

Reward and Recognition for University Teaching in STEM subjects

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1. Background

The issue of reward and recognition in higher education has recently become a major topic. A number of papers and reports have addressed the issue (summarised in, for example, Cashmore and Ramsden, 2009). The main driver for the flurry of activity appears to be the tension between research and teaching generated by the contradictory forces of research assessment (RAE and REF) and the need for universities to maintain income by increasing student numbers. The tension arises where the same staff are expected to research more and teach more. For most academics, large teaching and assessment loads are detrimental to research achievement and international research status is largely incompatible with attention to pedagogy. (This does not mean that active researchers cannot be expected to give good lectures: Hattie & Marsh (1996) found no correlation between research and teaching excellence; but they are less likely to have time to develop more effective alternatives to traditional methods or to devote to crucial feedback on student work.) On the other hand, the transparency of the tuition costs of an undergraduate education, when imposed on the recipients, increases the demand for “good” teaching, where good teaching is often conflated with contact time in survey responses.

Given that in many cases the same staff carry out both roles of teaching and research it is important to consider the balance between the two in promotions. This has led to a number of investigations into reward and recognition (e.g. Cashmore et al 2013) that consider university policies on the balance, in particular in cases where some staff choose to focus more on one or the other. According to this research, University policies are framed in terms of achievement in research and achievement in teaching. While it is clear that there are a number of robust measures of research achievement, whatever their validity (research assessment, publications, grant income etc.), the problem arises in defining equivalent measures for achievement in teaching. This is exacerbated by the perception that income from teaching is largely determined by (historic) reputation in research. This raises questions about some of the conclusions of these reports: we may all agree that achievement should be rewarded; the crux is to measure it (Gunn and Fisk 2013).

In contrast, this paper focusses on the status of teaching fellows and teaching-only academic staff in their current roles, as defined by their job specifications. In addition, this research is directed towards academic staff who have been appointed to teaching only roles or whose teaching-only status is acknowledged in their contracts. Again, this differs somewhat from research directed to recognition of staff who have chosen to focus to a greater or lesser degree on teaching rather than discipline research. For simplicity we refer to the staff who come under this umbrella as “teaching fellows” (TF) whether they are permanent or temporary or have other designations (such as “teaching-only” or “teaching-dominant”) in their institutions. The outcomes show that the opportunities for progression do play a role in the morale of staff, but they are not the focus of the paper; we touch on progression issues only in the final subsection.

Why is this important? For many years we have enjoyed a reasonably coherent framework of academic employment in higher education. Lecturers had three main roles: research, teaching and administration and while the balance for the purpose of promotion may have differed between institutions it was fairly consistent within institutions. This consensus has broken down because the expectations on lecturers have changed. Lecturers are now expected to execute a wide variety of functions: managing teams of researchers, developing teaching, obtaining funding from multiple sources, liaising with industry, contributing to community engagement, serving on committees, attending conferences and so on. Even the narrow administrative role has expanded with the plethora of examination boards and quality management procedures. It is not possible for people to execute these effectively without some impact on the most demanding of them, research.

This has led to a variety of responses. Some institutions have appointed teaching fellows as “low level” academics; some have removed the teaching fellow grade in favour of teaching dominant lectureships; some have done both without apparently a clear distinction. In some institutions teaching fellows can be promoted to the equivalent of senior lectureships and even professorial status. In others “teaching fellow” denotes a temporary position or one with no progression route. Whatever the structure, the purpose has been to redefine the teaching role as a specialist position and to attempt to shift some of the burden of teaching away from high profile researchers. Over one quarter of academic staff (27%) are now on teaching only contracts³ up from 10 per cent in 2002.⁴ Staff in these positions therefore play a central role in the face-to-face experience of students. These staff will often be the drivers of innovation in teaching, but there is a lack of clarity on the recognition that this might deliver for them.

It seems worthwhile to investigate the perception teaching fellows (in our wider meaning) have of their role as a baseline from which to construct a coherent teaching strategy for Higher Education (HE). We therefore undertook the survey described below. We restricted the survey to STEM (Science, Technology, Engineering and Mathematics) teaching staff. There is some argument about whether there are discipline distinctions in pedagogy, which we do not enter into (see e.g. Healey, 2005). We restrict ourselves to STEM subjects because that is the area we know.

