

FACULTY OF SCIENCE, ENGINEERING AND COMPUTING

Postgraduate Student Expectation Survey Findings

2010/11 and 2011/12

Understanding the prior learning experiences and learning and teaching expectations of postgraduate taught students in the Faculty of Science, Engineering and Computing

Introduction

There has been a dramatic expansion in the taught postgraduate (PGT) student body in the UK in the past 10 years. Extensive research has been undertaken in the field of the student experience and learning and teaching at the undergraduate level (Thomas, 2002; Hatt 2005) but there is limited research in the area of PGT study (Wakeling, 2005; Green, 2005; HEFCE 2006; Stuart. et.al, 2008). However, the Higher Education Academy (HEA) is at the forefront in investigating the PG student experience. In 2008, the HEA launched its annual Postgraduate Research Experience Survey (PRES) followed by their Postgraduate Taught Experience Survey (PTES) in 2009. The HEA survey research is throwing valuable light on the experience of PG students across the sector. In 2008, an HEA funded a report entitled '*Widening participation to postgraduate study: decisions, deterrents and creating success*' led by Professor Mary Stuart, was published. The research explored intentions to study at PG level and identified key drivers and barriers. The research analysed over 1000 final year student questionnaires from across all disciplines at the Universities of Brighton and Kingston. However, although there is an increasing body of research looking at the PG student experience, there is a lack of research and knowledge in understanding the impact of PGT students' prior learning and teaching experience, and, their expectations at PGT level.

Reason for the research

The pool from which to attract PGT students is substantial due to the increasing number of students successfully completing study at undergraduate level. The increase in student numbers at both UG and PG level has had a major impact on the delivery of the student experience within institutions.

The PGT student body in the Faculty of Engineering (FoE) at Kingston (KU) reflected the national pattern of growth in the PGT student body. In the FoE, the PGT student experience was not treated as a *bolt on* activity which can be a common occurrence. Equal attention has been paid to developing UG and PGT orientation and induction activities. However, evidence from PGT Faculty student meetings, module feedback activities and course representatives suggested that if there was a greater understanding by all staff in the FoE of new PGT students' learning and teaching expectations then the postgraduate students experience could be improved.

The FoE decided to undertake research to explore new PGT students learning and teaching expectations. It was undertaken by the Faculty's Learning and Teaching Coordinator who had been a primary researcher on the Stuart et.al study. The aims of the research were to explore the previous learning and teaching experiences of the Faculty's new PGT students and their expectations of studying at PGT level. The objectives were to use the results to develop academic, welfare and support activities within the Faculty, to identify any academic weakness PGT students felt they had, to

raise awareness amongst staff of new PGT students concerns, and, to improve the overall PGT student experience. The research was repeated with new PGTs in FoSEC in 2011/12 when the FoE merged with Science and Computing.

Setting the scene – the expansion in UK PG student numbers

The expansion in UK PG student numbers

There has been a large expansion in the PG student body within the UK in the past 15 years with the primary growth in taught masters' and taught doctoral degrees (Bekhradnia, 2005). Statistics from the Higher Education Statistics Agency (HESA) show that in 2004/5, the number undertaking a PG qualification in the UK totalled 532,603 (FT= 226,060: PT= 306,570). In 2009/10, the overall total increased by 8.6% to 578,705 (FT= 298,255: PT=280,450) (HESA, 2011). It is important to note that the HESA figures encompass PGT and PGR students but the majority are PGT. The increase in the PGT student body at KU has been more dramatic. In 2004, there were 2,486 (FT= 862: PT=1624) students enrolled on PGT courses but by 2010/11, the number had increased 160% to 6,477 (FT=3323: PT=3154) (KU, 2012). As the figures show, by 2010/11, full-time (FT) study had replaced part-time (PT) study as the dominant mode of study at PG level both nationally and at KU.

The early expansion in PG numbers in the late 90's and early 2000 was attributed to PGT courses and non-UK students (Bekhradnia, 2005). This still continues to be the case. In 2009/10, HESA statistics show that *international* students consisting of European Union (EU) and those outside of the EU made up 44.5% of all FT postgraduate numbers (HESA, 2011). This pattern is reflected in the KU PGT population where 57.6% of all FT PGTs in 2010/11 were from the EU or outside of the EU (KU, 2012). However, HESA statistics show that 86.5% of the total PT PG population are UK domiciled students (HESA, 2010). Again, this is reflected in the Kingston statistics where 83% of the PT PGT student body are UK domiciled (KU, 2012). It is unclear why this is the case on a national and KU level but student attitudes to debt and access to funding may be factors.

Contributing factors increasing UK student participation at PGT level include economic changes and the perceived value of the UG degree within the employment market. Wolf (2002) suggests that one possible reason why the postgraduate population has increased in recent years is that '*as the bachelor's degree becomes ubiquitous, its relative advantage in the labour market is diminishing*' (cited by Wakeling 2005, p. 506). Evidence demonstrates that postgraduate study is increasingly undertaken for career advancement rather than self-fulfilment (Anderson et. al.,1998; Barber et. al., 2004, Stuart et. al., 2008; Park and Kulej, 2009). Postgraduate study has expanded quickly within the sector. The research and development of student experience initiatives has not kept pace with the growth as it has done at undergraduate level.

Expansion in Science, Engineering and Computing PG student numbers

The increase in national student numbers enrolled on PG *Computing, Engineering, and Technology* and *Mathematical Science* courses mirrors the overall growth in UK PG participation. At KU, increases on *Computing* and *Engineering Technology* courses mirror the national pattern. In 2006/7, PGs enrolled nationally on *Computing* courses was 20,110 (FT= 13,070: PT= 7,040) but by 2010/11 this had increased to 22,480 (FT=16,335: PT 6,145) (HESA, 2011). At KU, the pattern is similar with 311 (FT=175: PT=136) enrolled on *Computing* courses by 2010/11 (KU, 2012).

Students enrolled nationally on *Engineering and Technology* courses was 34,660 (FT=22,990: PT 11,670) in 2006/7 but by 2010/11 this had increased to 44,955 (FT=31,705: PT=13,250) (HESA, 2011). At KU, by 2010/11, the number of PGT students on these courses had increased to 585 (FT=348: PT=237) (KU, 2012).

In 2006/7, HESA statistics showed that the number of PGs enrolled nationally on *Mathematical Science* courses was 5,335 (FT=3550: PT=1785) but by 2010/11, this had increased to 5,865 (FT= 4395: PT=1470) (HESA, 2011). Participation on *Mathematical Science* courses at KU does not reflect the national picture and has low PGT recruitment in this area.

Data collection and analysis

The research utilised a quantitative questionnaire that collected demographic variables and key factors of interest. The questionnaire was voluntary and completed in two phases. Data was only collected from respondents studying at KU and not partner institutions. The questionnaire included open-ended and closed questions (e.g. those using a five-point Likert-type scale). Questions were developed following an analysis of the literature and a pilot questionnaire. The questionnaire was distributed as a hard copy survey to maximise completion rates within specific timescales.

Phase one was undertaken in the FoE in 2010/11. Students completed the questionnaire at an orientation event. It was completed by 79 respondents in the September and January intake. This accounted for 66% of the new PGT student entrants in the FoE in 2010/11.

Phase two was undertaken in the newly combined FoSEC in 2011/12. The survey was not undertaken during the orientation event but in teaching week 2. This meant that not all students could complete the survey. The sample size accounted for approximately 38% of the new PGT intake in the FoSEC in September 2011.

The quantitative data collected was entered into the Statistical Package for the Social Sciences (SPSS). A range of frequency and parametric tests were run on the data. The findings are reported below. Due to the low number of questionnaires completed by new PGT students in some schools, the school findings are not statistically significant. However, where there were noticeable differences between the schools, they are included in the findings. The abbreviations used for schools are as follows: Aero; Civil; CIS; GGE; LifeSci; Mech; Chem/Pharm.

Basic findings

Where students were coming from?

In 2010/11, 46% of the FoE respondents came directly from University, 35% from work and 19% from taking a year out. Similarly, in 2011/12, 40.7% of the FoSEC respondents came straight from university, 40.7% from work and 15.9% from taking a year out.

Gender

In 2010/11, 85.9% of the FoE respondents were male. In 2011/12, of the FoSEC respondents, 67.6% were male and 32.4% female. The increase in gender participation was anticipated due to the subject provision in the newly created FoSEC. The FoSEC

and the survey samples in both years, due to its subject provision, does not match the University's overall PGT statistics where female participation is 52% and male is 48%.

Ethnicity

In 2010/11, 46.8% of the FoE respondents described themselves as white. The second largest ethnic group was Asian with 22.8%. In 2011/12, the figures amongst FoSEC respondents were 52.9% and 30% respectively. Kingston University statistics show that of its PGT student body, 44.5% of students classify themselves as white and 29.5% as Asian.

