What does 'quality' in higher education mean? Perceptions of staff, students and employers.

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'Quality' in education is difficult to define. What is viewed as high quality by staff, students and employers must be identified so that universities can articulate their offer. Equally, helping students develop the graduate skills and attributes that employers value is essential. This project explored quality in higher education from the perspectives of undergraduate students, academic staff and employers. 340 students, 32 staff and 17 employers completed their respective questionnaires. Qualitative data was collected from students in focus groups. Results showed that employers most highly valued graduate personal qualities, while quality of teaching and learning, feedback and staff: student relationships were highly rated by staff and students. Students, while positive about the methods of teaching and learning used, expressed uncertainty about whether they were receiving a high quality education. Higher education institutions and academic staff must articulate the value of the academic offer more clearly to their students.

Keywords: quality; perceptions; employability; teaching & learning; personal qualities; relationships

Introduction

What is meant by 'quality' in higher education is unclear (Brockerhoff et al, 2015). It is a multidimensional term (Elton, 1998; Krause, 2012), simultaneously dynamic and contextual, but may also be perceived differently by different stakeholders (Schindler et al, 2015). Within higher education there are four main stakeholder groups: providers (e.g. funding bodies), users of products (e.g. students), users of outputs (e.g. employers) and employees of higher education (Schindler et al, 2015); quality is likely to be perceived differently from each viewpoint and is therefore relative (Harvey and Green, 1993). Others argue that quality must be considered from the perspectives of public

accountability (value for money), the extent to which research outputs and student learning from higher education are socially desirable, and that quality has a transformative component for students, teachers and the culture of the institution (Biggs, 2001; Harvey and Knight, 1996). In addition, 'quality' has both tangible (e.g. course materials) and intangible (relating to student service) elements (Yeo, 2009).

Consumerisation of education may create or reinforce a negative perception of quality and whether higher education represents good value for money. What students perceive of as high quality in their education may not be clearly articulated (Hill, Lomas and MacGregor, 2003) or matched by what academics identify as valuable or what employers wish to see in graduates. Students who perceive themselves as receiving poor quality education may be less likely to engage and fulfil their academic potential, or may fail to continue their studies. Students may feel dissatisfied with their university education if what the university offers and delivers does not match their expectations, and if reflected in low National Student Survey and other survey results, consequent reputational damage. Staff understanding of high quality education may not match that of their students either in terms of content or delivery. Likewise if employers' expectations of the skills and competencies expected from high quality graduates are not met, this will impact negatively on student employability and employer relationships with higher education institutions. Identifying and disseminating what employers identify as high quality attributes may help students to develop key graduate attributes using the plethora of university support services available to them. Understanding what students identify as high quality or good value will help staff ensure the academic offer is framed in student-relevant terms. This is particularly important at a time when external ratings of universities such as the Teaching Evaluation Framework (TEF; http://www.hefce.ac.uk/lt/tef/) are likely to impact upon

student choices and their perceptions of the extent to which any given higher education institution represents good value.

With the advent of student tuition fees in the UK in 1998 and the subsequent steady increase in tuition fees, students may consider themselves as consumers of education and indeed may be encouraged to do so by Government and the media (Brennan, 2012). However this overly simplistic description of what is a complex relationship ignores the requirement that for success students must take responsibility for and engage in their learning (Coates, 2006). Student engagement is linked to positive learning outcomes such as good grades and the development of critical thinking skills (Carini, Kuh and Klein, 2006). Learning, engagement and student retention are all linked (Carini, Kuh and Klein, 2006; Crisp and Cruz, 2009; Tinto, 2012). Therefore from a pedagogic perspective too, understanding different perspectives of quality is important.

The aim of this project was to ascertain what is perceived as quality in higher education by staff and students of a post-92 university Kingston University, and employers of graduates within the science sector, to identify commonalities and differences.

Methods

Ethics approval was granted by the Centre for Higher Education Research and Practice (CHERP) Research Ethics Committee of Kingston University. Three questionnaires were developed; one each for staff, students and employers. All participants received an information sheet explaining the aim of the research, why they had been chosen and how their data would be stored and used.

