifiers in 2008-09 were used in order to identify those enrolling in PG programmes in 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14.

These data were used to develop tabulations of observed ‘transition rate’ (i.e. the proportion of the qualifiers who entered PG study in the period considered) by institution, for PGT, PGR and other PG study, separately. They were also used to generate a similar overall tabulation of transitions by discipline, at Joint Academic Coding System (JACS) Subject Group level, of the first degree. Analysis was carried out by discipline and institution together, providing an indication of how transitions within a disciplinary group varied for different institutions. Given the focus of the project on activities undertaken with students, these student disciplinary groups were effectively a proxy for institutional departments.

The underlying data were modelled using a cross-classified, multi-level model with a binary independent variable (which was, for the ‘immediate’ transition, whether or not a 2012-13 qualifier entered a PG programme the following year). Second-level factors (random effects) available in the model were: first-degree institution, subject area and UG discipline. Level one factors (fixed effects) were: first-degree attainment, gender, POLAR (Participation of Local Areas) background (based on postcode on entry to first degree), age, ethnicity and disability.

Much of the apparent association between ‘departments’ and postgraduate transition outcomes is likely to result from the distribution of different types of students across departments. For example, high academic
attainers are concentrated in some departments and not others, and are more likely to progress to higher degrees (especially PG research). The model estimates the *additional* effect on progression, net of these compositional factors.

Initial institutional outputs were generated which included the number of qualifiers from each institution, the actual transition rate observed for that institution and an estimated institutional effect on the transition rate. This estimate was calculated as the difference between the full model transition prediction and the prediction when institutional and departmental random effects were excluded. A positive value indicated institutions where the actual transition rate was higher than expected given the profile of qualifiers. The significance of the institutional random effect (from zero) was included to indicate institutions where the institutional effect, which could be large, was not statistically significant. ²

The same procedure was followed for transitions up to three years after graduation, or up to five years, using the cohorts outlined above.

The model was also used to provide institution and ‘department’ breakdowns (in reality based on first degree disciplines, as discussed). The final model had subject area, institution, institution group and UG discipline level two factors within the fitted multi-level model. This gave the number of qualifiers from that discipline and institution, actual and modelled transition rates by ‘department’, and then a department effect was estimated from the model output (and the model significance given).

It was agreed that institution-level results would not be published (as this could be interpreted as a type of ‘league table’), but the outputs were used to investigate trends of difference between institutions and disciplines within them, and to identify apparent ‘high performers’ in terms of a higher rate of progression than predicted by the model.

Transitions to PGT, PGR and other PG (OPG) programmes were derived separately in all cases.

### 5.2 Trends by discipline

The DLHE for 2012-13 leavers (qualifiers) records that overall 18.4% of UK-domiciled, full-time first-degree leavers proceeded to further study, of which 75% were pursuing a higher level (PG) qualification – that is, 13.9%. This comprised 8.2% pursuing Masters-level PGT programmes, 1.9% PGR programmes and 3.8% other PG programmes (which included PGCE programmes).

The use of comparative HESA Student Record data to measure transitions from UG to PG study is potentially more robust than using DLHE data, as it data-matches individual people appearing as graduating students and later as PG students. It therefore avoids any issues to do with respondent error in the DLHE survey (especially proxy reporting) and bias due to non-response.

Figure 1 illustrates the proportion of UK-domiciled, full-time first-degree students who progressed to PG study by disciplinary group, based on the comparative Student Record data. The ‘one year’ transitions (red bars) are for those who qualified in 2012-13 and progressed to PG study in 2013-14. This shows a similar result overall to that derived from the DLHE data, that is, around 13% progression in total, ranging by discipline from nearly 25% in the Physical Sciences to less than 5% of those in medical or veterinary subjects.

The grey bars in the chart show the amount of transition to PG study (of all kinds) within three years of graduation, although not for the same graduating cohort (in this case it was those who qualified in 2010-11 and entered PG study in any of the following three academic years). While a robust comparison between the two therefore cannot be made, on the assumption that trends will be broadly consistent over this period of time, this shows that significantly more transitions to PG take place after the ‘immediate’ transitions (i.e. into the subsequent academic year). In some disciplines this appears to be as much as double the total proportion that entered PG study, and the relative proportions vary with discipline. The proportion entering

---

² It should be noted that, as these are population data, tests of statistical significance are arguably not appropriate.
PG study within three years was over 30% for Physical, Mathematical and Biological Sciences, as well as Humanities and Languages.

Data were also available for transitions made over the first five years from graduation, albeit not for the same cohort as the immediate or three-year analysis, which means direct comparisons are not robust. However, the evidence suggested that the extent of further transitions (i.e. in the fourth and fifth years after graduation) was relatively lower than between immediate and ‘within three year’ transitions, although the pattern varied considerably.

![Figure 1: Rate of transition of graduating UK-domiciled first-degree students to all types of postgraduate study, for those making immediate transitions and those doing so within a period of three years of graduation](image)

For the disciplinary groups targeted in this study, the proportion immediately progressing to PG study varied from 18% for Biological Sciences and Law graduates down to 5% of Business and Administrative Studies graduates. For all these discipline groups, a significantly higher proportion progressed within three years.

Analysis of the type of PG study to which immediate progressions were made shows strong variations with discipline group (Table 1). The 18% of Biological Sciences graduates who enrolled in PG study comprised 11% in PGT study, 3% in PG research and 5% in other PG study. On the other hand, within the 18% of Law graduates, the majority (12%) pursued other PG programmes, which almost certainly included the Legal Practice Course (LPC) required for entry to the legal profession.

The profile for History and Philosophical Studies was different again, with fewer, proportionally, of the 16% who progressed to PG study being engaged in PG research (1%), the majority (10%) pursuing PGT, and 5% other PG studies (almost certainly including PGCE courses). For Engineering and Technology graduates, of the 9% who progressed to PG study in total, the relative proportion pursuing PG research was higher at 3% in total.