Domiciled status

In 2010/11, of the FoE respondents, 37.7% were UK domiciled, 25.9% were from the EU and 36.4% resided outside of the EU. In 2011/12 FoSEC respondents stated that 42.3% were UK domiciled, 21.9% were from the EU and 35.8% resided outside of the EU. Both sample groups reflect the overall PGT Kingston University statistics where 42.4% of PGT students are recorded as being UK domiciled.

Age

In 2010/11, 52.6% of the FoE respondents were in the 18-25 and 41% in the 26-36 age groups. In 2011/12, the figures for FoSEC respondents were 55.9% and 32.2% respectively.

First language

In 2010/11, of the FoE sample, only 40.3% stated that English was their first language. Eighteen languages were reported as a first language by the remaining 59.7%. In 2011/12, a similar pattern emerged with 40.8% of the FoSEC respondents stating that English was their first language. Thirty seven languages were reported as a first language. In both years, a significant percentage of UK domiciled students did not speak English as first language (29% in 2010/11 and 37% in 2011/12)

Reasons for undertaking a PG degree

In 2010/11, of the FoE respondents, the top two reasons cited for undertaking a PGT degree were 44.3% undertaking a PG degree to *improve their knowledge of the subject area* and 30.4% to *provide more career options*. The third reason cited by 11.4% was to *improve their chances of getting a graduate job*. In 2011/12, the reasons cited by the FoSEC respondents were similar with 48.6% *wanting to improve their knowledge of their subject area* and 28.2% hoping a PGT degree will *provide more career options*. In third place, 7.7% of respondents stated that they were doing it as a *requirement for their chosen career*.

Reasons for choosing Kingston to do their PG study

In 2010/11, the reasons provided by the FoE sample for choosing Kingston to do their PG study in rank order were; *course content, the University's teaching reputation* and *the cost of fees*. The Faculty's *research reputation* was not significant. In 2011/12, the reasons provided by the FoSEC respondents were similar with *course content* being ranked first, *university research reputation* in second place followed closely by the *university's teaching reputation* and *cost of fees* in third.

Fees

Of the FoE sample in 2010/11, 34.6% said the fees were important in their decision making process. In 2011/12, this had risen to 51% amongst the FoSEC sample.

Funding

The 2010/11, the FoE respondents stated that *parents* and *self funding* were the primary means of how they intended funding their PG studies. The figures were 46.2% and 34.6% respectively. In 2011/12, the FoSEC respondents stated that *parental funding* and *self funding* were still the primary methods of funding their PGT course but the figures were 38.6% and 32.4% respectively.

Expectations

In both surveys, the majority of respondents expected to receive a *higher level of service* than they had experienced at undergraduate level. They also expected to be *treated in a manner reflecting a higher level of study*. They expected to study in a *more independent way*, were *less likely to tolerate a poor quality experience*, *expected value for money* and *expected to receive more individualised study*.

Academic strengths and weaknesses

There were few differences between the two survey in terms of the respondents perception of their academic strengths and weaknesses. However, it was notable that 26.6% of the FoE respondents in 2010/11 thought they had *weak literacy skills* and of these, 52.4% had come straight from University. In 2011/12, 21.1% of the FoSEC respondents stated that they felt they had *weak numerical skills* and of this sample, 30% were coming straight from University. The differences were subject based.

Anxiety levels

In 2010/11, 43% of the FoE respondents reported being anxious or very anxious about starting their studies at PGT level. Of the 43%, 33.3% were coming from University. In 2011/12, the anxiety level amongst the FoSEC respondents was 55.3% and of this sample, 60% were coming from university.

Understanding what is meant by the term 'Feedback'

In both surveys, the majority of students understood what was meant by the term, *feedback*. There was no correlation between understanding the meaning of feedback, domiciled status and English being a respondent's first language.

Feedback preferences

Amongst the 2010/11 FoE respondents, feedback preferences at PGT level were first, email, second, face to face and third, paper. In 2011/12, the FoSEC respondents ranked their preferences as face to face in first place, email in second and paper in third. In the undergraduate survey undertaken in the previous two years in the FoE, face to face was ranked in first place, paper in second and email in third. In the 2011/12 FoSEC survey, there were some noticeable school differences which can be found in the full report. In both surveys, audio and intranet feedback were the least favoured methods of feedback.

Value of a PG qualification

Of the FoE sample in 2010/11, 83% felt that employers valued a PGT qualification more than an UG degree. In 2011/12, the FoSEC cohort reported similar opinions with 81.7%. In both survey cohorts, 95% thought that their PGT qualification would provide them with the higher skills required for succeeding in the workplace.

Findings

Section 1 Starting University

1. Where have you come from?

Respondents were asked what they had been doing before starting their postgraduate studies. In 2010/11, of the 79 Engineering respondents, 39% (30) had come from work and 46% (36) from university or other study. In 2011/10, a similar picture emerged with 40.7% (59) coming straight from University, 40.7% (59) coming from work and 15.9% (23) having come from taking a year out.

In 2010/11, of the 5.1% (4) who had responded by ticking *other*, reasons given included self-employed, undertaking unskilled work, being at home and leaving a 6 month internship. In 2011/12, no *other* responses were provided.

In 2011/12, there was a significant difference between CIS and the other schools in terms of where their student body had come from in 2011/12. The overall number of respondents coming from work was 40.7% but the percentage in CIS was 60%.

Implications

There are a number of implications for the student and the institution regarding where a PGT student has come from. Students may need different interventions depending on their previous experiences and backgrounds. Students coming from the world of work possess skills that could give them an advantage in a work based learning environment because they can use their work based methodology in the context of learning. Students coming from an undergraduate course may have different teaching expectations. These are issues which need to be considered when developing PGT orientation and induction programmes and managing the PGT student experience.

2. What are your reasons for undertaking a postgraduate qualification?

Respondents were asked why they were undertaking a postgraduate qualification. They were given a choice of 11 responses. Of the choice responses only 6 were selected in 2010/11 and 8 in 2011/12 (see table 1). The top two reasons for undertaking PGT study in both years were wishing to *improve their knowledge and provide more career options*. In 2011/12, the percentage stating that they were undertaking a PGT degree to *improve their chances of getting a graduate job* reduced. This may be due to the increase in subject diversity included in the survey.

Table 1 Reason 1 for undertaking a PGT qualification

	2010/11 71 respondents	2011/12 140 respondents
Wish to improve my knowledge of my subject area	44.3% (35) 1st	48.6% (69) 1st
Provide more career options	30.4% (24) 2nd	28.2% (40) 2nd
Improve the chances of getting a graduate job	11.4% (9)	4.9% (7)
For the enjoyment of studying	1.3% (1)	2.1% (3)
Gain exposure to the research environment;	1.3% (1)	4.2% (6)
Required for my chosen career	1.3% (1)	7.7% (11)
Desire to remain in higher education	-	2.1% (3)
Delay going into the job market	-	0.7% (1)

The primary reason given by the cohort sample in 2011/12 was a wish to *improve the knowledge of a subject area* with 48.6%. All the schools fell within a range of 43-55% schools apart from GGE where only 32.6% stated that this was a reason. The primary reason provided by this school's respondents was that a PG qualification would provide more career options. All other schools ranged between 14.3% and 37.5% in response to this reason.

Similar overall findings were found in the Stuart et.al *Barriers to PG study* (Stuart. et.al., 2008).

In the PTES 2010 Survey, the two most important motivation factors for taking a postgraduate taught programme were to *progress in current career path* (i.e. professional qualification) (52%) and to *improve my employment prospects* (53%) (Park and Kulej, 2011).

In the FoE Undergraduate Learning and Teaching Surveys, the top 3 reasons for undertaking an undergraduate degree were:

- Want to achieve something for myself;
- A degree will give me a better chance of getting a job;
- I need a degree to do the career I want to go into.

These findings are not dissimilar to those cited by respondents in this study.

Implications

As more students look towards a PGT qualification for improving or providing more career choices, reevaluating the learning outcomes of courses and ensuring that students expectations are managed accordingly would be a strategic activity to undertake. Wherever possible, including real work based opportunities to keep students engaged is a positive strategy.

3. What was important to you when choosing a university for your PG course?

Respondents were given 10 options when answering what had been their top three reasons for choosing an institution at which to study. The reasons provided are shown in tables 2, 3 and 4.