Student questionnaire

Participating students received a questionnaire with a series of 15 statements about aspects of teaching and learning (Appendix 1). Participants were required to indicate whether they agreed, disagreed or were unsure about each statement. Data was coded and entered into an Excel spreadsheet; when demographic information was entered, the university identifier was removed so the dataset was anonymised.

Staff and employer questionnaires

The staff questionnaire comprised 27 statements; staff were asked to indicate whether they agreed or disagreed with each statement. Staff had the opportunity to add qualitative information about other factors they thought were important in the provision of a high quality education. Finally they were asked to identify the barriers which in their view, impact upon their ability to deliver a high quality education. The employer questionnaire contained 17 statements relating to their perceptions of the qualities of high quality graduates; employers were also asked to identify any additional important graduate attributes and to identify the single most important attribute of a high quality graduate. Both staff and employer questionnaires contained a brief tick-box demographic survey (gender, age, ethnicity, length of time in current job and job position). Staff and employer questionnaires are shown in Appendix 2 and 3 respectively.

Focus groups

Participants in all three groups were offered the option of attending focus groups to discuss key themes in more detail. One focus group was held with students; however to date limited interest has been expressed by staff and employers and no focus groups have been held. However staff and employers had the option of adding qualitative information to their questionnaire responses.

Distribution of questionnaires

Large modules common to several degree pathways taken by first, second and final year students (levels 4, 5 & 6 respectively) were identified and targeted in order to reach as many students as possible. Permission to distribute the questionnaires in class was sought from module leaders; a short verbal introduction to the project was given and information sheets distributed by the research team. Students who wished to participate did so, completing the activity in-class.

Foundation degree students (level 3) were reached at their end of year poster presentation event at the university. A short talk outlining the project was followed by distribution of the information sheets and questionnaires. All questionnaires were completed at the time and returned within the poster session.

Staff questionnaires including demographic information and the information sheet were emailed to all staff within the Science, Engineering and Computing (SEC) Faculty of the university. The faculty comprises approximately 50 academic members of staff. In addition paper copies of both were printed out and distributed to staff pigeonholes.

Questionnaires for employers were distributed at a number of external career guidance fairs.

Data analysis

All data was anonymised and entered into Excel spreadsheets, separately for staff, students and employers. For each group (staff, students & employers), responses were collated into specific themes. A total of 5 themes were common to all three groups (specifically teaching & learning, support, facilities, relationships and feedback). Staff and employers shared an additional 2 themes (co-curricular & institutional). Staff alone had questions related to timetables; employers alone had questions related to education

& personal qualities and students alone had a question related to peers. Students were also asked to respond to the statement: 'I think I am getting a high quality education at university' (possible responses were agree, disagree or unsure). Tables 1 and 2 show the themes and numbers of questions within each theme for staff, students and employers.

Table 1: Themes and numbers of questions within each theme for each group, categories shared by all groups

Themes	T & L[1]	Support	Facilities	Relationships	Feedback
Groups	Number of questions in each group for each theme				
Staff	7	5	5	3	3
Employers	4	4	2	1	1
Students	5	3	2	2	1

[1]T & L = Teaching & Learning

Table 2: Themes and numbers of questions within each theme by group

Themes	Co-curricular	Institutional	Timetable	Education	Personal qualities	Peers
Groups	Number of questions in each group for each theme					
Staff	1	1	5	0	0	0
Employers	2	3	0	2	2	0
Students	0	0	0	0	0	1

In order to analyse the data, 'yes' responses were scored 1 and 'no' answers scored 0. For students alone, 'unsure' was coded -1. Within each theme the scores for each individual were calculated and divided by the number of questions related to the theme for that group. For example the theme teaching and learning comprised 7

questions for staff, 4 for employers and 5 for students. The overall teaching and learning

score for staff was divided by 7, that for employers by 4 and that for students by 5 to

make scores comparable between groups.

As the data was non parametric, Kruskal-Wallis tests were carried out to explore

differences in themes between staff, students and employers. Posthoc analysis was

carried out using Dunn's p-values corrected using the Benjamini-Hochberg FDR

method to identify specific differences between groups. For those themes relevant to

only two of the groups, the Mann Whitney U test was used to identify differences in

responses.