These variations reflect a wide range of pathways available to graduates of different disciplines. One aspect of this is the strong disciplinary differences in trajectories of those progressing to PG research, where starting a doctorate immediately after a first degree is only common in the sciences and rare in other disciplinary areas.
Table 1: Proportion of UK-domiciled, full-time 2012-13 first-degree graduates who progressed to different forms of PG study in 2013-14

<table>
<thead>
<tr>
<th></th>
<th>PGT</th>
<th>PGR</th>
<th>OPG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>11%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Business and Administrative Studies</td>
<td>4%</td>
<td>0.1%</td>
<td>1%</td>
</tr>
<tr>
<td>Engineering and Technology</td>
<td>5%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>History and Philosophical Studies</td>
<td>10%</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>Law</td>
<td>6%</td>
<td>0.2%</td>
<td>12%</td>
</tr>
</tbody>
</table>

5.3 Trends by institution

Figure 2 demonstrates graphically the variation by institution of the proportion of 2012-13 graduates who immediately progressed to all types of PG study (i.e. enrolling in 2013-14). Each vertical bar represents a single institution. The extents shown in red colour are the immediate transitions, which shows a small number of institutions to have had very high rates of transition (over 25%) while the majority were in the range of 10% to 20%.

The extents shown in grey represent institutions’ transitions over a period of three years, albeit for the 2010-11 graduating cohort (i.e. not the same cohort). This shows that for many institutions significantly higher proportions make the transition to PG study over the longer period of time, although the additional extent is not consistent for every institution. Where the extent of the red bar (transitions up to three years) is smaller than the extent of the blue bar (immediate transition) for an institution, this is presumably due to differences between the two cohorts, and exists only for certain institutions with small cohorts.
Figure 2: Proportion of UK-domiciled, full-time first-degree graduates progressing to any PG study, by institution – for immediate transitions and within up to three years.
Analysis of these data by institution type shows that the ‘highest performing’ institutions (i.e. over 25% of graduates making immediate progression, or over 35% for transitions after up to three years) to total PG were specialist institutions, including conservatoires or academies of Music or Art, typically with relatively or very small cohorts, and one or two institutions renowned for large-scale teacher-training provision. None of the ‘non-specialist’ institutions had proportions of over 25% or 35% respectively, for the cohorts studied.

In order to investigate trends with type of institution in more detail, the data relating to ‘immediate’ PG transitions was analysed by type of PG provision at institutional level. Figure 3 shows the progression rates for 2012-13 graduates into PGT, PGR and other PG (OPG) study in 2013-14 by institution. Each bar represents a single institution; specialist institutions are denoted with green colouration, and Russell Group member institutions blue.

These charts show that the very highest rates of transition were into PGT and other PG provision, while rates to PGR study were much more modest and zero for a considerable number of institutions.

For transitions to PGT, some of the specialist institutions described above had the highest transition rates, while other specialist institutions (including some specialists in Art and Music but also some in Education) had very low progression rates. The Russell Group institutions were relatively tightly clustered in terms of the proportions progressing to PGT, although they were not among the ‘highest performing’ institutions.

The pattern for transitions to PGR study was quite different, with the left hand side of the chart (i.e. institutions with relatively high proportions) being dominated by Russell Group member institutions. No specialist institution had a high progression rate to PGR study, and the majority had no transitions at all or an insignificant proportion, hence their near absence in the chart. The long ‘tail’ of institutions with insignificant or zero progression is marked in comparison with the charts for PGT and other PG.

Specialist institutions again dominated those with the very highest rates of transition to other PG provision, with four of the top six being well known teacher-training establishments (and the others performing Arts establishments). Again, however, many specialist institutions had very low or insignificant rates of progression. Meanwhile, the Russell Group institutions were very widely spread across the progression-rate spectrum.

These trends will presumably partly reflect the pattern of postgraduate study provision within the institutions, as relatively high proportions of students in many institutions will progress to PG in the same institution where provision is available. Related to this, a number of specialist institutions do not have research-degree awarding power (RDAP), which could contribute to their very low rates of transition.
Figure 3(a): Progression rates for 2012-13 graduates into PGT study in 2013-14, by institution. Blue denotes Russell Group member institutions; green denotes specialist institutions.
Figure 3(b): Progression rates for 2012-13 graduates into PGR study in 2013-14 by institution. Blue denotes Russell Group member institutions; green denotes specialist institutions.
Figure 3(c): Progression rates for 2012-13 graduates into other PG study in 2013-14 by institution. Blue denotes Russell Group member institutions; green denotes specialist institutions.
5.4 Trends by ‘department’

As indicated at the beginning of this section, ‘department’ here refers to those qualifying from an institution with first degrees in a particular disciplinary group, which is taken as a proxy for the effect of the department or unit within the institution in which they were taught. However, this will not necessarily map directly onto any actual organisational units within institutions.

Figures 4 to 7 offer a selection of illustrations of observed rates of progression to PG study by institution for a small range of disciplinary groups (and types of PG study). Figure 4 shows that the majority of institutions have a progression rate for Engineering and Technology qualifying graduates of between 5% and 10% for immediate transitions to PGT study, with a few rates of up to 20% (and a single outlier at twice that rate). Progression rates over the three-year period range from slightly higher to well over double the rate in some instances (where this is lower than the immediate transition it should be remembered that the figures are for different cohorts). As can be seen, the progression rates for Russell Group member institutions range right across the spectrum encompassed.

The trend within Biological Sciences was broadly similar but most institutions had a higher rate of between 7% and 15% (Figure 5), although again with a few at rates above 20%. Again, the relative ‘performance’ of Russell Group member institutions varied widely. A similar pattern was observed for History and Philosophical Studies.

Progression rates to PGR research were markedly lower, exemplified by results for Biological Sciences (Figure 6). For most institutions, less than 5% of qualifiers progressed to PGR immediately, and the relative numbers progressing within three years also were somewhat lower than for transitions to PGT. The rates of transition to PGR were very low on this timescale for the non-science subjects. Another key observation from Figure 6 is the relative dominance of Russell Group institutions in terms of institutions with relatively high progression rates – with these institutions very well clustered to the left side of the chart (i.e. higher immediate transition rates).