2. Survey details

The survey was designed to elicit information on the variety of terms of employment and status of TFs. It was carried out by the Centre for Interdisciplinary Science at the University of Leicester in collaboration with the Physical Sciences discipline at the Higher Education Academy (HEA). The survey was developed with input from teaching fellows who attended the launch of the HEA Physical Sciences Teaching Fellows Forum at the Institute of Physics in January 2013. It was validated on 11 TFs

³ HESA (2013)

⁴ AUT (2004) The unequal academy –UK academic staff 1995–96 to 2002–03

(including “teaching only” lecturers) identified through Human Resources (HR) at the University of Leicester. The survey was then sent to all STEM staff identified as teaching academics (626 in total) on their University web sites with requests to inform colleagues. It was carried out in November and December 2013. It is interesting in itself that an Institute of Physics (IOP) report (McWhinnie, 2013) identifies 355 teaching-only staff in Physics and 425 in chemistry, through direct requests to human resource departments, whereas the websites of the academic departments identify far fewer.

Table 1

We received 158 responses. Table 1 shows the number of responses according to discipline (survey question Q1; see the appendix for the full set of survey questions). In the first part of this paper (section 3) we give the quantitative data from the survey. The survey also allowed for free form comments which are summarised in the part 2 (section 4). The results were presented at a conference session at HEA STEM in Edinburgh 2014 and in the third part (section 5) we report briefly on the responses from that meeting. Section 6 gives our conclusions.

Overall our report seems to raise some potentially worrying issues relating to the self-esteem of what for many students are key members of the front-line teaching staff in UK universities. Importantly these do not seem to be related, or not related principally, to financial reward. Rather they are related to perceived disparities in the conditions of service and recognition. With a view to substantiating our results on a wider scale, we recommend that a detailed study of the range of practice be undertaken under the auspices of a national body. This should lead to recommendations for greater harmonisation of the status of TFs and the definition of their roles. As an initial action to raise recognition of the role we would like to see the development of a TF community through, for example, special sections at conferences and through development of the STEM TF forum.

3. The survey questionnaire

We asked respondents about their employment status (Q3). Table 2 shows the mode of employment (upper row). There are 68% employed on full time permanent contracts, the remainder split between part-time permanent staff and staff on fixed term contracts, either full or part- time. However, these data may be not representative of the sector because of the methods used to identify TFs. For example, many fixed-term or part-time staff are not listed on departmental websites. The HESA data for 2013-14 is given in the lower row of table 2. For academic staff as a whole, 64% are on permanent (or open-ended) contracts and 66% are employed full-time. It would seem that teaching – only STEM staff enjoy somewhat greater job security, which runs counter to anecdotal “evidence”. The comparison may be influenced by the fact that “all academic staff” includes research-only staff on fixed term contracts related to fixed-term projects,

whereas, short of closing down a programme, teaching staff might expect to be permanently employed (even if they are not).

TABLE 2

Figure 1 shows the annual pay (or pay scaled to annual equivalent, Q2). At the top end we can see a small cohort of staff who have moved into senior teaching roles, for examples as departmental directors of teaching, in the later parts of their careers. Six respondents identified themselves in these roles and two identified themselves as senior staff who had been unwillingly regraded as “teaching-only”. We did not ask about age, but, as we shall see, the majority of TFs are on average more recent appointments than other academic staff entrants and probably younger on average. While we should be aware that the TF denomination here includes a small number of senior staff, the younger cohort probably dominate the responses.

The median (full time equivalent) salary was in the £K35 to £K40 range. To put this in context, the average full time academic member of staff was paid £45, 075 p.a in 2012.⁵ We cannot conclude that TFs are paid less than other academics at equivalent stages in their careers. Since academic pay scales below professorial level are largely related to age, in order to look at relative pay we would need to control for the possibility that TFs might on average be younger than other academic staff. However, we did not collect data on the age distribution of TFs.