Results

Participants

A total of 340 students, 32 staff and 17 employers completed their respective

questionnaires. Demographic descriptions of the student participants are shown in Table

3, and staff and employer participants in Table 4.

Table 3: Demographic description of student participants

Level	Total Numbers (% of total sample)	Males Numbers (%)	Females Numbers (%)	Age (y) Mean ± SD	Ethnicity[1]
3	104 (30.5%)	39 (37.5%)	65 (62.5%)	21.9±4.6 (all) 21.6±3.6 (F) 21.9±4.6 (M)	27 W (26%); 31 A (30%); 28 B (27%); 14 mixed (13%); 4 other (4%)
4	128 (38%)	43 (34%)	85 (66%)	22.1±5.0 (all) 22.1±5.0 (F) 21.9±3.9 (M)	31 W (24%); 45 A (35%); 32 B (25%); 12 mixed (9%); 8 other (6%)
5	38 (11%)	11 (29%)	27 (71%)	22.2±4.1 (all) 22.2±4.1 (F) 22.6±3.8 (M)	16 W (42%); 11 A (29%); 6 B (16%); 2 mixed (5%); 3 other (8%)
6	70 (20.5%)	19 (27%)	51 (73%)	23±4.5 (all) 23.3±4.2 (F) 24.6±3.8 (M)	28 W (40%); 25 A (36%); 11 B (16%); 5 mixed (7%); 1 other (1%)
Overall	340 (100%)	112 (33%)	228 (66%)		105 W; 112 A; 77 B; 33 mixed; 20 ns /other

[1]Ethnicity: W= White; A= Asian; B= Black; ns = not stated

All year groups were represented with the largest number of participants from Level 4 (n=128 participants, 38% of the total student sample) and the smallest number from Level 5 (n=38, 11% of the total student sample). In each year group approximately two thirds of respondents were female and one third male, with no age difference seen by gender. Considerable ethnic diversity was apparent in the sample, in line with the rich ethnic diversity of the student body. Within each level a wide age range was seen so that differences in average age between each level were small. This was due to a small number of mature students within each level.

A total of 32 university staff and 17 employers took part. Employers tended to be younger than university staff, and had spent less time in their current post perhaps as a consequence of their relative youth. Ethnic diversity of the employers was limited, with the majority describing themselves as white. In contrast approximately one in five university staff described themselves as other than white. More female university staff than males took part, although participant numbers by gender within the employers group were almost equal.

Table 4: Demographic description of staff and employer participants

	Males Numbers, (%)	Females Numbers. (%)	Age (%)	Ethnicity[1] (%)	Time in current job (%)
Staff	13 (41)	19 (59)	18-25y: 0 26-35y: 22 36-49y: 63 50-65y: 16	W: 78 A: 6 Other: 13 Ns: 3	<1y: 3 1-5y: 32 6-10y: 42
Total	32				
Employers	8 (47)	9 (53)	18-25y: 35 26-35y: 29 36-49y: 18 50-65y: 18	W: 94 Mixed: 6	<1y: 18 1-4y: 53 5-6y: 18 >7y: 12
Total	17				

[1]Ethnicity: W= White; A= Asian; B= Black; ns = not stated

Differences between staff, students & employers:

Teaching & Learning (T & L), Support and Facilities:

Kruskal Wallis tests indicated that there were significant differences between the three

groups for all three themes (Table 5). The scores for staff & students for T & L were

significantly higher than those for employers (respectively $p=0.0003$ & $p=0.0009$,

Dunn's p-value corrected by Benjamini-Hochberg FDR method). 76.5% of employers

disagreed that the method of learning is a good marker of quality, whereas 91% of staff

agreed that how material is delivered mattered and 74% of students agreed that use of a variety of teaching methods helped them to learn. 87.5% of students felt that the methods used to deliver their modules influenced their performance on those modules.

Both staff and employers rated support more highly than students (p=0.000 and p=0.002 for staff vs. students and employers vs. students respectively). Both staff and students rated facilities significantly higher than employers (p=0.000 and p=7.99e-8 respectively).