Figure 7 shows that the relative rates of progression to other PG study for Law qualifiers were much higher for some institutions and somewhat higher for many others, than for transitions to PGT (or PGR). The extent of ‘additional’ transitions (i.e. the difference between the proportion immediately and those over 3 years) was small for those cases with a very high initial transition.
Figure 4: Progression rates for Engineering and Technology qualifiers to PGT study, by institution, for immediate transitions and also over a period of three years. 'R' denotes Russell Group member institutions; 'S' denotes specialist institutions.
Figure 5: Progression rates for Biological Sciences qualifiers to PGT study, by institution, for immediate transitions and also over a period of three years. 'R' denotes Russell Group member institutions; ‘S’ denotes specialist institutions.
Figure 6: Progression rates for Biological Sciences qualifiers to PGR study, by institution, for immediate transitions and also over a period of three years. ‘R’ denotes Russell Group member institutions; ‘S’ denotes specialist institutions.
Figure 7: Progression rates for law qualifiers to other PG study, by institution, for immediate transitions and also over a period of three years. ‘R’ denotes Russell Group member institutions; ‘S’ denotes specialist institutions.
5.5 Modelled ‘departmental effects’

To reiterate, ‘department’ is taken here to mean those qualifying from an institution with first degrees in a particular disciplinary group, which is used as a proxy for the effect of the department or unit within the institution in which the students were taught. It does not necessarily map directly onto any actual organisational units within institutions.

Figures 8 to 11 demonstrate the extent of the net predicted ‘departmental effect’ for individual institutions, for selected disciplines. This represents the calculated effect of the department, net of ‘compositional’ factors, on the progression of its graduates to postgraduate programmes. It should be stressed that this is not the observed rate of progression, but the departmental effect. In each case, a column on the chart represents a single institution. The order of institutions varies for each chart, based on the strength of departmental effect. In many cases, denoted by darker coloration where $p > 0.05$, the departmental effect is not statistically significant (although in some of these cases it is relatively large). The focus, therefore, needs to be on institutions towards the right hand side of the charts, which are shown with a dark column – that is, where the departmental effect is both significant and positive. A number of the institutions within the sample studied in depth are denoted with capital letters.

Charts have been selected purely to illustrate some of the key trends emerging from the data model. It was the departmental effect that was used to identify, in principle, potential institutional locations for the in-depth qualitative research.

The pair of charts comprising Figure 8 illustrate the net predicted effect for progression of Engineering and Technology qualifiers to PGT study ‘immediately’ and cumulatively up to three years after graduation. As these are not for the same graduating cohort, it is assumed for simplicity that the pattern of progression was broadly similar for both cohorts. On that basis, Figure 8 shows that ten institutions had a significant positive departmental effect of 3% or higher. The extent of departmental effects tended to be somewhat larger, whether positive or negative, for transitions over the three-year period. Two of the institutions selected for study in depth are highlighted, showing that for these cases at least, a positive departmental effect for immediate transitions was also evident, and larger, over the three-year period too.

Figure 9 show similar results for predicted transitions to PGT study for Biological Sciences qualifiers. The pattern and magnitude of departmental effects are broadly similar to those for Engineering, although in this case with a particularly high effect for a single institution. Highlighting particular institutions shows that, in this case, a positive departmental effect for immediate transitions may not persist for three-year transitions.

Broadly similar patterns were observed for transitions to PGT for History and Philosophical Studies and for Law, although for the majority of institutions the departmental effect was not significant at a 95% confidence level. Departmental effects for Business and Administrative Studies were not significant for transitions to PGT the year following graduation, and significant for very few institutions over the three-year period.
Figure 8: Net departmental effects on transitions to PGT study for Engineering and Technology graduates (a) immediately after graduation, and (b) within three years of graduation. Results for institutions shown with dark red or dark grey columns are statistically significant.
Figure 9: Net departmental effects on transitions to PGR study for Biological Sciences graduates – (a) immediately after graduation, and (b) within three years of graduation. Results for institutions shown with dark red or dark grey columns are statistically significant.
Figure 10: Net departmental effects on transitions to PGR study for Biological Sciences graduates – (a) immediately after graduation, and (b) within three years of graduation. Results for institutions shown with dark red or dark grey columns are statistically significant.
Figure 11: Net departmental effects on transitions to other PG study for law graduates: (a) immediately after graduation, and (b) within three years of graduation. Results for institutions shown with dark red or dark grey columns are statistically significant.
Figure 10 illustrates the predicted departmental effects for transitions to PGR study, using Biological Sciences as an example, although the trends were similar for the different subjects examined. These show that departmental effects were slightly smaller in magnitude than for PGT in this disciplinary area, and were rarely significant at the 95% level. For the particular institutions highlighted, the relative strength of departmental effect was similar for both the time periods analysed.

Finally, Figure 11 shows predicted departmental effects for transitions to other PG study for Law, both immediately and over three years. These show that the departmental effects are much greater for this form of transition than for transitions to PGT, and especially to PGR, for both time periods. The number of institutions with significant departmental effects is also much greater.

Taken together, the charts and underlying analysis show a number of trends in relation to the modelled departmental effects:

- within a disciplinary group, departmental effects tend to be somewhat larger for transitions to PGT (and more of them are significant statistically) than to PGR study. For PGR transitions, relatively few departmental effects are significant and many are very small;
- for some disciplinary areas, specifically Law among our sample, departmental effects for other PG study can be much larger than for either PGT or PGR;
- the number of institutions with statistically significant departmental effects varies with disciplinary group, as well as with type of PG study;
- the relative ‘position’ of particular institutions, in terms of its department effect compared with those of other institutions, can vary strongly. A positive departmental effect observed for a discipline for immediate transitions to PG study may also persist for cumulative transitions over a longer period of time (one to three years inclusive), but this is not always the case. One or two institutions with a significant positive effect for an immediate transition had a negative departmental effect over the longer period, within the same type of transition;
- the considerable variability at the institutional level suggests that caution is needed in interpreting the model outputs.

The data and results in this chapter have been provided deliberately on an illustrative basis, to indicate what can be demonstrated at a disciplinary and institutional level. They display graphically great variability between extents of progression in different settings, and the potential for further analysis in future. They were used to inform the sampling of institutions attempted in the in-depth research within the project.

6 Institutional perspectives

6.1 Institutional strategies and PG study

6.1.1 Engagement in the research

The relative difficulty experienced in engaging institutions in this research was perhaps an early sign of what would emerge in relation to institutional strategies in supporting progression to PG study. It contrasted with CRAC’s experience in a number of recent research studies about doctoral programmes in HEIs, where targeting a senior staff member with the relevant responsibility – a PVC-Research, Director of Research, or Graduate School leader, for example – was relatively straightforward and calls for participation sent to them drew high levels of response (and subsequent engagement in the project). These senior staff had clear accountability in relation to the provision of PGR programmes and a strong interest in recruitment of students to them.