Table 2 Primary reason 1 for choosing a university

	2010/11 78 respondents	2011/12 144 respondents
<i>Course content</i>	84.6% (66) 1st	79.2% (114) 1st
where I studied as an UG student	5.1% (4)	2.8% (4)
University's teaching reputation	3.8% (3)	4.9% (7)
My home town university	2.6% (2)	2.8% (4)
Cost of fees	1.3% (1)	0.7 (1)
Campus facilities	1.3% (1)	2.1% (3)
Reputation for a good social life	-	0.7% (1)
Other	1.3% (1)	0.7% (1)

Table 3 Primary reason 2 for choosing a university

	2010/11 55respondents	2011/12 116 respondents
Course content	7% (4)	10.3% (12)
where I studied as an UG student	7% (4)	1.7% (2)
University's teaching reputation	40.4% (23) 1st	20.7% (24) 3rd
My home town university	1.8% (1)	5.2% (6)
Cost of fees	17.5% (10) 2nd	27.6% (32) 1st
Campus facilities	5.3% (3)	2.6% (3)
Reputation for a good social life	1.8% (1)	2.6% (3)
University's research reputation	14% (8)	26.7 % (31) 2nd
Other	5.3% (3)	1.7% (2)

Table 4 Primary reason 3 for choosing a university

	2010/11 55 respondents	2011/12 94 respondents
Course content	1.8% (1)	% ()
where I studied as an UG student	9.1% (5)	7.4% (8)
University's teaching reputation	18.2% (10) 2nd	22.2% (24) 2nd
My home town university	5.5% (3)	3.7% (4)
Cost of fees	20% (11) 1st	23.1% (25) 1st
Campus facilities	18.2% (10)	18.5% (20)
Reputation for a good social life	7.3% (4)	3.7% (4)
University's research reputation	16.4% (9)	8.3% (9)
Other	1.8% (1)	-

For both survey cohorts, *course content* was the most influential reason for studying at Kingston (see table 2).

In 2010/11, primary reason 2 was the *university's teaching reputation* followed by the *cost of fees* (see table 3). In 2011/12 the primary second and third reason cited was the *cost of fees* (see table 4). The University's teaching and research reputation followed closely behind the *cost of fees* in the responses given in primary reason 2 (see table 3).

On a school level, all the school respondents apart from those in GGE stated that *teaching reputation* was in their top two reasons in choosing a course. For the respondents in GGE, *research reputation* was the primary driver with 53.5% hence the *research reputation* being listed in second place in primary reason two. If the school's responses are removed from the sample, *teaching reputation* moves to second place.

The top 3 reasons cited in the Stuart et.al study for choosing a university at which to undertake PG study were the similar. They were listed as *course content* (34%) followed by the *university's teaching reputation* (24.5%) with the *cost of fees* (12.2%) in third place (Stuart et.al, 2008).

The three reasons mentioned most frequently in the PTES 2010 Study were:

- reputation (26%);
- location (36%);
- flexibility of programme delivery (26%)

(Park and Kulej, 2009).

In terms of reputation, the PTES survey found *institutional reputation* was rated highest (39%), closely followed by *the institution's reputation in their chosen subject area* (33%); *reputation of department* came much lower (23%). As in other studies grants and other *funding opportunities* did not appear as a significant factor (Park and Kulej, 2009).

Implications

The cost of PGT courses is being discussed by the sector as a result of the impending increase in UG fees for students starting courses in English universities this coming September. The immediate implication of the UG fee strategy is that universities are likely to raise PGT fees and in some cases, it could be in line with the UG level. The outcome is that PGT applicants are highly likely to look more acutely at the cost of a course and what they will receive for their money. Course content and support will also be critical factors that institutions will need to consider especially if the anticipated PGT NSS survey (equivalent of the UG NSS) is introduced. It is important that PGT students' expectations of what PGT study entails in managed so they do not view it as just an extension of undergraduate study and they understand the value of research informed teaching in their study experience.

4. Fee levels

Respondents in both years were asked directly how *important the fee levels* were when making their choice of where to study.

In 2010/11, 34.6% of respondents thought the fees were *very important or important* in the decision making process. In 2011/12, this figure rose to 55.1% for respondents on Engineering courses.

In 2010/11, of the respondents domiciled in the EU, 81.7% stated that *fees were very important or important* compared to 42.9% for UK and 35.7% for non-EU respondents.

In 2011/12, there was very little difference between the domiciled status responses with 56.9% for the UK, 43.3% for the EU and 42.9% for non-EU stating that that *fees were very important or important*.

In 2011/12, 51% of the sample stated that they thought the fees were *important or very important* although it is not the primary reason for choosing a university.

In 2011/12, of those who had come straight from University to PGT study, 37.3% stated that the fees were *important or very important*. Of those, who had come from the world of work, this figure was 61%.

On a school level, 79% of respondents from GGE stated that fee levels were important but only 25% of respondents from Aero felt that this was the case.

Certain subjects such as MBAs and vocational masters' programmes have traditionally been price sensitive but with the expansion in PGT numbers, this may be changing. The drive to undertake PGT study could be due to a number of factors: it enables access to the higher paid jobs market which is expanding; student perception about the importance of the PGT qualification in a competitive market has increased; a down turn in the economy has fuelled participation or it is a combination of all. Research has shown that fees have been cited as major reason for not progressing onto PGT study (Allen.et. al., 2006: Stuart.et.al., 2008). These findings are discussed in more detail in a separate Fee and Funding paper which accompanies this report.

Implications

A long term implication will be to monitor whether any increase in PGT fees and the increased accrued UG debt of the 2012 cohort graduating in 2015/16 will impact on PGT recruitment. Also, there needs to be more understanding of the decision making process of students who are coming from work and the impacts on fee levels and their attitudes to debt. It appears that funding at PG level will be targeted at research degrees and employment led taught provision (DBIS, 2009) meaning that institutions need to take an evidence based approach to pricing and their provision. As the debt for UG English students increase and with the current fluctuations in the economy, it is highly likely that the findings regarding fee levels above and value for money will increasingly be critical factors for applicants when considering what to study and where.

5. Funding of the course

In both years, the respondents were asked to identify how they were funding their studies for their PGT course. Eleven choices were available but in both survey cohorts, only 6 were selected for funding method 1 and 9 for funding method 2 (see tables 5 and 6). The *self funding* response option was included because many respondents in the pilot study stated that they did not want to state how they were funding their studies. This is borne out by the number of respondents who selected this response. Self funding could be through a variety of methods already listed.

Table 5 Funding method 1

	2010/11 78 respondents	2011/12 145 respondents
Parents/guardians	46.2% (36) 1st	38.6% (56) 1st
Self funded	34.6 % (27) 2nd	32.4% (47) 2nd
Loan/overdraft	7.7% (6)	13.8% (20)
Employer	7.7% (6)	5.5% (8)
Savings	2.6% (2)	3.4% (5)
Spouse/partner	1.3% (1)	-

Table 6**Funding method 2**

	2010/11 29 respondents	2011/12 66 respondents
Self funded	37.9 % (11) 1st	30.3% (20) 1st
Employer	7.7% (6)	4.5% (3)
Savings	20.7% (6) 2nd	18.2% (12) 2nd
Loan/overdraft	13.8% (4) 3rd	7.0% (5)
Parents/guardians	10.3% (3)	16.7% (11) 3rd
Salary	6.9% (2)	15.2% (10)
Spouse/partner	3.4% (1)	3.0% (2)
University scholarship/studentship	3.4% (1)	3.0% (2)
Sponsorship	3.4% (1)	1.5% (1)

The primary funding method cited in both years were *parents and guardians* followed by *self funding*. There was a correlation between domiciled status and parental funding with a higher percentage of international students using this as a source of funding. In the Aero and Mech, parental and guardian support was a primary source but not in Pharm/Chem or Life Sci.

In the Stuart et.al 2008 study, final year Kingston students stated that they intended funding their PG studies through *loans* (31.5%), *parents* (16.6%) and a *salary* (16.3%) (Stuart et.al., 2008). This finding could be explained by the respondents being final year undergraduate students and unaware of the lack of PG funding opportunities.

There is an assumption across the sector, albeit anecdotal, that when a student enters PG study that they will be self reliant and fund their own studies through bank loans or savings. However, bank development loans have not been in existence for many years. There is also the perception that when a student studies at PGT level parental involvement substantially reduces or becomes non-existent. What these findings demonstrate is that parental involvement is continuing at PGT level through the assistance of fee contribution and it appears to be rising amongst the student body at KU.

With this sample, it would be logical to assume that those coming straight from university are the ones receiving assistance. This assumption is reflected in the sample for both survey cohorts. In 2010/11, of the respondents who stated that their parents were helping them fund their studies, 64% were coming straight from University. In 2011/12, this figure was 52.5%.

However, 19.4% of respondents in 2010/11 and 26.8% in 2011/12 coming straight from work also stated that they would be receiving parental support.

As UG student debt increases, research shows that students are returning to the family home after completing a first degree to save money and reduce their debt. In Kingston University's HESA returns, 15.6% of all PGT students stated that their term-time accommodation was in their parental/guardian's home.

The majority of respondents in this study in both years were in the 18-25 year old group so this could in part explain the findings. These findings are discussed in more detail in a separate Fee and Funding paper which accompanies this report.

Implications

The lack of available funding for PGT applicants is a problem facing applicants and institutions wishing to recruit PGT students (Boorman et. al, 2009). It explains why respondents in this research seek parental support to fund their studies. UUK and the Russell Group have recognised these limitations hence their recommendation to the Browne Review that a loan system is extended to PGT students.

6. Undertaking paid work

Respondents were asked whether they intended *undertaking paid work* during their studies and what the mode would be. In 2010/11, of the respondents who answered this question, 25% stated that they intended working full-time and 75% part-time. In 2011/12, these figures were 15.2% and 84.8% respectively.