Table 5: Means (±SD) and medians (±IQR) for teaching & learning (T & L), support and facilities for staff, students and employers

	T & L		Support		Facilities	
Kruskal Wallis test results:	H (df 2) 15.3, p=0.0005		H (df 2) 32.6, p=8.2e-08		H (df 2) 18.8, p=0.00008	
	Means ± SD	Median ± IQR	Means ± SD	Median ± IQR	Means ± SD	Median ± IQR
Staff	0.81±0.18	0.86±0.29[a]	0.65±0.32	0.7±0.6[c]	0.74±0.32	0.9±0.5[c]
Employers	0.41±0.26	0.4±0.4[a,b]	0.56±0.23	0.5±0.25[b]	0.27±0.31	0.0±0.5[b]
Students	0.69±0.32	0.8±0.4[b]	0.11±0.61	0.33±1.0[b,c]	0.68±0.52	1.0±0.0[b,c]

[a]Statistically significant difference between staff & employers, p=0.0003 (T & L), p=0.000 (facilities), Dunn's p value adjusted by Benjamini-Hochberg

[b]Statistically significant difference between students & employers, p=0.0009 (T & L), p=0.002 (support), p=7.99e-8 (facilities), Dunn's p value adjusted by Benjamini-Hochberg

[c]Statistically significant difference between staff & students; p=0.00002 (support), Dunn's p value adjusted by Benjamini-Hochberg

Relationships and Feedback:

Kruskal-Wallis tests showed significant differences between the three groups for both themes as follows (Table 6). Relationships were rated significantly higher for employers than staff or students (p=0.02 for both). Students rated feedback significantly higher than staff (p=0.008). 53% of employers disagreed that the quality of feedback was a good marker of quality in higher education compared with 15% of staff. 72% of students agreed that the quality of feedback they received helped them to do better.

Table 6: Means (±SD) and medians (±IQR) for relationships and feedback for staff, students and employers

	Relationships		Feedback	
Kruskal Wallis test results	H (df 2) 7.13, p=0.03		H (df 2) 10.58, p=0.005	
	Means ± SD	Median ± IQR	Means ± SD	Median ± IQR
Staff	0.81 ± 0.27^a	1.0 ± 0.33^a	0.52 ± 0.35^c	0.33 ± 0.67^c
Employers	$1.0\pm0.0^{a,b}$	$1.0\pm0.0^{a,b}$	0.47 ± 0.51	0.0 ± 1.0
Students	0.78 ± 0.40^b	1.0 ± 0.5^b	0.55 ± 0.78^c	1.0 ± 1.0^c

[a]Statistically significant difference between staff & employers, p=0.02 (relationships), Dunn's p value adjusted by Benjamini-Hochberg

[b]Statistically significant difference between students & employers, p=0.02 (relationships), Dunn's p value adjusted by Benjamini-Hochberg

[c]Statistically significant difference between staff & students; p=0.008 (feedback), Dunn's p value adjusted by Benjamini-Hochberg

Co-curricular and Institutional:

Mann Whitney U tests indicated no significant differences for co-curricular activities between staff and employers, whereas scores for the institutional category were significantly higher (p=0.0004) for employers than staff.

Table 7: Means (±SD) and medians (±IQR) for co-curricular and institutional for staff and employers

	Co-curricular		Institutional	
Mann Whitney U test results	Z score 1.44, p=1.43		Z score -3.56, p=0.0004	
	Means ± SD	Median ± IQR	Means ± SD	Median ± IQR
Staff	0.69±0.5	1.0±1.0	0.19±0.4	0±0[a]
Employers	0.59±0.2	0.5±0.0	0.41±0.14	0.33±0.0[a]

[a]Statistically significant difference between staff & employers, p=0.0004 (institutional), Mann Whitney U 2-tailed test

Individual categories

Personal qualities were rated highly by employers (0.82 ± 0.30, mean ± SD) while education was rated less highly (0.53 ± 0.3, mean ± SD). 94 % of employers agreed with the statement that motivated graduates were a good marker of quality in higher education; in contrast only 23.5% of employers agreed that degree classification was a good marker.