Nevertheless, in figure 2 we can compare the salary distribution of TFs with that of all academic staff (from HESA data). Each bar represents the fraction of total in one of the three cohorts in that salary band. The total area under the histogram for each cohort is 1. The distributions are not statistically the same (reduced $\chi^2 \gg 1$) because there are significantly more TFs in the highest pay grade and less in the lowest one, but using the closest match gives the mean salary for TFs (£39 500) to be equivalent to age 36 on the academic scale. This is lower than the average for all academics (see below). Thus, either TFs are an older cohort on low pay or a younger cohort. Further evidence, which we investigate below, points to the latter. A younger cohort could indicate that the increasing numbers of teaching-only staff are being preferentially recruited from a younger cohort on average. This merits further investigation since again it runs counter to the anecdotal evidence that older, less research-active staff are being transferred to teaching- only contracts.

FIGURE 1

⁵ http://fairpay.web.ucu.org.uk/files/2013/11/ucu_hepay_briefing1_salaries.pdf

To investigate further we have plotted the years of service for TFs (Q7) in figure 3.

FIGURE 2

There does not appear to be any public data on length of service for lecturing staff, so a detailed comparison with TFs is problematic. However, we can get some idea of the relationship from the following argument. The average age of a member of academic staff (including teaching-only) is 46.4 (male) and 44.7 (female) (McWhinnie, 2013). The corresponding figures for researchers are 35.8 and 35.9 years. Thus, an average academic is likely to have been in post (not necessarily in a single institution) for around 10 years. This is probably a lower estimate, since it includes teaching-only staff who are on average more recent hires. In fact, the average number of years in post in our survey of TFs is 6.6 years (figure 3). Thus, TFs are unlikely to form an older cohort as a group, although a few of our respondents had transferred from lecturing posts to teaching dominant posts fairly late in their careers. They are therefore unlikely to be a group receiving lower rates of pay for their age or qualifications. So we have to look elsewhere for an explanation of the gap between the average pay of TFs and the average academic. As we surmised, the most likely explanation would appear to be that we are dealing with a younger cohort on average. This is borne out to some extent by the free-form comments which almost never refer to pay as an issue.

In figure 5 we look at the average pay across disciplines. Some of the discipline groups are quite small (recall from table 1 that we have only 4 physicists) but the discrepancies are nevertheless quite large. There is no correlation between the average number of years in post in each discipline and the average pay. It is more likely that figure 5 reflects the average chronological ages in the cohorts. This suggests that there is a significant number of newly appointed staff in some disciplines in relatively senior positions.

FIGURE 3

FIGURE 4

Figure 3 shows the years of experience as a TF (disregarding any earlier experience as a lecturer, Q7). The distribution appears to reflect the increasing role of TFs in recent years. This can also be seen from the mean of 6.6 years as a TF; only 28% have been in this role for 10 years or more.

FIGURE 5

Figure 5 shows the percentage with a teaching qualification (e.g. PGCHE, PGCert) or studying for one, in each discipline excluding those that do not report a specific qualification in 2012 (Q4, Q5, Q6). The surprising feature of this histogram is

the small proportion of qualified teaching fellows. Most universities now require all recently appointed academic lecturing staff to undertake a PGCHE qualification or equivalent. Edmunds (2009) in his report on Physics states that training is obligatory for 56% of staff. In view of the fact that most TFs are relatively recent appointments, one might have expected the overwhelming majority of TFs to have or be seeking teaching qualification. One might also have expected that any employer interested in staff progression and teaching quality would require this. Evidently, for one reason or another, this is not the case.

On the other hand, 135 respondents report that their institution provides support for professional development (Q11). However, this ranges widely from just the basic provision of internal CPD to access to travel and conference funding. Only 41 respondents appear to have support to attend conferences and even this varied between the generous and the miserly. It is difficult to believe that this does not have an impact on career progression given that promotion to senior positions often requires some evidence of impact beyond the classroom, even if only to the extent of some endorsement from external referees.