In 2010/11, 60% intended *working throughout the year*, 16% only *during the vacations* and 18% *not at all*. In 2011/12, the figures were similar with 57.4% *who intended working throughout the year*, 17.7% *during the vacations* and 16.3% *not at all*.

Of those who had come straight from University, 53.4% intended working throughout the year whereas for those who had come from work, this figure was 67.8%.

A high percentage of respondents in all the schools apart from Aero intended working throughout the year. Six of the seven schools were in the range of 43.8% (Mech) to 87.5% (Civil). Only 12.5% of respondents from Aero stated that they intended working throughout the year. It is important to note that the sample size in the school was small with only 8 respondents but interestingly, 75% of the samples were domiciled in the EU or outside of the EU.

The increase in respondents in 2011/12 stating that they intended working part-time throughout the year could be due to the inclusion of subjects with less contact hours thus enabling students to work. However, due to the increase in student debt over the past few years, this finding is not a surprising.

Implications

Balancing paid work, study and life demands are known to impact on a student's ability to fully engage in their studies. It is for this reason that University Career Units advise undergraduate students to undertake no more than 15 hours of paid work a week. With increasing debt UG debt and the young age of the PGT student, it is unsurprising that a high percentage of respondents intend working throughout the year. Also, PGT students

coming from work into study may retain paid work in their old work environment. It is highly likely that this would be the scenario for a student studying part-time.

When institutions look at their PGT provision, it may be mindful to consider the timing and type of delivery of courses. If the PGT market is to be maintained in a challenging environment, greater consideration of institutions fitting around the needs of the student rather than the student fitting around the needs of an institution should be considered. Block style study is an effective method of learning for the part-time or the full-time home student wishing to undertake paid work alongside their studies. However, this approach is not always helpful for the part-time or full-time student from overseas who has gaps in their timetable or paid work restrictions. Lack of interaction could result in isolation and disengagement. If it is viable, institutions could consider offering courses that operate in block style and yearlong in order to provide student choice.

7. Expectations of study at University

Respondents were asked to select a range of statements that reflected their expectations about studying at university. The majority of the respondents stated that they expected the quality of their course and the service they received to be higher at PG level than at UG level. The findings are shown in table 7.

Table 7 PG Expectations of University

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
My expectations in terms of quality of delivery and service postgraduate level will be higher than at undergraduate level	2010/11 58.2% (46)	2010/11 34.2% (27)	2010/11 3.8 % (3)	2010/11 3.8 % (3)	2010/11 -
	2011/12 60.4% (87)	2011/12 25% (36)	2011/12 6.9% (10)	2011/12 4.9% (7)	2011/12 2.8% (4)
I expect to be treated in a manner which reflects my academic achievement as a graduate	2010/11 38% (30)	2010/11 41.8% (33)	2010/11 12.7% (10)	2010/11 7.6% (6)	2010/11 -
	2011/12 46.5% (67)	2011/12 27.1% (39)	2011/12 16% (23)	2011/12 5.6% (8)	2011/12 4.9% (7)
I expect to learn in a more independent manner	2010/11 35.4% (28)	2010/11 40.5% (32)	2010/11 19% (15)	2010/11 2.5% (2)	2010/11 2.5% (2)
	2011/12 32.9% (47)	2011/12 37.1% (53)	2011/12 18.2% (26)	2011/12 7.7% (11)	2011/12 4.2% (6)
My tolerance of poor quality of delivery and service at postgraduate level will be lower than at undergraduate level	2010/11 30.4% (24)	2010/11 31.6% (25)	2010/11 16.5% (13)	2010/11 10.1% (8)	2010/11 11.4% (9)
	2011/12 27.9% (39)	2011/12 30% (42)	2011/12 17.9%(23)	2011/12 10.7%(15)	2011/12 13.6%(19)
I expect more value for money postgraduate level than at undergraduate level	2010/11 43% (34)	2010/11 32.9%(26)	2010/11 21.5%(17)	2010/11 2.5% (2)	2010/11 -
	2011/12 41.7%(60)	2011.11 33.3% (48)	2011/12 17.4% (25)	2011/12 4.2% (6)	2011/12 3.5% (5)

I expect a more individualised study experience at postgraduate level	2010/11 30.8%(24)	2010/11 42.3%(33)	2010/11 21.8%(17)	2010/11 2.6% (2)	2010/11 2.6% (2)
	2011/12 31% (45)	2011/12 40% (58)	2011/12 19.4%(28)	2011/12 6.2% (9)	2011/12 3.4% (5)
I don't know what to expect when studying at postgraduate level	2010/11 5.2% (4)	2010/11 11.7% (9)	2010/11 24.7% (19)	2010/11 36.4% (28)	2010/11 22.1% (17)
	2011/12 8.4% (12)	2011/12 9.8% (14)	2011/12 18.9% (27)	2011/12 22.4% (32)	2011/12 40.6% (58)

It is not surprising that the majority of PGT students *strongly agreed or agreed* that they expected a higher standard of service than that at undergraduate level. Interestingly, in 2010/11 and 2011/12, 21.5% (10.1%+11.4%) and 24.3% (10.7%+13.6%) respectively, of respondents, were prepared to receive a level service similar to that offered at UG level. In 2011/12, EU respondents and those domiciled outside of the EU were the most accepting with 50% and 45.6% respectively. This could be a cultural issue. Of the UK domiciled respondents, only 32.2% stated that they would be prepared to receive the same level of service.

Understanding the dynamics and implications of this response needs further investigation. It could be that respondents misinterpreted the question or if their last place of study was abroad then they may be making the statement based on their previous study experience.

In both survey cohorts, a worryingly high percentage of respondents stated that they did not know what to expect when studying at PGT level. This also needs further investigation to determine in what areas this applies (e.g. study, living in the UK as a PGT).

There were some noticeable differences between the schools. These included:

- *Expect to be treated as a PGT student*- all schools ranged between 71.7% and 85.2% but in Aero this figure was only 37.5%;
- *Expect to learn in an independent manner* – Schools ranged between 60%-77.7% but only 25% in Civil expected to learn in a more independent manner.
- *Tolerance of poor quality of service at PG level*- 37.5% in Civil, 35.7% in Mech and 26.9% in Life Sci were accepting of poor service;
- *Expect a more individualised study experience at PG level* - respondents in Civil had the lowest expectation with 50% and those in Pharm/Chem had the highest with 100%;
- *Do not know what to expect at PG level*- of the schools, CIS had the largest number of respondents not knowing what to expect at PGT level with 39.6% but 100% of respondents in Pharm/Chem stated they did know what to expect.

Implications

As student fees at all levels of study increase, institutions need to prepare themselves for the fact that student expectations at UG and PGT level will continue to rise. As PGT student numbers continue to swell (with a substantial number coming from employment) their work and life experiences will shape their expectations. It is up to institutions to manage their expectations and educate them and colleagues that they are partners in

their own learning. It will be more critical than ever that the PGT student experience is improved across academic, welfare and support services.

8. What do you regard as your strengths and weaknesses?

Respondents in both years were asked about the perception of their academic strengths and weaknesses (see table 8). They were asked to tick one answer per skill. The sample size responses for the statements below were 79 in 2010/11 and between 113 and 144 in 2011/12.

On the whole, respondents appeared to answer reflectively. Only a small percentage stated that they felt they had *very strong* skills in those skills listed. The majority stated that they felt that they had *strong skills*.

Of the sample, a relatively small percentage felt that they were *weak or very weak* in the skills listed. At postgraduate level, it is generally expected that students should have acquired many of the required academic skills either through previous study or through work. However, a student's perception of their skill base is often over exaggerated.

There was no significant difference in perception between those coming straight from study and those from work in terms of what they thought about the level of their skill base. Although the majority of respondents felt that they had a fairly strong skill base entering PGT study, anecdotal evidence from some course directors suggests that the skill base amongst some PGT students is not strong in some areas and varies between different types of students especially non-UK domiciled students.

Table 8 Academic strengths and weaknesses

	Very strong	Strong	Weak	Very weak
Quick assimilation of ideas	2010/11 19% (15)	2010/11 72.2% (57)	2010/11 8.9% (7)	2010/11 0
	2011/12 23.1%(33)	2011/12 63.6% (91)	2011/12 13.3% (19)	2011/12 -
Ability to organise my study independently	2010/11 25.3% (20)	2010/11 60.8% (48)	2010/11 13.9% (11)	2010/11 -
	2011/12 34.7% (50)	2011/12 49.3% (71)	2011/12 16% (23)	2011/12 -
My study skills	2010/11 8.9% (7)	2010/11 81% (64)	2010/11 10.1% (8)	2010/11 -
	2011/12 16.7% (24)	2011/12 75.7% (109)	2011/12 7.6% (11)	2011/12 -
Knowledge of subject studying at University	2010/11 15.4% (12)	2010/11 56.4% (44)	2010/11 26.9% (21)	2010/11 1.3% (1)
	2011/12 16.8% (24)	2011/12 62.9% (90)	2011/12 19.6% (28)	2011/12 0.7% (1)

Literacy skills	2010/11 19% (15)	2010/11 53.2% (42)	2010/11 26.6% (21)	2010/11 1.3% (1)
	2011/12 26.4% (38)	2011/12 56.3% (81)	2011/12 16.7% (24)	2011/12 0.7% (1)
Numeracy skills	2010/11 32.1% (25)	2010/11 57.7% (45)	2010/11 10.3% (8)	2010/11 -
	2011/12 26.1% (37)	2011/12 51.4% (73)	2011/12 21.1% (30)	2011/12 1.4% (2)

Although there was little significant difference between the two survey cohorts in terms of their beliefs about their academic strengths and weakness, the statistics from both years did highlight some issues.