The average score for timetables given by staff was relatively low (0.38 ± 0.23, mean ± SD).

Students rated the effect of interactions with peers on the quality of their learning relatively highly (0.76 ± 0.62, mean ± SD). However in response to the

statement *'I feel that I am getting a high quality education'*, the mean ± SD was 0.56 ±
0.79. This relatively low score was driven by a high number of 'unsure' responses
(unsure responses scored -1). Of the total respondents, 19% were unsure, 6% disagreed
and 75% agreed that they were getting a high quality education.

Focus groups - students

Three focus groups were held with undergraduate students, one each with five Level 4,
5 and 6 students. Major themes which emerged included the importance of staff who
were enthusiastic and approachable. A perception of caring staff that 'want you to
succeed' emerged as a major positive factor, whereas the converse, staff who were not
approachable had a major negative effect. Polarised views of some staff were expressed.
The positive impact of support services such as library and IT as well as career guidance
services was acknowledged. In terms of negative factors, delays in replacing staff who
left were perceived to have a negative effect on the quality of education received, as
were staff seen as unenthusiastic or uncaring. In some cases staff leaving impacted upon
particular schemes, singled out by students as having been badly affected. Concern over
the impact of large group sizes on quality, common particularly in common first and
second year modules, was expressed.

Qualitative results – staff

Staff were asked to identify in their own opinion what the biggest barriers to delivering
a high quality education are (Table 8). The results showed clear commonalities among
participants which fell into three broad categories: institutional barriers, barriers related
to resources and barriers related to students. Institutional issues such as lack of time,
excessive administration, workload, lack of adequate laboratory facilities and poor
timetabling were most frequently mentioned. Also frequently mentioned were
micromanagement, the role of senior management, staff shortages, constant changes and

unequal workloads. Resource issues included lack of time as well as specific resources such as lab facilities, while student-related issues included lack of attendance and lack of responsibility.

Table 8: Barriers to delivering a high quality education from a staff perspective

Category	Barrier identified	Number of times mentioned (% of total responses)
Institutional	Excessive administration, bureaucracy & micromanagement	13 (18)
	Workload (quantity & unequal distribution)	9 (12.5)
	Lack of support	6 (8)
	Conflicting priorities	3 (4)
	Timetabling	3 (4)
	Constant change	2 (3)
	Poor staff morale	2 (3)
Resources	Large groups	6 (8)
	Lack of facilities (physical & budgets)	8 (11)
	Lack of time	7 (10)
	Lack of staff, staff turnover & high staff: student ratio	7 (10)
Student	Lack of attendance & lack of student responsibility	3 (4)
	Unrealistic student expectations	2 (3)
	Low quality students	1 (1.5)
	Total	72 (100)

Qualitative results: employers

Employers were asked to identify the single most important attribute of a high quality graduate. Notably, all respondents chose personal qualities such as enthusiasm, dedication, ambition, attitude, confidence & curiosity.

Table 9: Most important graduate attributes identified by employers

Quality	*Numbers (%)*
Personal qualities: enthusiastic, determined, outgoing, tenacious, listens, work ethic, questions & challenges, confident	28 (49)
Ambition: drive & passion, self-belief	12 (21)
Realism: prepared to start at the bottom & do small jobs, sees bigger picture, learns on the job	7 (12)
Skills: literacy & numeracy, articulate, educated	4 (7)
Interpersonal skills	4 (7)
Knowledge & experience	2 (3.5)
Total	57 (99.5*)