Turning now to the workload of teaching fellows (Q10), the number of contact hours (figure 6) varies greatly as one might expect if part-time employees are included. However, as can be seen from figure 6, excluding part-time staff, the shape of the distribution is fairly similar. The average number of contact hours per year is 290, equivalent to about 12 hours per week during term time. There does not appear to be any publically available data on staff contact hours in general. However, teaching represents about 30-40% of academic staff workload so we would expect the average contact time for a full time academic to be around 2/5 of that for a full time teacher. So, parity between cohorts would suggest that an average academic should have a contact time of about 120 hours a year or about 5 hours a week during term. This is probably not greatly in excess of actual loads, so the average number of contact hours in our survey would seem to be fair. However, the range might be considered alarming in showing the disparity between supposedly similar roles. Although we did not ask about time spent on administration, some respondents used the opportunity to complain bitterly about their load. It would be informative to know if TFs are being asked to carry out disproportionate numbers of low-level administrative tasks which would clearly impact negatively on opportunities to engage with activities to enhance their career progression.

Of course, for most TFs there is more to the role than contact time. Teaching fellows mostly undertake the full range of teaching duties (lectures, laboratories, tutorials, workshops) including pastoral care (Q 8) and some have special responsibilities (e.g. admissions tutors, careers advisors). Almost all have the same freedom as research academics to develop their own teaching material and approaches (Q9). In the majority of cases, TFs appear to be fully integrated into Departmental structures with 145 (out of 151 who answered this question) included in Departmental staff meetings and 92 sitting on student-staff committees. There was however very little reported representation at University level (Q13).

Some 45 per cent also undertake pedagogic research and 3 TFs were attempting to continue their own discipline research. It is difficult to reconcile this with the number with the limited opportunity to attend conferences that we noted above; presumably in many cases they work in isolation or pay their own conference expenses. From the free-form comments on the extent to which the actual workload exceeds that contracted, it would seem that there are significant demands made on TFs beyond the contact hours.

FIGURE 6

We come now to what appears to be the central issue: we asked “How valued do you feel?” Figure 7 shows the extent to which TFs feel valued by others. It is clear that almost all TFs feel they are valued by their students, which suggests that students do not see TFs as providing education on the cheap (the view expressed in some of the comments). On the other hand, the perception of over half the respondents that they are not valued by their institution should be a matter of concern, at least to the extent of meriting further investigation.

FIGURE 7(a)

FIGURE 7(b)

FIGURE 7(c)

We noted above that there were almost no explicit complaints about pay. Nevertheless we can look at the data to see if the degree to which staff feel valued by their institution is linked to pay. There is a linear trend for higher paid TFs to feel more valued both by students and by their institution ($R^2 = 0.85$, $R^2 = 0.88$ respectively) but the slopes are quite distinct, being some 4 times greater for the institution. This quantifies the trend that can be seen in figure 7(b) and 7(c) where higher paid staff feel generally more valued (or less not-valued). The trend is much more pronounced for the institution than for students. This is unlikely to be evidence of a trend towards greater satisfaction through a career. A more likely explanation is that the highly paid staff remaining in teaching dominant roles are indeed more highly valued by their institutions, the less highly regarded ones having left.

Finally we touch on the matter of promotion (Q12). Out of our survey 91 respondents (58%) believe that their institution has a career path for teaching fellows, while 30

respondents believe it does not and 37 do not know. Thus almost half of the respondents are unaware of their career structure or do not have one.

4. Summary of free-form responses

The free-form comments are the most revealing aspect of the responses. While they are not all negative, they do seem to show some disenchantment with a role that should be valued as the forefront of the delivery of high quality university education.

A number of respondents (6/47) were happy with their roles and felt valued, although some pointed out that this had taken time or, in one case, had been achieved only on the basis of an external award. Three respondents had been promoted to senior positions, although one complained that this was not recognisable by his or her title. Several pointed out that they liked their job roles: it was the context in which they carried them out that was for them their problem.

More commonly TFs felt there was an unfortunate distinction between research staff and teaching staff in some cases enshrined in the promotion procedure, if not formally then in the way it was implemented. In one case it would appear that TFs were not allowed permanent positions. Several responses (7/47) explicitly referred to the perceived higher status of research staff (“[I am] a cheap lecturer without the respect”).