In 2010/11 and 2011/12, 26.9% and 19.6% of the respective samples thought they had a *weak knowledge of the subject* that they were going to be studying. This could partly be explained by some respondents undertaking a PGT course to change career direction rather than a failure at UG level to equip students with the appropriate knowledge.

In 2010/11 and 2011/12, 26.6% and 16.7% of the respective samples thought they had *weak literacy skills*. And in 2011/12, 21.1% of the sample thought they had *weak numerical skills*. These findings could be related to the nature of the subjects included in the study as illustrated below.

School differences included:

- *Assimilation of ideas*- 37.5% of respondents from Aero and 27.8% of those from Life Sci stated that they felt that they had weak 'assimilation of ideas' skills. Other school responses ranged between 7.4% and 13.8%;
- *Ability to organise time*- the schools with the largest number of respondents stating that they had weak time management skills were GGE with 27.8%, Life Sci with 22.2% and Mech with 23.5%. All other schools ranged between 0-15.8%;
- *Study skills*- 17.6% of respondents from Mech stated that they had weak study skills. Other schools ranged between 0-12.5%;
- *Knowledge of subject to be studied at PG level*- 50% of Aero respondents stated that their knowledge was weak with GGE and Mech following behind with 29.4% each. Life Sci was the lowest with 3.6%;
- *Weak literacy skills*- the top 3 schools where respondents stated that they had weak literacy skills were Aero with 50%, Mech with 29.4% and Civil with 25%;
- *Weak numeracy skills*- the top 3 schools where respondents stated that they had weak numeracy skills were GGE with 38.9%, Aero with 25% and CIS with 22.6%. Other schools ranged between 0-21%.

It is reasonable to expect respondents coming from work or a year out to feel anxious about their literacy, numerical skills and knowledge of the subject. However, it was worrying to note that of the 26.6% in 2010/11 who stated that they thought they had *weak literacy skills*, 52.4% were straight from University. Of the 21.1% in 2011/12 who thought they had *weak numeracy skills*, 30% were coming from University.

It is now nationally recognised that the skill base of graduates had changed. The Times Higher Education Supplement reported that the CBI had stated that of the employers questioned in a study they had undertaken, many were concerned about the levels of graduate literacy and numeracy with a quarter saying they were unhappy with graduates' employability skills (Fearn, 2008).

Implications

When students start their studies at PGT level, it is important for an institution to identify the weakness in their student body key skill's base and bridge the gap by providing extra support when and where it is needed. This is not the same as saying that standards should be lowered. The integrity of academic standards must be maintained. Low levels of preparedness for entering higher education can increase transition difficulties (Richardson, 2003). Also, a student's previous experience of higher education can be a barrier to effectively continuing in education because a student's expectations may have been distorted by their previous experience (Bamber and Tett, 2000). Institutions need to be aware of student study deficiencies. Some institutions may decide not to recruit weak skilled students in order to overcome this problem. This is not a positive approach for the university or student.

9. How anxious are you about starting your postgraduate studies?

Respondents in both years were asked to state how anxious they were about starting their postgraduate studies (see table 9).

	2010/11	2011/12
Very Anxious	9% (7)	12.6% (8)
Anxious	34.6% (27)	42.7% (61)
Not anxious	46.2% (36)	36.4% (52)
Not anxious at all	10.3% (6)	8.4% (12)

In 2010/11, of the sample, 43% were *anxious or very anxious* about starting their studies. Of the 43%, 33.3% were coming from University and 53.3% from work.

In 2011/12, this had increased across the SEC faculty to 55.3%. Of the 55.3%, 60.3% were coming from university. Interestingly, only 34.8% of those who took a year out stated that they were *very anxious or anxious*. There were noticeable differences between the schools in relation to this question. Respondents from schools that were least anxious were Civil with only 15.7% and GGE with 17% stating they were *anxious or very anxious*. Anxiety levels were highest amongst Life Sci respondents with 65.4% being *anxious or very anxious*, 54.7% for CIS, 50% for Chem/Pharm and Aero and 41.2% for Mech.

There was no correlation between anxiety levels and whether a respondent was a first or second generation student.

It is reasonable to assume that a student coming from work or a year out is more likely to be more anxious than a student coming straight from study. However, the concern with the 2011/12 cohort sample is that two thirds of students coming straight from university felt *anxious or very anxious*. Information on whether these students were Kingston

undergraduates was not collected as part of the survey. The rise in anxiety levels between the 2010/11 FoE cohort and the 2011/12 School of Engineering cohort (name after merger) may be due to the fact that in 2011/12, there was no orientation and welcome website and handbook pre-arrival information that had previously been used to manage expectations.

The Faculty of Engineering's dedicated PGT orientation and induction website included a range of information including advice on academic and personal support and broad L&T information such as module choice guides and was available from June. This resource was not adopted after the SEC merger. This may partly explain the lower levels of anxiety of the FoE 2010/11 survey cohort.

Implications

It is important for institutions to manage the expectations and support the transition of new PGT students into their studies as they do undergraduate students. However, it is essential that the processes used to support UG students are not directly transferred to support PGT students as they require different support interventions.

10. What would reduce your anxieties?

All respondents were asked to suggest specific help or information that would help reduce the anxieties in their studies.

The responses for both survey cohorts were very similar. The respondents' suggestions fell into four broad themes: learning and teaching, communication, information and support with learning and teaching being the most populated theme.

Learning and teaching

- Good lecturers
- Access to all lecture notes and slides
- Access to published journals
- Copies of lecture notes
- Availability to lecturers
- Face to face time with lecturers
- Face to face feedback
- Full reading list
- Module information before the course starts
- Good supervisor for the project
- Completion of coursework feedback in a timely manner
- Hard copy lecture notes
- Get study information well in advance of starting
- Short tests to show development and progress

Communication

- Clear communication from all staff
- Friendly atmosphere
- Being informed about expectations
- Assignment requirements

Information

- Direction on where to find any information
- Information earlier on all aspects of study
- Information on how the academic year works

Support

Advice on what support is available
Good one to one support
Support on how to study in a different language

Implications

The suggestions provided by the respondents do have resource and operational implications. Key stakeholders across all services need to ensure that they are working together to deliver a quality experience across academic and welfare support. It is important to ensure that any students who join a course late are given a late orientation programme to provide them with the necessary information. This activity was undertaken in the old Faculty of Engineering and worked well with positive feedback from students and staff.

Unlike the UG version of the study, the PGT respondents in both survey cohorts did not cite making friends, getting peer support or being given the opportunity to socialise as important aspects in reducing their anxiety levels. This finding suggests that PGT students, who are older and more likely to have established social networks outside of university, do not need extensive social support provided at Faculty or University level.

The report by the University's PG Network Group, which was established in 2011 and provides social and academic support for PGT students across all disciplines, states that since September 2011, 20.45% of the total PG population at KU have engaged in activities offered by the PG Network Group. This initiative is valuable and beneficial to a range of PGT students including international students. This fact supports the finding in this report though that many PGT students will not utilise support activities offered by the university.

Section 2 *Your previous learning experience*

11. Briefly state what you understand by the term feedback.

Respondents were asked what they understood by the term feedback. Generally most of the respondents regardless of domiciled status understood what the term feedback meant. Only a small handful provided confusing answers and of these, there was no correlation between the responses given and domiciled status.

Feedback is:

An opinion given by a person after they have seen your work (EU)

Comments and feedback given on work/study pieces (UK)

Explanation of mistakes and help any misunderstandings (EU)

Means reflection and evaluation (OS)

Providing information on my performance (EU)

In the FoE UG Expectation Survey, a large percentage of the respondents who were new students did not understand what the term feedback meant. Hopefully, the responses above demonstrate that UG students by the time they have completed their first degree do understand and benefit from the feedback they receive.

Although most of the respondents in this study appeared to understand what the term feedback meant, it is always good practice to ensure that students are fully aware of what is meant by feedback and are introduced to the various methods and approaches at the start of their course. This way their learning experience can be managed and improved.