*Percentages rounded to nearest whole numbers

Discussion

Both teaching and learning and academic facilities were rated more highly by academic staff and students than employers. Similarly Green (1994) suggested a stakeholder-relevant aspect of quality; for students and teachers this related to the process of education, whereas for employers it related to the outputs. Whereas students and staff emphasise the quality of the student experience, employers emphasise employability (Harvey and Knight, 1996). Employability can be defined as the capacity to get and

keep fulfilling work (Hillage and Pollard, 1998). Similarly to our findings, the subject of study may not be of relevance to most employers (Purcell and Pitcher, 1996). Instead the achievement of a degree in higher education may be considered a tool which equips graduates for future learning, as part of a lifelong learning model (Yorke, 1999). It is unsurprising that employers were less concerned in this study with the nuts and bolts of everyday teaching and learning than either staff or students. For employers the end product is of more relevance; it is a given that those called for interview will have achieved a basic minimum standard as evidenced by their degree. At that point the personal attributes of the individual; how they are likely to perform in the world of work and how they will work and communicate with a diverse range of other team members, becomes critical. Our findings illustrate this; for employers the most important attributes of high quality graduates were personal skills. This has also been shown by others (O'Leary, 2016; HECSU and AGCAS, 2015). Some individuals will be inherently skilled in these areas, but our findings highlight the important role of universities in helping all students to develop and demonstrate personal skills, perhaps through co-curricular activities or group assignments where opportunities to work together effectively are given. However it is not clear that students themselves recognise how important these skills are, and work is needed to ensure that they understand what skills they are developing through different assignments, activities and tasks, and why it is important that they can demonstrate them (Green, Hammer and Star, 2009).

Surprisingly, academic staff and employers both rated support significantly higher than students did. The statements related to support in the student questionnaire were confined to support networks (e.g. career guidance and support), whereas those in the staff questionnaire related to academic, career & lifestyle support as well as provision of extra activities to support learning (e.g. talks, visits). Within the employer

questionnaire the two support statements related to access to information (e.g. library, intranet) and provision of career guidance. It may be that not all students understand the importance of career guidance provision until they actually need it; if it lacked personal relevance at the time they filled in the questionnaire, they may not have understood why it matters. The provision of career support to students is important; part of graduate employability depends on graduates having assets (e.g. knowledge, skills and attitudes) and being able to present these to employers (Hillage and Pollard, 1998). Provision of careers advice is one part of enhancing student employability (Knight and Yorke, 2003). However university support encompasses far more than simply career guidance; it also includes the Personal Tutor Scheme, academic, library and study support. All of these help students to become self-directed learners, enhancing their employability (Nicol, 2010), a priority for higher education (Tomlinson, 2012).

The quality of the learning partnership between academic staff and students may depend on the individual relationships developed between staff and students. 95% of all students surveyed agreed with the statement that *'the lecturers I have impact upon my learning'*. Since students and teachers are jointly responsible for the achievement of learning outcomes (Biggs, 2001), this is unsurprising. American data shows that degree completion and persistence are enhanced when students perceive that faculty members care about them and about their teaching (Pascarella and Terenzini, 2005). Others have shown that the competence of academic staff was considered to be the most important dimension of quality by undergraduate students (Munasinghe and Rathnasiri, 2011). Investment in learning is not solely the province of the learner. Learning and teaching are both deeply personal as well as professional activities, and it is unsurprising that relationships formed in the classroom impact upon learning. The quality of the teaching experience is important to students while the quality of the programme matters to staff

(Harvey and Green, 1993). Nonetheless both are interlinked; how the teaching material is organised and delivered to students can encourage their active engagement (NSSE, 2001), and high levels of learning and engagement are reported by students when collaborative learning methods, academically challenging material and enriching educational activities are used (Umbach and Wawrzynski, 2005). Teaching and learning, maintenance of contact hours with academic staff and investment in learning facilities are more highly rated than smaller class sizes by students, when given a choice (Neves and Hillman, 2016).

Statistically significant differences for feedback between staff and students were seen; surprisingly student mean scores were higher than those for staff (Table 4). However what is perceived as feedback may vary, and the three questions on feedback for staff related to the amount, quality and format of feedback given to students. Staff who disagreed that the amount and/or format of feedback given was an important marker of quality would have a low mean score for this category, which does not imply that they disagree with the importance of good quality feedback. However although students rated the teaching and learning methods used and the feedback given highly, a high degree of uncertainty in response to the question *'I feel that I am getting a high quality education'* was shown. It is important that higher education institutions including academic staff clearly articulate the value of the academic offer to their students, to reduce this uncertainty.