By comparison, it was by no means clear to whom an invitation to engage in research about progression from UG study to PG should be targeted. Responsibility for support for students considering their future after UG study would be expected to fall to the PVC or equivalent who was responsible for student experience, or for education, learning or academic matters. Nor was it always clear who had accountability for PGT provision, at least in relation to UK students. When a PVC referred the researcher to an individual department, the person they chose was one of quite a wide variety of staff roles, perhaps indicating that it was unclear who was best placed to comment on PG transitions – that is, the person with responsibility for UG study, the head of graduate studies or someone else in a strategic position within that faculty.

34
6.1.2 Institutional strategies for PG study

Interviews with senior HE staff investigated whether the institution had a strategy to increase the number or proportion of its UGs that progressed to some form of PG study. None reported that their institution did so (i.e. for an increase in progression to PG study per se), which was in stark contrast to the ubiquity of strategies to enhance the employability of their students/graduates.

On the other hand, several institutions had a strategy to increase the proportion of their UGs that progressed to PG study in their own institution. In more than one case the ultimate objective of the strategy was to be able to offer an opportunity for PG study within the institution for every one of their UG students.

One institution reported a strategy to increase the proportion of its UGs that progressed to a PGR programme irrespective of where that programme was located (as it recognised that it could not possibly offer all those opportunities itself). It saw the proportion of UGs progressing to PGR study as an important graduate outcome measure, and an increase in its academic reputation through this strategy. It did not have a parallel strategy in relation to PGT study.

Response to this question often led to discussion of the institution’s strategies for PG provision. Although recent research has highlighted that an increased extent of doctoral provision is sought strategically by most English HEIs (Mellors-Bourne et al. 2014a), interviewees were reticent about the strategy behind their PGT provision. In several cases they suggested that PGT provision was driven by their institution’s international strategies, as high proportions of their PGT cohorts were from overseas.

A number of the interviewees felt their institution was not fully strategic in its approach to provision of PGT programmes, and two reported that their institution was commencing a review of its PGT provision. Their interpretation was that provision tended currently either to reflect international market opportunities (perceived as largely for financial benefit) or the research interests of its academic staff, rather than being driven by a strategy which either related to the UK PGT market or to longer-term academic objectives.

Several the interviewees reflected that PGT provision was an ‘in between’ activity – lacking the scale of UG provision or the potential academic benefit of PGR activity – and thereby was not strategically driven. As such, it was susceptible to being led by the potential financial returns from international students rather than the needs.

6.2 Rationales for PG study

6.2.1 Background

Recent research has highlighted the heterogeneity of current PGT and PGR cohorts in UK HE, which include wide variations in nationality, age and career trajectory (i.e. the point in a career at which PG study takes place, Mellors-Bourne et al. 2014b). That heterogeneity is reflected in the range of rationales or motivations reported for pursuit of PG study in particular (Wakeling et al. 2015). The most important motivations for PG study are reported dominantly to be career-related for most prospective students (other than those very late in career). The key motivations for consideration of PG study by undergraduates and recent graduates are reported to be, broadly:

- to enable progression into an identified career direction (typically certain professions, but also to PGR study within HE);
- to provide an enhancement of more general career or progression prospects, in some cases supplementing a perceived weakness in their first-degree (either in terms of its grade or the institution) or by delaying entry to the labour market;
- to support a change to an existing career path, or acceleration within it, or entry to a ‘career job’ from a position of sub-optimal employment.

While the motivations for PGR participation are thought to be somewhat more consistent, and underpinned by an intellectual drive to pursue study at the highest level, a wide range of career trajectories is observed, which is also discipline-related. Many of those entering PGR programmes in Physical and Biological Sciences do so directly from a first degree (or from a Masters undertaken immediately after it), while this trajectory is relatively rare among those undertaking PGR programmes in the Social Sciences, Arts and Humanities or Education, the vast majority of whom enter PGR substantially later in their career (and mostly after undertaking PGT study at some point).
These differences have significant impact on a study such as this, and the transition data underlying it, as the activities or support provided to first-degree students by institutions are likely to be more influential or relevant to those who pursue PG study immediately or soon after their first degree, and potentially less so for those who consider PG study at a later career stage. HEFCE has reported that those who ‘return’ to PG study after a period away from HE (such as a number of years in employment) are at a disadvantage in terms of access to information and informants about PG opportunities, compared with those who are within or very close to the HE system (Mellors-Bourne et al. 2014b).

6.2.2 PG study within institutional employability strategies

The senior HE staff interviewed provided their understanding of the key motivations for PGT study, articulating several of the career-related rationales identified in the recent research literature. In particular, they tended to identify two groups of motivations:

- acquisition of a specialised qualification and knowledge in order to enter a particular profession or career pathway (including potential entry to an academic career, via a PhD);
- potential differentiation or enhancement in the graduate labour market (including those seeking to ‘trade up’ or compensate for perceived weakness in their first degree).

In so doing they were able, to some extent, to relate progression to PG study to the employability strategies extant in their institutions. As certain career pathways require a PG qualification for entry, institutional support for employability should inform relevant students of that requirement and provide either opportunities to obtain the qualification or information about other providers who could offer it. Equally, encouragement to undertake a PG programme in order to strengthen chances in a competitive labour market could be seen as within the range of strategies suggested to students to enhance their employment prospects.

Where there was less clarity from interviewees was in relation to the extent of the labour market benefit or earnings premium that would ensue from a PGT qualification or specific programme, which was in many cases unknown (or reliant only on a few known individual cases). For careers that were directly related to the target disciplines in this study, in Engineering, Psychology and Law, there were major pathways that required a PG qualification (which were confirmed in discussions with respective professional bodies). A Masters-level qualification is a requirement to obtain Chartered Engineer status within the engineering profession, while practice in the legal profession requires achievement of the Legal Practice Course or Bar Professional Practice Course qualification. For Psychology, the need for a certificate to practise professionally is contingent on an accredited PG course. These professions aside, interviewees suggested either that most parts of the labour market were not articulating a strong need for PGT-qualified graduates or, if they were, the interviewees were not aware of it.

Labour market drivers for PGR study are also thought to be relatively weak, other than for academic or research careers, despite the fact that over half of those graduating with a doctoral qualification do not enter academic careers.