Implications

If the PGT NSS survey is implemented, as expected, feedback and assessment will be at the heart of it. It is important for institutions to apply the same rigor to PGT feedback that is being encouraged at undergraduate level. Students from countries who have been exposed to a 'non-questioning' approach to study need to be encouraged to actively engage in class discussion. Case study and discussion approaches to learning can help achieve this. At PGT level, it is critical that students become independent learners as soon possible especially if they do not have this skill on entry.

12. In your previous studies, did you read the feedback you were given?

The question of whether respondents had read the feedback provided in their previous study was not asked in the 2010/11 survey. It was included in the 2011/12 survey due to the response of the *understanding feedback* question in 2010/11.

The respondents in 2011/12 reported that 80% of the sample did read the feedback that they had been given in their previous studies. Worryingly, 20% stated that they did not read the feedback and of this sample, there was no correlation between the response and domiciled status, age or gender. On a school basis, 6 of the 7 schools ranged from 71.4% to 85.7% in terms of respondents reading their previous feedback. Respondents from Aero reported that only 50% had read the feedback provided in their previous studies. Interestingly, 75% of the Aero based respondents had come straight from University. However, it is unclear whether they were Kingston students.

Implications

There are various methods of feedback that can be utilised to encourage students to engage with feedback. These include providing general class feedback and providing feedback without a mark. Research suggests that if a student gets a mark they were anticipating, they will not read the feedback.

Section 3 Your learning experience on your PG course

13. At university, how would you like to receive your feedback?

Respondents were asked to state how they would like to receive their feedback at university. For each feedback method, they were asked to select a preference (see table 10). Interestingly, similar findings were found at UG level. These results are listed in table 11 for comparison.

Table 10 PG Feedback preference

Feedback Method	Most preferred method		An acceptable method		Least preferred method	
	2010/11	2011/12	2010/11	2011/12	2010/11	2011/12
On paper	31.9% (23) 3	39.1% (50) 3	54.2% (39)	44.5% (57)	13.9% (10)	16.4% (21)
Via email	60.3% (44) 1	56.3% (76) 2	31.5% (23)	39.3% (53)	8.2% (6)	4.4% (6)
Via an internal Intranet site	27.9% (17)	21.2% (24)	41% (25)	43.4% (49)	31.1% (19) 2	35.4% (40) 2
Audio (verbally recorded)	7.9% (5)	4.4% (5)	27% (17)	21.1% (24)	65.1% (41) 1	74.6% (85) 1
Face to face with tutor	58% (40) 2	62% (80) 1	39.1% (27)	29.5% (38)	2.9% (2)	8.5% (11)

Table 11 UG Feedback preferences

Feedback Method	Most preferred method	An acceptable method	Least preferred method
On paper (311)	46.3% (144) 2nd	49.8% (155)	3.9% (12)
Via email (303)	28.4% (86) 3rd	57.4% (174)	14.2% (43)
Via an internal intranet site (271)	10% (27)	46% (125)	44% (119) 2nd
Audio (verbally recorded) (262)	1.9% (6)	17% (57)	59.3% (199) 1st
Face to face with tutor (F2F) (318)	79.9% (254) 1st	15.5% (52)	3.6% (12)

All year cohorts at both UG and PG appear to prefer feedback either on paper, via a face to face session or via email. The preferences on a school basis are listed below in table 12.

Table 12 School feedback preference

	Aero	Civil	CISM	GGE	Life Sci	Mech	Chem/ Pharm
1 st	Email	Paper	F2F	F2F	Email	F2F	Email
2 nd	Paper	F2F	Email	Email	F2F	Email	F2F
3 rd	F2F	Email	Paper	Paper	Paper	Paper	Paper

There was a noticeable difference between the *most preferred feedback* preference of those coming from work and those coming from study. These can be found in table 13.

Table 13 Most preferred feedback preference of new students coming from work and university

	Work	University
Paper	41.2%	30.8%
Email	47.1%	61.4%
F2F	71.7%	55.6%

A much higher percentage of respondents coming from work preferred face to face feedback compared to those coming straight from university.

Implications

Face to face feedback is the primary preference cited by respondents in this study as well as those in the UG survey although email was a close second. There is an assumption that students want to engage with technology in their learning. What is unclear is whether students just want to engage in methods *they know* or whether they have tried other suggested methods such as audio and intranet feedback and have rejected them. The UG FoE L&T Surveys of 2009/10 and 2010/11 explored in greater detail respondents previous learning experiences and found that audio and intranet feedback options had not been available in pre-university study. As class sizes increase, assessment and feedback methods can become cumbersome and problematic to manage. Teaching teams could look at a range of feedback methods for their cohorts.

14. Do you think employers value a PG qualification more than an UG one?

Of the sample in 2010/11, 83% respondents felt that employers do value a PG qualification more than an UG one. In 2011/12, the responses were similar with 81.7% stating that employers valued it more, 6.3% stating no and 12% being unsure. At a school level, 50% of Aero respondents were not sure if a PGT qualification would benefit them but 100% of respondents in Civil and Chem/Pharm stated that they felt that it would.

In the Stuart et.al study, only 54.3% of the final year UG Kingston respondents stated that they believed employers would value a PG qualification more than an UG one, 13.3% said they did not feel that this was the case and 32.4% were unsure (Stuart.et.al., 2008). Science, engineering and computing subjects often lead to vocational careers so

the response rate from this study saying that students do believe that employers value an PG qualification more than an UG one may have a bearing on this result.

The Leitch Review highlighted the importance of postgraduates in driving innovation, entrepreneurship, management and leadership in business but it is unclear if the growth in PGT education has been as a direct result of employer demand.

A study by Connor et.al on behalf of CIHE for the Department of Business Innovation and Skills highlighted that employers did value the analytical and problem solving skills a Masters degree provided students. A PG qualification was seen as continuing professional development. However, the study also found that employers were concerned by the increasing number, and, the perceived variable quality of the PG courses available. Only 1 in 10 employers of PhD graduates and fewer for masters felt that a PG qualification was a guarantee of a high quality candidate (Connor et.al., 2010).

Implications

To protect the PGT market, institutions may need to:

- more clearly define the benefits of their PGT courses for students and employers;
- work with business and industry to ensure that they deliver the skills through curriculum and assessment to meet their needs and the demands of the student;
- offer more work based learning opportunities;
- obtain professional body recognition and accreditation;
- demonstrate credibility and currency of course offerings.

15. Do you think the postgraduate course you are undertaking will enhance your skills in the following areas and why?

Self management	Team working	Business awareness	IT
Problem solving	Communication	Numeracy	Leadership

In both survey cohorts, the majority of all the respondents believed that undertaking a PG qualification would enhance their skills in the following areas. In both 2010/11 and 2011/12, the figure was 95%.

Respondents stated that the reason they expected a PGT qualification to equip them with these skills because they were 'studying at PG level'. Their skills would be 'enhanced and broadened' and the knowledge they gained would be 'deeper'.

The study by Connor et.al reported that employers stated that although a PG qualification did enhance a range of the skills listed above, it was no indicator of leadership potential or work wisdom. These are two of the key skills employers are looking for in Master and Doctorate graduates. The report suggested that this was an area that both business and HE should develop (Connor et.al., 2010).

Implications

The sector needs to raise the profile of PGT courses with employers and ensure that the correct skills are built into courses. Skills could be explicitly defined in any documents or transcripts employers receive from the student (e.g. transcripts containing a skills matrix).

18. Gender

As anticipated, the gender balance of the survey respondents changed in 2011/12 due to the merger of Science, Engineering and Computing (see table 16). The University HESA figures recorded for female participation on PGT courses in SEC is 28% so female representation in this sample is just above the average for SEC. Institutionally, females make up 52% of the full-time PGT population and 57.5% of the part-time population giving an overall total female participation across all subjects of 54.5%.

Table 16 Gender of respondents

	2010/11	2011/12
Female	14.1% (11)	32.4% (96)
Male	85.9% (67)	67.6% (46)

Implications

The gender balance of students in this study reflects the global pattern of students studying Science, Engineering and Computing in western world universities (UNESCO, 2009). The challenge for institutions is whether they wish to increase female participation in these subject areas and how they aim to achieve this. One option may be to encourage applications from females in countries where there is a high female uptake of STEM subjects at UG level such as Denmark, Kuwait and Pakistan (Morgan, 2012).

19. Ethnicity

In 2011/12, the ethnicity of respondents varied compared to the 2010/11 survey cohort but this could be put down to the subject (see table 17). In both years, the sample percentage of respondents categorising themselves as white is higher than the Faculty percentage.

Table 17 Ethnicity of respondents

	2010/11	2011/12	SEC 2011/12
Asian	22.8% (18)	30% (42)	32.3% (236)
Black	16.5% (13)	10.7% (15)	17.5% (128)
White	46.8% (37)	52.9% (74)	42% (307)
Mixed	2.5% (2)	2.1% (3)	3.2% (22)
Other	11.4% (9)	4.3% (6)	5% (37)

20. Where is your permanent residency?

The permanent residency is not dissimilar between the cohorts (see table 18). Accurate statistics of the domiciled status of PGT students in SEC has been difficult to obtain hence their exclusion.