Statistically significant differences between staff, students and employers for the relationships category were shown; however the questions in this category varied for each group. For employers 'relationships' comprised a single question relating to good links to industry. The fact that 100% of employers agreed that this was important

demonstrates the essentiality of universities engaging with the wider community and encouraging staff and students to develop relationships external to the university.

The barriers to provision of higher education as described by academics are important. If as has been suggested frontline academics are the makers and shapers of quality policy, the transformational concepts of quality can be undermined by factors external to the learning environment (Newton, 2006). The context of higher education is continually changing, constraining institutions. It should be expected and acknowledged that these changes have the potential to impact negatively on student perceptions of quality, regardless of the extent to which academic staff try to mitigate them. Clearly the constant pace of change was viewed by staff as an important barrier to the provision of high quality education. Continuous change with little time to evaluate and assess its' impact, or even to think about how best to implement it, is challenging for staff and therefore also for students. It would be surprising if this were not reflected in surveys such as the National Student Survey. Our data demonstrates the frustration of staff who are in the frontline of trying to implement changes, whilst simultaneously mollify students who may not understand why it is necessary and need support to deal with it (as indeed do staff). Within focus groups students demonstrated that they are aware of aspects such as staff changes and the potential negative impact this may have. They were also unimpressed by large group sizes.

Conclusions

Clear differences in perceptions of what is quality in higher education between staff, students and employers were shown. Employers value highly the personal qualities of graduates and unanimously rate external links with industry as important markers of quality. In contrast they are less concerned with the class of degree obtained or the methods used to obtain it. For staff and students their relationships are highly rated,

unsurprising given the importance of the learning partnership between staff and students. Students are aware of constant change and qualitative data suggests that some aspects of change (e.g. high staff turnover) are perceived as negatively impacting upon quality. For staff, the difficulties of providing high quality teaching and learning in a constantly changing environment, with a multitude of conflicting priorities was clearly articulated. It is essential that higher education institutions clearly articulate the links between skills and attributes considered important by employers and the tasks and activities used to develop them, to their students.

Acknowledgments

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Appendix 1: Student Questionnaire

Statements

Do you agree or disagree with the following statements in regards to the quality of your experience in higher education? Please circle ONE response for each statement; either A (Agree), D (Disagree) or U (Unsure)

1. The lecturers I have impact upon my learning   A   D   U

2. I feel I do better in modules that my favourite lecturers teach on   A   D   U

3. The accessibility of university facilities (eg. Library) makes my learning easier   A   D   U

4. I am aware of what support networks are available at university   A   D   U

5. It has improved my experience having support networks (eg. Career guidance) available to me   A   D   U

6. The methods used to deliver my modules influence how well I do in them   A   D   U

7. The interactions I have with my peers have improved my university experience   A   D   U

8. The university classroom and laboratory facilities are good markers of quality   A   D   U

9. I think I am getting a high quality education at university   A   D   U

10. The feedback I get in class and assignments helps me to do better   A   D   U

11. I am satisfied with the amount of contact I have with academic staff   A   D   U

12. I feel I have been made aware of my future career prospects   A   D   U

13. A variety of teaching methods are used to help me learn   A   D   U

14. I am challenged by what I am learning   A   D   U

15. My curriculum is relevant to me   A   D   U

Would you be interested in attending a focus group to discuss this in more detail? Yes   No

If yes, please write down your email address for the purposes of organizing the focus group only.

My email address:………………………………………………………………………………

Appendix 2: Staff Questionnaire

Quality in Higher Education project

Please complete both parts of the following questionnaire, which seeks to identify staff, student and employers perceptions of quality in higher education.