6.3 Promotional and inspirational activity

The interviews and call for evidence from institutions sought to uncover practice that institutions undertook, or support that they regularly provided, which had the aim of increasing the profile of potential PG study and opportunities. These activities could broadly be grouped into activities embedded within the curriculum, and those that were co-curricular (or extra-curricular).

6.3.1 Embedded within the curriculum

Interviewees reported that careers or employability modules were embedded within their UG programme curricula, and within tutorial programmes, as part of their institutional employability strategy, although their extent varied between faculties and departments. These modules tended to incorporate elements to stimulate engagement in career thinking and/or management, to foster an increased awareness of possible post-degree opportunities, and to provide practical skills in pursuing such options (such as CV preparation or mock interviews). Within the second of these elements, there was generally some ‘mention’ of postgraduate study in relation to pathways after graduation, but the impression obtained was that in most cases this was not a major emphasis of the information given.
Interviewees described one aspect of this strategy to be encouragement to lecturers to “have a slot” in their curriculum where they would highlight PG study opportunities, but the precise manner in which this took place was left to the lecturer. It seems likely that the main emphasis would be on opportunities about which they knew most, that is, within their own department.

A number of institutions took this a step further, with a deliberate strategy to raise awareness among their UGs of specific PG study opportunities within the institution. More than one, for example, had the objective that every UG student, by the end of his or her penultimate year, should have heard of a particular PG opportunity being promoted, such as, for example, a particular research Masters course in the institution. The objective would be delivered by the opportunity being mentioned by at least one subject lecturer by a certain point in the syllabus. Two interviewees (in different institutions) reported this in relation to a research Masters course, which had been designed as a preparatory programme for those intending to pursue doctoral research.

There were isolated cases where an institution appeared to have a somewhat different strategy, at least for selected disciplines. For example, one post-1992 institution heavily promoted the general prospect of PG study to its students in subjects such as History and Philosophy, as part of instilling a culture of scholarship. Although it was emphasised that this was primarily a strategy to develop that culture of scholarship, in so doing it also provided practical information about PG career pathways to students. The interviewee noted that the institution’s PGT programmes were dominantly composed of its own graduates, that is, students who had ‘continued’ from first degree to PGT within the same institution, and also that the proportion of students from overseas was very low. They also noted that since the institution’s PGT provision was relatively limited in scope, information about programmes in some other institutions was included.

The institution reported in section 6.1 as having a strategy to promote PGR study irrespective of its location had specific objectives in relation to raising awareness about PGR opportunities among its UG students. This did include information about programmes in other institutions, as the institution’s own PGR programmes were limited in range. Uniquely, among these interviewees at least, it was reported that this university had overtly included research skills within the set of transferable skills that its employability strategies were intended to enhance.

Beyond these profile-raising activities, the evidence suggested that UG curriculum delivery contained little (and quite possibly no) activity by academic staff or others that had the overt aim of increasing consideration of PG study among students. Subject teaching in the more vocationally-oriented disciplines studied here – Engineering and Law – could include some contextual orientation within professional practice, within which a lecturer could mention that, for example, a Masters qualification was a requirement for practice, but there was no evidence as to whether such information was given.

Interviewees did note, however, that informal engagement took place between academic staff who led or taught on PGT programmes, or acted as PhD supervisors, and individual students. This was believed to be relatively commonplace but informal and somewhat idiosyncratic, and was thought mostly to take place with the more motivated or engaged students who displayed greatest interest in higher study. Practical laboratory or demonstration sessions, often supported by early-career researchers, research-active junior staff or doctoral researchers, were cited as being a particularly fertile environment for informal conversations of this kind.

A comment from several interviewees (in response to how awareness of PG study might be raised) related to the nature of the staff undertaking teaching. Where teaching was carried out by research-active staff, they believed that there would be inherent reference to current research which would raise the students’ interest in it and, potentially, increase the likelihood that they might personally pursue PGR study. In the call for evidence, several respondents made reference to what they believed to be the high profile of certain aspects of their institution’s research activity, which they felt inspired more students to become aware of PG possibilities.

### 6.3.2 Outside the subject curriculum

Several of the interviewees mentioned that their institution hosted or ran a ‘postgraduate day’ to which UG students were invited. This included generic content around the nature and benefit of PG study, and promotion of specific PG opportunities within the institution (and in some cases in other institutions), supported by the presence of alumni of the PGT programmes and/or doctoral researchers. Graduates who had entered industry after a PG course could share views on how their employers viewed PG qualifications. In some cases, students at nearby institutions would also be invited to attend these events.
Postgraduate fairs have also become relatively commonplace, in some cases run by a commercial third party, and at which different institutions promote their PG opportunities. A number of interviewees reported that their institution hosted such a fair. However, some noted that their institution did not host such events, as it did not wish to facilitate promotion of its competitors’ opportunities.

Three interviewees reported that their institution offered a range of specific opportunities that aimed to give UG students an insight into PG study, especially PG research. These could include short ‘taster’ sessions or days, which aimed to provide a sample of what PG study would be like, or could be more substantial in the form of ‘research internships’.

One interviewee reported his institution’s belief that students who had an opportunity to engage with research by working with an academic during their UG studies “beyond a dissertation” were more likely to progress to PG study. Research internships offer this opportunity in a structured way, typically taking place during the summer vacation and engaging the student in a research project as a mechanism to familiarise the student with the research process and encourage them to consider doctoral research. These internships function in a similar way to a period of work experience, but where the activity is a research project rather than employment. They are believed to more commonplace in the US, where they typically are used as a means to widen the racial profile of those entering research (see e.g., Posselt and Garces 2014).

A number of interviewees raised the question of whether work placements, which were increasingly promoted within institutional employability strategies, played a positive or negative role in relation to consideration of possible PG study. They recognised that they were useful in raising students’ thinking about careers generally, which could include consideration of PG-based options. On the other hand, a successful work placement experience with an employer was inherently likely to promote entry to such employment (and possibly with that particular employer), which could sway the student away from consideration of PG study. Recent research has indicated that a placement within an employer with PG-qualified staff can positively influence a student’s perception of the value of PG study (Wakeling et al. 2015).