Table 18**Domiciled status**

	2010/11	2011/12
British Isles	37.7% (29)	42.3% (58)
Other European Union Country	26% (20)	21.9% (30)
Outside the European Union	36.4% (28)	35.8% (49)

Implications

The international PGT market has experienced a number of challenges that have impacted on recruitment such as visa issues and a decline in key markets such as India/Asia. International students bring a myriad of benefits to UK universities but also support challenges. It is more important than ever before to ensure the appropriate support structures are in place for international students and that they are on courses that keep them engaged in their studies.

21. Age of respondents

As anticipated, the majority of the cohort survey respondents and those in the FoSEC as recorded in HESA data, are in the 18-25 and 26-35 age groups.

Table 19**Age of respondents**

	2010/11	2011/12	SEC 2011/12
18 – 25	52.6% (41)	55.9% (80)	43.3% (322)
26 – 35	41% (32)	32.9% (47)	41.0% (306)
36 – 45	5.1% (4)	7.7% (11)	13% (198)
46 and over	1.3% (1)	3.5% (5)	2.7% (20)

Implications

The sector faces the challenge of educating a diverse student body across 3 different generations; baby boomer (born 1946-1966), Generation X (born 1966-1982) and the Millennial student (born 1984-2000). All share different approaches to life and the use of technology. Our challenge is to provide a quality student experience for all our postgraduates whilst meeting their needs.

22. What course are you studying?

Respondents were asked to list the course they were enrolled on. The courses are listed in the appendix.

23. What school do you belong to?

School	
Aerospace and Aircraft Engineering	5.7% (8)
Civil Engineering and Construction	5.7% (8)
Computing, Information Systems and Mathematics	37.9% (53)
Geography, Geology and Environment	13.6% (19)
Life Sciences	19.3% (27)
Mechanical and Automotive Engineering	12.1% (17)
Pharmacy and Chemistry	5.7% (8)
Total	100.0% (140)

24. Do you consider English to be your first language?

Respondents in both years were asked to confirm whether they considered English to be their first language. In 2010/11, only 40.3% (31) stated that they considered English to be their first language. And in 2011/12, this figure was 40.8%. In both years, a significant percentage of UK domiciled students did not speak English as first language (29% in 2010/11 and 37% in 2011/12).

Of the 40.3% in 2010/11, 37.7% stated that their permanent residency is in the UK. In 2011/12 of the 40.8%, 36.8% state that their permanent residency is in the UK. This means some EU and non-EU respondents consider English to be their first language.

In 2010/11, eighteen languages other than English were listed by the respondents as their first language. In the UG level L&T Survey undertaken in the same year, the number recorded was 48.

Arabic	5	Igbo (Nigeria)	1
Bulgarian	1	Italian	3
Farsi	2	Punjabi	1
German	3	Romanian	2
French	2	Russian	1
Greek	6	Sinhala	1
Hindi	1	Spanish	5
Guajarati (Pakistan)	1	Turkish	2
Hungarian	1	Urdu	2

In 2011/12, thirty five languages were listed by the respondents as their first language.

Arabic	4	Greek	7	Hindi	6	Icelandic	1
Spanish	5	German	3	Marathi	4	Polish	2
Maltese	1	Turkish	9	French	4	Portuguese	1
Italian	1	Farsi	1	Urdo	3	Slovak	1
Chinese	2	Hungarian	1	Romanian	1	Swahili	1
Nepalese	1	Macedonian	1	Dutch	1	Norwegian	1
Lithuanian	3	Hebrew	1	Gujarati	1	Malayalam	1
Latvian	1	Nigerian	1	Bengali	1	Kamada	1
African	1	Tamil	2	Sri Lankan	1		

Implications

The number of PGT students whose first language is not English is substantial in this sample. The languages reported as a the primary language is very diverse. This has implications on the resources being put into language support provision.

Conclusion

This study highlights a range of issues which the sector could explore further. These include:

- Debt aversion attitudes as a barrier to PGT study;
- The effect of domiciled status on attitudes to learning, fees and funding;
- The impact of PGT fees on the UK market and the global economic downturn on EU and non-EU applicants.

This research highlights that we cannot treat PGT students as a homogenous group or like undergraduate students. We must not use initiatives specifically designed for UG students and try to implement them at PGT level because these students need different interventions and support.

Michelle Morgan
L and T Coordinator

Lucy Jones
Associate Dean

Faculty of Science, Engineering and Computing
March 2012

ADDENDUM FINANCE PAPER ATTACHED TO THE BOTTOM OF THIS PAPER

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Appendix 1

Courses studied in FoE 2010/11

Engineering Systems Management	5	Advanced Product Design	2
Management Construction	2	Automotive	2
Structural Design	7	Mechanical Engineering	10
Engineering Projects	3	Construction	13
Aerospace	6	Civil	7
Renewable Energy	19	Manufacturing	2

Courses studied in FoSEC in 2011/12

	Frequency
Networking and Information with Management Studies	1
Networking and Information Security	12
IT and Strategic Innovation	5
Information Systems with Management Studies	2
Health Information Management	2
Web Development	6
Information Systems	3
Embedded Systems	2
Embedded Systems with Management	2
Software Engineering	8
Networking and Data Communications	4
Electronic Commerce	1
Electronic Commerce with Management	1
Wireless Communications	1
Biomedical Sciences	13
Biotechnology	7
Cancer Biology	8
Renewable energy	15
Engineering Project Systems Management	3
Aerospace Engineering	1
Mechanical Engineering	3
Automotive Engineering	3
Pharmaceutical Science	9
Hazards and Disaster Management	14
Environmental and Earth Resources Management	3
Sustainable Environmental Development with Management Studies	2
Structural Design and Construction Management	2
Civil Engineering	4
Construction Management and Construction Law	1
AIMS	1
Total	139

Addendum to the FoSEC Postgraduate Taught (PGT) SEC Expectations Survey

Fee levels and Funding – responses

Introduction

The Higher Education Academy's (HEA) PGT Experience Survey captures a national picture of the postgraduate taught student experience once a course has been completed but there is very limited data available looking at the expectations and funding of PGT students. Apart from the HEA's Postgraduate Research and Postgraduate Taught Student Experience Surveys, the other two substantive PGT reports available were produced 4 years ago with data collected 6 years ago. The first is the 2008 HEA funded report entitled *Widening participation to postgraduate study: decisions, deterrents and creating success* led by Professor Mary Stuart which looked at PGT study expectations of over 1000 final year undergraduates at the universities of Brighton and Kingston. The second report is Dr Paul Wakeling's doctoral research from 2009 entitled *Social Class and Access to Postgraduate Education in the UK*. He has written extensively on the subject in attempt to understand who goes onto PGT study and why.

Reason for the research in SEC

The PGT Learning and Teaching Expectation Survey, first implemented in the FoE and later rolled out across the FoSEC, was designed to provide data that would assist in improving the PGT student experience at Kingston (KU) as well as understanding our student expectations and funding patterns. Due to the findings, this short paper has been written to report the responses in full and highlight areas for further discussion. This paper also looks at the potential implications of the fee level and funding responses. This paper should be read in conjunction with the main reporting which outlines the growth in PGT numbers.

Although the survey cohort samples are relatively small, they do constitute a substantial proportion of the FoE (66% in 2010/11) and FoSEC cohorts (38% in 2011/12). The findings between the survey cohorts' are similar and flag up issues for further discussion.

Fee levels

Respondents in both years were asked directly how important the fee levels were when making their choice of where to study. For both cohorts, fee levels were very important but it was not the primary reason for choosing where to study and why.

In 2010/11, 34.6% of the respondents thought the fees were *very important or important* in the decision making process. In 2011/12, this figure for respondents on engineering courses rose to 55.1%.

In 2011/12, 51% of the sample stated that they thought the fees were *important or very important*.

In 2011/12, of those who had come straight from University to PGT study, 37.3% stated that the fees were important or very important. Of those, who had come from the world of work, this figure was 61%.

On a school level, 79% of respondents from GGE stated that fee levels were important but only 25% of respondents from the School of Aerospace felt that this was the case.

Certain subjects such as MBAs and vocational masters' programmes have traditionally been price sensitive. The expansion in PGT population across the sector suggests that the PGT qualification is helping graduates access higher paid jobs. What is unclear is if the employment market is shifting to accommodate PGT graduates because there is a body of highly qualified graduates or the market is demanding it hence the increase in PGT student numbers. Is the increase due to students' perceptions that employers value the PGT qualification more or are the changes in the economy forcing students into higher level education? Or is it a combination of both?

Research suggests that the costs of fees are a major factor in not progressing onto PGT study (Allen et al, 2006, Stuart et. al, 2008). The PGT market is more price sensitive than the undergraduate market and that *the demand on postgraduate study is inversely proportionate to the health of the economy as a general trend* (Foskett et.al, 2006: 50). The overall UK figures for PGT and STEM based subjects appear to bear this out (see main report). However, what is unclear is how the international economic climate in recent months will impact on the PGT market in the UK and at KU in the next two years.