Part I: Your opinions

1. **What does 'good quality' in higher education mean to you? (please tick ALL that apply)**

☐ The time I have with students

☐ Good classroom facilities

☐ My timetable

☐ My students timetable

☐ Access to support for students (e.g. study and careers advice)

☐ Access to practical help for students (e.g. medical, housing, counselling)

☐ Good laboratory facilities

☐ More lab practicals

☐ More office hours

☐ Less office hours

☐ My relationship with my students

☐ Access to information for students (e.g. Studyspace, library)

☐ I.T. facilities

☐ The university buildings

☐ Approachability of staff

☐ The cost of university fees

☐ Extra activities offered to students (e.g. talks, visits, extracurricular activities)

☐ How material is delivered to students (e.g. lectures, tutorials)

☐ A curriculum that students can relate to

☐ Up-to-date material

☐ Knowledgeable staff

☐ Enthusiastic staff

☐ Multiple teaching methods

☐ The amount of feedback I give to students

☐ The quality of feedback I give to students

☐ The format of feedback I give to students

☐ The Personal Tutor Scheme

Other/s (please
specify……………………………………………………………………………………
………………………………………………………………………………………………

2. **What are the biggest barriers to delivering a high quality education for students, in your opinion?**

    ....
    ....

Part II: About You

Demographic Questionnaire

1. **Gender**

Male	Female	Prefer not to say
1	2	3

2. **Age**

18-25	26-35	36-49	50-65	66+	Prefer not to say
1	2	3	4	5	6

3. **Ethnicity**

White		
British	Irish	Any other white background
1	2	3

Mixed			
White and Black Caribbean	White and Black African	White and Asian	Any other mixed background
4	5	6	7

Asian or Asian British			
Indian	Pakistani	Bangladeshi	Any other Asian background
8	9	10	11

Black or Black British		
Caribbean	African	Any other Black background
12	13	14

Other Ethnic Groups	
Chinese	Any other ethnic groups
15	16

Not stated
17

4. How long have you been in your current job? (years)…………………………………..

5. Please indicate your current position.

☐ Academic   ☐ Admin

☐ Library   ☐ Technical

☐ I.T/ Student Support

Other, please specify: …………………………………………………………………………..

6. Would you like to take part in a focus group to discuss this in more detail?

Yes   No

If 'Yes', please give your email address to arrange a mutually agreeable time:……….

Appendix 3: Employer Questionnaire

Quality in Higher Education project

Please complete <u>both</u> parts of the following questionnaire, which seeks to identify staff, student and employers perceptions of quality in higher education.

Part I: Your opinions

1.What does 'good quality' in higher education mean to you? (please tick/highlight <u>ALL</u> that apply, or delete those that do not)

☐	Graduates who are motivated
☐	Graduates with a first class honours or upper second degree
☐	A university with nice buildings & infrastructure
☐	Staff who are knowledgeable and up-to-date
☐	The cost of the fees charged
☐	The curriculum on offer to students
☐	Graduates who are literate and numerate
☐	Graduates who are questioning
☐	Good university facilities (e.g. library, I.T., laboratories)
☐	Access to information for students (e.g. university intranet, library)
☐	The methods of teaching used
☐	Quality of feedback given to students by staff
☐	Good links to industry
☐	Support facilities (e.g. career guidance)
☐	Extra activities offered to students (e.g. talks, visits, extracurricular activities)
☐	Enthusiastic staff
☐	Externally accredited programme

Other/s (please
specify…………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

2. What, in your opinion, are the most important attributes a high quality graduate possesses?...

....

....

Part II: About You

Demographic Questionnaire

3. Gender

Male	Female	Prefer not to say
1	2	3

4. Age

18-25	26-35	36-49	50-65	66+	Prefer not to say
1	2	3	4	5	6

5. Ethnicity

White		
British	Irish	Any other white background
1	2	3

Mixed			
White and Black Caribbean	White and Black African	White and Asian	Any other mixed background
4	5	6	7

Asian or Asian British			
Indian	Pakistani	Bangladeshi	Any other Asian background
8	9	10	11

Black or Black British		
Caribbean	African	Any other Black background
12	13	14

Other Ethnic Groups	
Chinese	Any other ethnic groups
15	16

Not stated
17

6. **How long have you been in your current job? (years)……………………………..**

7. **What is your current position?**

8. **Would you like to take part in a focus group to discuss this in more detail?**

YesNo

If 'Yes', please give your email address to arrange a mutually agreeable time:…………………………………………………………………………………………… …………………………………………………………………………………………… …………………….