One interviewee also mentioned peer mentoring as a mechanism used to raise awareness of PG opportunities, with current doctoral researchers mentoring PGT and UG students and current PGT students mentoring UG students (as well as certain alumni undertaking mentoring). Inherently, the experiences related by these mentors would have been within the same institution, but it was believed that such activity could promote the concept of PG study more generally, as well as promoting the specific opportunities the mentors had experienced. It is known that an element of mentoring has been included, to a greater or lesser extent, in several of the recent Postgraduate Support Scheme projects.

6.3.3 The role of information, advice and guidance

A variety of perspectives were sought on the role of formalised information, advice and guidance (IAG) in relation to promotion of PG study, including from the professional body for university careers services, from several careers professionals within institutions, from several careers professionals within institutions and from senior academic staff.

The academic staff interviewed were unclear as to the extent to which their careers service was active in encouraging students to think about PG study opportunities generally. However, they assumed that the primary responsibility for promoting their own institutional PG opportunities lay with the department or school running those programmes (and to varying extents with the institutional marketing team).

To some extent this was reinforced by the views of the careers professionals. The research took place at an interesting time, as institutions were in the process of publicising PGT scholarships for which they had recently bid for funding (and were also match-funding). It was clear that there were institutional imperatives to promote these scholarships in order to achieve successful recruitment, and careers services had been asked to display promotional material and disseminate information about them.

The careers staff interviewed contrasted this with their perception of the routine position in relation to their institution’s PG opportunities. They reported that they were not always made aware of institutional opportunities nor asked to be active in promoting them by the institution’s marketing function.

While IAG provided by careers staff is required to be impartial, and not directive, the careers staff interviewed believed that promotion of opportunities was something that they should undertake. Two such careers
professionals commented that they received more information about PGR opportunities from some other institutions than they did from their own institution.

The general view from IAG professionals was that their role was not to recommend PG study over an employment pathway, or vice versa, but that making information about PG opportunities available was within their remit, and that they would provide guidance on the potential value of such qualifications in the labour market. However, they believed that the profile of PG opportunities (within the visible activity of the careers service) was much lower than that of employment opportunities from graduate employers and especially major graduate schemes.

These staff considered that entry to employment was considered ‘the norm’ for most students by both the university and the students, whereas progression to PG study would only be seen as the norm for a narrow selection of students (or within certain applied subjects and/or pathways).

One representative commented that in a previous era his (then) university had provided printed brochures about PG opportunities, which were known to be popular with students, but now that almost all their information was provided online he was not sure the extent to which this information was accessed.

In the call for evidence, although no IAG-based activities were reported, two institutions that were taking part in a Postgraduate Support Scheme consortium project reported that part of their research activity was to investigate the role of IAG activities in increasing access to and widening participation in PG study.

6.4 ‘Push’ and ‘pull’ activities

Overall, on the basis of the perspectives reported, the evidence suggested that relatively little activity was taking place strategically with the objective of promoting PG study, in comparison with that taking place to enhance employability in the sense of increased prospects for employment after graduation.

As has already been mentioned in relation to institutional strategies, it was felt important in the context of this study to distinguish between support or activity designed to inspire UGs to consider the concept of PG study in general (referred to here as ‘push’ activity) and activity that specifically promoted participation in the institution’s own PG opportunities (i.e. ‘pull’ into its PG provision).

This distinction is important in terms of the underlying motives. ‘Push’ activities are primarily undertaken to raise students’ awareness of the range of opportunities open to them after their first degree, in any location, with the objective of a helping them to secure a positive post-graduation outcome. Admittedly, the latter contribute to the institution’s destination measures, so this is not an entirely altruistic activity. ‘Pull’ activity is primarily driven by the potential benefit to the institution (which is largely, but not exclusively, financial), although this should also provide a positive outcome for the graduate.

It can certainly be argued that promotion of a specific PG option (i.e. such as a PGT or PGR programme within the institution) will have some knock-on effect in raising a student’s awareness of PG options per se. Conversely, a student who is more aware of the concept or value of PG study may well select a programme in the same institution. Nonetheless, the primary motivations of ‘push’ and ‘pull’ activities are clearly different and, we believe, require this distinction to be made when depicting activity to promote PG study. Therefore the activities described above were considered in relation to the primary motivations underlying them (although in some cases this required an assumption on our part).

What was immediately clear was that much more ‘pull’ activity is taking place than ‘push’ activity, although the latter was intended to be the main target of investigation in this research. This raises the question of the extent to which there are institutional motivations for promotion of PG study in general.

It was notable that when asked about the ways in which the general prospect of PG study was promoted to UG students, almost all interviewees mentioned activities that directly promoted (or at least indirectly highlighted) opportunities for PG study within their own institution. A prominent example of this was that almost all interviewees – in response to this question – mentioned that their institution offered a discount on PGT programme fees to their own UG students or alumni. In at least one case, such discounts were on a sliding scale in relation to the year of graduation, thus incentivising immediate transitions into PGT programmes. We did not obtain any evidence of the efficacy of such discount schemes. For that matter, we also did not obtain evidence that any of the activities that were mentioned had been evaluated, although it is possible that interviewees might not have been aware of such evaluations in other parts of their institutions.
7 Relating institutional perspectives and PG participation data

Comparative data showing institutional variations in rates of progression to PG study, either observed using HESA Student Record datasets or derived from them as generated predictions, as described in Section 5 above, are not available to institutions. When interviewees were informed that data analysis had identified comparatively ‘higher performance’ (in the sense of a greater level of progression to PG study than some other institutions) in their institution in certain disciplinary groups, this came as news to all of them. To some extent, therefore, any ‘explanation’ that they might give that lay behind such a position might be considered as conjecture on their part, although the majority did not offer such explanations but, rather, had to reflect on what practice did exist to promote progression.

A number were familiar with the broad percentage of their UGs that progressed to PG study reported in DLHE data – but none had any insight as to how this compared with other institutions. There was some intrigue that detailed data (on PG transitions) existed and many interviewees questioned whether the data showed the extent to which transitions were to their own PG programmes or those in other institutions. In fact, the institutional location of PG study was not identifiable in this analysis of the HESA Student Record data.

Broadly, the level of familiarity with DLHE data in respect of PG study destinations was not high. Given that the DLHE data are collected by the institution, the possibility clearly exists for institutions to analyse their data in relation to PG study destinations, but this did not seem to have been a focus for analysis or had not permeated to the academic staff interviewed. It is likely that most institutional focus is on outcome measures within the Key Information Set (KIS) which are used to promote UG provision, namely the proportion of graduates in employment and/or further study (combined), the proportion of those employed in graduate employment and their earnings. Again, this could be interpreted as a reflection of a relatively lower strategic importance of transitions to PG study than, for example, transitions into employment, or recruitment of undergraduates in the first place.