A range of factors need to be considered regarding the cost of fees. These include:

- **Student demographics.** In the Stuart et.al study, analysis revealed that UK students, those who studied practical/applied courses those with no children, White/non-minority ethnic students and those from families who have no previous higher education experience were less likely to intend to undertake postgraduate study. Overseas students (including students from mainland Europe), those on theoretical/non-applied courses, those with children, minority ethnic students and those who have family with previous higher education experience were more likely to intend to undertake postgraduate study (Stuart et.al., 2008). Social class is also a factor (Wakeling, 2009).
- **The academic capability of the PGT applicant** This may become an important driver in deciding whether to undertake a higher level of study. An applicant with a weak entry qualification may decide that the risk of withdrawal or non-completion is too great to justify the expenditure especially in a harsh economic climate. If an institution traditionally recruits students with weak or diverse entry qualifications then their ability to continue attracting students in the current economic climate may be a challenge.
- **The perception of 'value' attributed to the cost of fees.** An applicant may equate a 'low' fee being charged for a course by an institution with the perception that it must be 'substandard' in some way. It would be interesting to look at responses of applicants being offered places at Warwick and

Oxford to do an MBA where Warwick charged £10,000 and Oxford charged £4,500. Both institutions are well respected but Oxford is seen as the more prestigious institution. What would the perception of the applicants be regarding their perceived value of the course due to the fee level?

- **A student's attitude to debt.** In the Stuart et.al study analysis revealed that UK students who were more worried about debt (but not necessarily in more debt) were less likely to intend to undertake postgraduate study and those who are less worried about debt (but not necessarily in less debt) were more likely to intend to undertake postgraduate study (Stuart et.al., 2008). It appears that students coming from work into study may also be more debt averse.

Implications

Students today are more aware that they should expect to 'receive value for money' although they may not be aware of exactly what that entails within the education sector. Respondents in both survey cohorts stated that the level of fees was very important in their decision making process although not a primary driver in deciding at which institution to study. This is a potentially critical factor for institutions. Get the product right and institutions may be able to successfully overcome some of the barriers in relation to fee increases.

The level of PGT fees, due to the increase of UG fee levels, is being examined by the sector. It is highly likely that PGT fee levels will imminently increase. What is not clear is how the increased UG debt incurred by the 2012 cohort graduating in 2015/16 will impact on PGT recruitment in the future. As the average debt for the UG English student increases, and, with the current fluctuations in the economy, it is highly likely that fee levels and value for money will increasingly become critical factors for applicants when considering what to study and where. This situation needs to be closely monitored.

UK domiciled students already make up 83% of the part-time market. Fee increases at UG and PG level may continue to make this mode of study even more desirable and affordable.

Government funding at PG level appears to be targeted at research degrees and employment led taught provision (DBIS, 2009) meaning that institutions will need to take evidence based approaches to their pricing and their provision.

Complaints to the Office of Independent Adjudication (OIA) in the area of PG study have increased. It is unclear why but it is logical to assume that increasing student expectations and demand for value for money are playing a part.

Funding of PGT courses

Both survey cohorts were asked to identify how they were funding their studies for their PGT course. Eleven choices were available but for both survey cohorts, only 6 were selected for funding method 1 and 9 for funding method 2. The *self funding* response option was included because in the pilot study, some respondents stated that they did not want to divulge how they were funding their studies. This is borne

out by the number of respondents who selected this response in both survey cohorts. Self funding could be through a variety of methods already listed.

Funding method 1

	2010/11 78 respondents	2011/12 145 respondents
Parents/guardians	46.2% (36) 1st	38.6% (56) 1st
Self funded	34.6 % (27) 2nd	32.4% (47) 2nd
Loan/overdraft	7.7% (6)	13.8% (20)
Employer	7.7% (6)	5.5% (8)
Savings	2.6% (2)	3.4% (5)
Spouse/partner	1.3% (1)	-

The primary funding method cited by both survey cohorts were parents and guardians followed by self funding. There appears to be a range of variables for this finding.

In the Stuart et.al 2008 study, final year Kingston students stated that they intended funding their PG studies through loans (31.5%), parents (16.6%) and a salary (16.3%) (Stuart et.al, 2008). In the Wakeling study, this figure amongst PGT respondents across 9 institutions was 17%. The low number of respondents in the Stuart et al. study stating that parents or guardians would be a funding resource could be explained by the fact that these respondents were final year students and unaware of the lack of self funding opportunities at PGT level. Also, since the Wakeling and Stuart et.al studies were undertaken, there have been a number of changes at UG and PG level that could explain the findings found in the SEC study.

Coming to PGT study straight from university

It is logical to conclude that those coming straight from university are the ones receiving assistance from their parents. This assumption is reflected in the sample for both survey cohorts. In 2010/11, of the respondents who stated that their parents were helping them fund their studies, 64% were coming straight from University. In 2011/12, this figure was 52.5%.

However, 19.4% of respondents in 2010/11 and 26.8% in 2011/12 who were coming straight from work also stated that they would be receiving parental support. It is important to note that they were also in the age groups 18-25 and 26-35 (see below) so may not have been working for long enough to accrue savings or qualify for a loan.

Age of PGT respondent

The respondents receiving the parental assistance are restricted to two age categories. They are 18-25 years and 26-35 years, and, of the respondents in these age groups, 47.5% and 34% respectively stated that parental funding was their

primary means of funding their PGT course. No respondents in the 36-45 and 46 plus age groups reported parental funding as a funding option at all.

The majority of respondents in this study in both years were in the 18-25 year old group so this could in part explain the findings. As UG student debt increases, research suggests that students are returning to the family home after completing a first degree to save money and reduce their debt. This is reflected in the University's HESA returns where 15.6% of all PGT students stated that their term-time accommodation was their parental/guardian's home.

First generation v second generation

Out of the 46.2% respondents in the 2010/11 survey cohort who were receiving parental assistance, 53.6% were second generation students (parent/guardian has been to university).

Of the first generation respondents (parent/guardian had not been to university) and who were assisting them with their fees, the figure was 37%. In 2011/12, of the 38.6% whose parents were assisting them with their fees 44.6% were second generation students and 28.4% were first generation students.

When the data from the Stuart et al study is examined, 15.3% of the sample stated that they would seek parental assistance and 33.3% would self fund. When the data is broken down to engineering, science and technology respondents, the figures are similar to the overall total with 14.7% expecting to obtain parental assistance with fees and 33.3% to self fund. The data showed that the number of second generation students being funded by parents was double that of first generation ones. This could be due to second generation students' parents understanding the value of higher education more than first generation parents. Plus they may have greater access to resources enabling them to financially support their son or daughter.

Domiciled status

Domiciled status appears to be a significant factor in respondents obtaining support from parents or guardians in both survey cohorts. In 2010/11 of the 46.2% receiving parental support with their fees, 15.8% were domiciled in the UK, 64.7% in the EU and 61.1% outside of the EU. In 2011/12, the figures were similar. Of the 38.6% who receiving parental assistance, 25.9% were domiciled in the UK, 53.3% in the EU and 44.9% outside of the EU. At school level, this finding was found in the schools of Aero and Mech but not Chem/Pharm or Life Sciences.

Implications

If age is a key variable, a loan system may assist. The lack of available funding for PGT applicants is a major problem for them as well as institutions wishing to expand their PGT numbers (Boorman et. al., 2009). This would in part explain why the respondents in this research are seeking parental support to fund their studies. UUK and the Russell Group have recognised these limitations hence their recommendation to the Browne Review that a loan system is extended to PGT students.

If domiciled status is a key variable then UK recruitment may not be affected pre-2016 even in light of the lack of available funding and an imminent increase in PGT fee levels because they are managing to self fund. UK PGT numbers have continued to rise even in the current climate. However, it may encourage more part-time rather than full-time participation of UK students.

If first generation status is a variable, then again, a loans system could assist PGT student numbers.

Conclusion

There is an assumption across the sector, albeit anecdotal, that when a student enters PG study that they will be self reliant and fund their own studies through bank loans or savings. However, bank development loads have not been in existence for many years. There is also the perception that when a student studies at PG level parental involvement substantially reduces or becomes non-existent. What these findings demonstrate is that:

- parental involvement is continuing at PGT level through the assistance of fee contribution;
- first generation, domiciled status and age are significant variables.

It is unclear the level to which the subject of PGT study plays a role in the pricing of a course in today's current climate. Raising PGT fees now before the market potentially becomes even more price sensitive in 2016 could enable the sector to use the extra funding to prepare itself and ensure the correct mechanisms are in place for a more price sensitive environment. Debt, fee levels, expectations and funding options of PGT study are areas in need of further exploration and research. This knowledge is critical because it will help inform universities set fee levels and encourage the government in setting up a loan support for students studying at PGT level if it wishes to preserve the PGT market.

Michelle Morgan and Lucy Jones

Faculty of SEC

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