Careers service staff reported that very variable levels of interest were shown by academic staff in DLHE data (which are often collected by the careers service), although there was some indication that the level of interest was broadly growing.

7.1 Correlating PG-supportive cultures and transitions data

In most cases, comparatively high levels of transition to PG study seen in the HESA data for departments and institutions studied in our qualitative work could not be correlated strongly with any particular reported promotional or support activities in those settings. This could in part be because the data available was based on grouped disciplines of UG study, whereas our investigations practically needed to be focused on departments within institutions.

On the other hand, the relatively small scale of transitions to PG study inherently means that a single activity (such as strong promotion of a local discipline-related PGT course and progression of a modest number of an institution’s graduates into that PGT course cohort) could result in a significant rise in the total transition to PGT study for UGs in that particular discipline. As an example, if the majority of a cohort of, say, 20 students participating in a research Masters programme had been recruited from a particular discipline within that institution (and such a programme did not exist in a comparable institution), that could account for the relatively high progression performance seen from the HESA data for that discipline and institution. It should be stressed that this is a hypothetical example rather than a proven case.

However, there were three instances where some kind of correlation could be observed. One was a Humanities disciplinary group in one of the institutions studied, where it was reported that there was underpinning promotion of PG study generally and a strongly developed culture to pursue it. The institution’s rate for UGs in that discipline progressing to PGT study immediately after graduation was the highest nationally for that discipline (based on the particular cohort measured).

The other instances seemed to be examples where the requirements of a profession were driving relatively high proportions in the relevant discipline to undertake PG study. These included Law students, where an institution’s Law school offered the Legal Practice Course (LPC) and the interviewee reported that many students progressed to
it rather than undertaking the course through an alternative provider. The data for that institution did indicate a high proportion of its Law UGs progressing to other professional study (the grouping within which the LPC would be found). A broadly similar situation could be expected to pertain within Psychology, although the JACS grouping of Psychology within Biological Sciences to some extent masks this in our particular analysis.

### 7.1.1 The ‘Integrated Masters effect’

The clearest example, however, related to Engineering students, for many of whom a career objective is Chartered Engineer status that requires, among other things, a Masters-level qualification. This can be achieved by studying an ‘integrated Masters’ first-degree course (which results in the MEng degree) or through a BEng course followed by a taught Masters (MSc). Our research examples included several Engineering departments. A trend emerged that those not offering the MEng programme, or which had one but had few enrolments on it, had relatively high rates of progression to PGT courses. Interviewees reported that they understood that a proportion of their graduates had progressed to MSc courses in order to qualify for chartered status. On the other hand, in a Russell Group institution within which many of the students did pursue the MEng programme, the proportion progressing to PGT was much lower. To varying extents, this trend appeared to be common across a number of institutions.

It was interesting also to note that the trend was broadly reversed in relation to PGR study. Interviewees believed that this reflected the exposure of Engineering students in the research-intensive institution in our sample to its high-profile research activity, which resulted in a higher proportion pursuing PGR opportunities than was the case for other types of institutions. Much the same could be inferred for our Biological Sciences examples, but it was less clearly the case for other disciplines where the ‘norm’ is to pursue PGR study at a later career stage and not immediately post-degree.

### 8 Conclusions and recommendations

The data analysis undertaken with the support of HEFCE confirms that there are significant differences in the rate of transition from undergraduate study to postgraduate study by institution, by discipline, and by ‘department’ (i.e. discipline within an institution). In some institutions, there appear to be positive departmental effects that result in a higher-than-expected rate of progression, even accounting for student differences. However, this is perhaps not surprising as ‘school effects’ are well-known in relation to differential progression into first degree study, so there is no reason to suppose that institutional or departmental effects should not exist which impact on progression to PG study.

On the basis of the analysis conducted, these differences appear to occur both in relation to transitions immediately after graduation and (perhaps to a lesser extent) for progression to PG study a few years after graduation.

The institutional perspectives obtained suggest that while there may be some differences between institutions, and departments within them, in the inspiration or support provided to undergraduates in relation to potential consideration of PG study, in most cases this is rarely systematic or strategically driven.

The institutional promotion of the concept of progression to PG study that does take place is dominantly driven by institutional motivations to increase participation in their own PG opportunities, rather than a desire to promote PG study more generally. The evidence suggested that few institutions have an overt policy or strategy to increase the proportion of their undergraduates that progress to PG study per se, despite the positive impact that this could have on their graduate destination measures. The relative difficulty of engaging institutions initially to take part in the research was perhaps an indication of this position, and/or a lack of a distinct locus for it in institutions. There was also little evidence to suggest that employability strategies made overt reference to PG study.

On the other hand, many did seek strategically to increase the proportion of their UGs that progress into their own PG provision. In places this had been interpreted practically as the limitation only to promote their own opportunities to their students. This potentially contrasts with the situation at UG level where there is co-operation with schools and with other universities in relation to widening participation, as there is an acceptance that there is an overall benefit from any activity.
In general, especially within scientific disciplines in the research-intensive institutions, there seemed to be more interest in transitions to PGR than to PGT, and to some extent a greater focus on supporting them. However, it should be borne in mind that in many disciplinary areas taught PG study is becoming the conventional pathway to (if not a pre-requisite for) entering a PGR programme, so encouragement to consider PGR could result in a student entering PGT as a next step.

Potentially as a result of this, there is no clear locus of responsibility for activity to increase the level of interest in prospective PG study generally. Where particular activities did exist to promote PG study, these tended to be at departmental or faculty level rather than institutional level, and in some cases dependent upon an individual’s enthusiasm to promote a particular programme.

Promotion of PGR opportunities, in particular, was often on the basis of informal conversations with individual students who were sufficiently motivated and/or had the confidence to undertake them. This informality and lack of transparency is likely to limit the range of prospective PGR students, at least to some extent, and might also potentially lead to inequalities through unconscious bias (such as selecting in one’s own image, as suggested by McPherson et al. 2001).

Information, advice and guidance provided by institutions’ careers services played little part in promoting the concept of progression to PG study, and reportedly were often overlooked when institutions promoted their own opportunities. This has also been reported in detailed research with those who have recently considered PG study (Wakeling et al. 2015). On the other hand, promotion of opportunities was seen to be within their remit, and careers professionals were more likely to have an understanding of the potential labour market benefit of PG qualifications, which could be shared through guidance. In many cases academic staff were unclear as to the extent of labour market impact of PG qualifications, other than within certain traditional pathways. This is likely to contribute to inequalities of progression, as prospective students with parents, relatives or friends who have experienced PG education will have informal advice and guidance available to them, while those without such sources will be reliant on the advice provided in the institution.

Discussion of transitions to PG study frequently led to some debate and concern about institutions’ strategies in respect of PGT provision for UK students, with a common perception that PGT provision was not a high priority in institutions’ overall strategies, other than to support international student provision.

An unintended finding from this project was that the institutions that were eventually successfully engaged in the project were quite intrigued by it, perhaps reflecting a relative paucity of policies in place on this theme. Many of the interviewees asked questions about their own transition data and thought it would be important and interesting to understand more about the motivations of their students in choosing whether or not to undertake postgraduate study, particularly in their institution. However, in the absence of strategic goals or monitoring targets in relation to PG study, their interest in postgraduates seemed hitherto to have been a lower institutional priority than developing policies in areas with more overt strategic objectives.

The research ambitions of this project were perhaps ahead of the lived reality of postgraduate support in the UK HE sector. While there is a high interest in some quarters about the ‘supply pipeline’ of UK students to PG study, and some pockets of innovative or effective support for transitions to PG study, the agenda appears to be at a different stage in its life cycle compared with what is known about UG transitions. There are as yet no PG outreach officers in the same way that institutions employ entire teams for widening participation in UG study, and less is known about student experiences at PG level than for UG study. The respondents in the present study seemed to welcome the opportunity to reflect on their institutional or departmental approaches to PG provision and students transitions to it, and would have been interested in examples of best practice from other institutions. This does seem to suggest that there is some desire in the sector to build capacity for developing support and thinking around PG transitions, but it has not hitherto been prominent or strongly articulated.
8.1 Recommendations

On the basis of the evidence, albeit limited, presented in this report, the research team proposes the following recommendations.

Data and evidence

1. **Data awareness**: institutions’ staff reported a range of familiarity in terms of progression data, specifically HESA’s DLHE survey data. For some institutions and staff, this was a valuable source of information that could inform practice, whereas other respondents were not aware of their institutional DLHE data. A first step in supporting best practice in postgraduate transitions might therefore be to raise awareness of existing data sources that provide information about postgraduate transitions.

2. **Research with and dissemination of other data**: based on the experience of manipulating the HESA Student Record datasets underpinning this project, there is scope for further analysis of transition patterns for different cohorts and more systematic research of transitions over a period of time for particular cohorts. A strategy, and perhaps mechanism, could also be developed for the dissemination of subsets of these data to institutions. These derived HESA data are unknown to institutions or individual departments, both in terms of the proportions of students who transition to PG study (including within the institution) but also in terms of sectoral comparisons. It could be possible to derive sets of key information that could be made available to institutions that outline rates of transition and the demographics of those who transition. This could enable institutions and departments to develop a more informed approach to promotion of and recruitment to postgraduate study.

3. **Evaluation**: overall, there was a lack of systematic or long-term evaluation of initiatives designed to support postgraduate transitions. More effort in developing evaluative studies to understand the impact of particular initiatives supporting postgraduate transitions would be valuable.

4. **Enhancing understanding of the complexity of postgraduate transitions**: in devising or evaluating initiatives, it is necessary to be mindful of the complex ways in which interventions may work. For example, a work placement in industry may not only result in a more employable UG student but might also enhance their interest in postgraduate study, depending on that experience and whom they meet. Furthermore, in evaluating individual initiatives, it is also necessary to consider institutional, departmental and peer-group cultures and the gradual and complex character of transitions, which may be more difficult to quantify.

5. **Labour market information**: there seems to be a lack of available information which demonstrates the beneficial employment outcomes of postgraduate study, especially taught Masters programmes, despite the career-related motivations of most prospective students. Quantifying the labour market ‘pull’ for postgraduate-qualified graduates would be beneficial, as well as provision of more quantitative evidence of employment outcomes at programme level.

Supporting postgraduate transitions

1. **More promotion of postgraduate options**: the simplest recommendation for institutions is to do more, as most seem currently to do little, to promote the concept and potential value of undertaking postgraduate study to undergraduates and alumni. Promotion of postgraduate options outside the institution’s own provision will be a key part of this.

2. **Engaging with the student voice**: a number of potential areas of good practice were identified in this report, from the institutional perspective at least. It is important that the perspectives of the students themselves should be included in evaluations of practice and promotion of opportunities.

3. **Engage with known factors in decision-making**: this and other research shows that prospective students consider a range of factors when deciding whether to progress to postgraduate study. These include access to information, advice and guidance, personal links with academic staff, accreditation requirements for the discipline, labour market prospects, as well as personal interest and ambitions and also financial issues and funding opportunities. Institutions that successfully support postgraduate transitions will be aware of these factors and consciously engage with them.

4. **Embed support initiatives**: the research found a range of initiatives that supported postgraduate transitions, although not all were embedded in curricula. The more that promotion of postgraduate options is embedded in routine teaching and learning, the more likely it is to be sustained.

5. **Use the available channels**: it was clear that not all opportunities are currently taken for the promotion of postgraduate opportunities, and careers services in particular seem to be an underused opportunity.
6. **Appreciate the disciplinary context of transitions**: there is great variation across disciplines in postgraduate transition rates. It may be useful for disciplinary groups or professional bodies to assist institutions to collaborate in supporting discipline-specific postgraduate information and support strategies.

7. **Supporting ethical transitions**: in light of growing awareness of tensions between altruistic ‘outreach’ and raising aspirations for postgraduate study on the one hand, and recruitment internally into institutional provision, it might be helpful for the sector to think about what ethical outreach and recruitment means. This could also consider how students from different backgrounds fare in access and progression to postgraduate study. Sector bodies like Supporting Professionalism in Admissions might be well placed to contribute in this regard.

### 9 Bibliography


i-graduate (2013) *Understanding the information needs of postgraduate taught students and how these can be met.* Bristol: Higher Education Funding Council for England.