The major complaint seems to be that TFs perceive themselves not to be valued by their institution (12/47). Some gave specific examples to back up their impressions. For example, in one institution TFs, in contrast to lecturers, have to share offices (difficult when dealing with tutees); in another the Department’s preferred candidate to provide cover for the HoD was not permitted on the grounds that he or she was not a “lecturer”. It should be said however that most complaints of feeling under-valued amongst the permanent TFs were impressionistic. Some mentioned the “dead-end donkey” nature of the job (and even that HR believed this to be the case) and a number pointed out that the actual workload is often much greater than the contracted workload.. The large workload was commented on particularly by four respondents. Low pay was mentioned only by three respondents on permanent contracts; it would seem that status, respect and a clear career progression are more important.

Some TFs (5/47) are on rolling contracts, in one case renewed only annually, which, they felt, diminished their status. Such conditions are clearly not conducive to an investment in the enhancement of teaching.

There is some negativity about the title of Teaching Fellow. “Since I effectively have tenure, the only reason I can see for the existence of my job title is as means of discriminating against staff that are not research-active: an institutional bias that is very harmful to morale. It is frankly scandalous that this situation continues in an era when students are paying £9k/year in fees and consequently expecting a very high standard of teaching.”

We suggest this might be an issue for discussion. Is there a need to distinguish in their job titles between lecturers who are employed to teach and those who are required to do research? For many years we seemed to manage without a distinction, except that promotion was not available to the former. Thus in some cases the TF title has evolved

to label staff who are “non-academic” as far as promotion is concerned, despite the fact that they do the same job as teaching-focussed lecturers. In other institutions there is a full promotion route (in principle and sometimes in practice) for TFs who are regarded as experts in their chosen field and not as failed researchers. Since in many institutions TFs and teaching-focussed lecturers play a large role in the face-to-face teaching and in the development of pedagogy, there would seem to be an obvious need to maintain morale for the good of HESTEM in the UK. Sorting out the job titles, job descriptions and career progression that respect the contributions from expert teachers might be a good place to start.

5. UK Teaching Fellow Workshops Summary

The HEA has funded the establishment of a Physics teaching fellows forum upon which we have endeavoured to build a STEM TF network. The forum grew out of a meeting of STEM teaching fellows hosted by IOP and funded by HEA as an adjunct activity to the questionnaire. The setup costs of the forum were met by HEA. A report on our questionnaire was presented to a STEM TF workshop at the HEA STEM meeting in Edinburgh 2014. At the workshop we asked two main questions. The various written and verbal responses have been collated under themes and supplemented with our comments/responses.

(i) What are your expectations of the UKSTEM Teaching Fellow’s network?

There was a suggestion that the network should organise more face-to-face meetings. This is problematic not only because of resources but also because of the already large number of meetings. The RSC hosts regular meetings of TFs with a pedagogic research agenda. The IOP Higher Education Group meetings provide good networking opportunities for TFs. Of course, such opportunities are not available to TFs who do not have access to funding for conferences.

A core area for use of the network (through the forum) is in research collaboration and advice; there are several threads that support this. We shall also be trying to support a TF Newsletter.

The survey was intended to provide a snapshot of the variety of practice across the sector; we would like to follow this up with more detailed case studies, which we believe would support the case for sharing of good practice.

(ii) We asked: what do you think a UK STEM Teaching Fellow’s Network can offer you?

Here are some responses to this question:

‘Mentor by other senior teaching academics. Help from them for refereeing and advice on promotions’

‘Reduces the feeling of isolation’

‘Reading your publications (pedagogical)’

The feeling seems to be that TFs are isolated in their institutions and not always clear about the expectations of their role and the prospects for career development. There appears to be a need for the wider community to address some of these issues.

We held a second workshop at the ViCE-PHEC 2014 conference in Durham. The main outcome of the discussion at this meeting was the suggestion that the professional bodies should collaborate to provide a platform for the development and promotion of a policy on TFs in higher education. The Royal Society of Chemistry runs a successful network for Teaching Fellows. We should explore opportunities to work with the RSC to expand the model to other STEM areas or to form an overarching network.

5. Conclusions and Recommendations

While many STEM TFs are happy with their role, our survey suggests some feeling of isolation and lack of status of TFs and a possibly unhealthy variety of practice in different institutions. Some quotations from the survey support this view:

‘That was quite cathartic. Thank you.’

‘My hope would be that this survey can help to change the adverse situation teaching fellows find themselves in.’

and

I think this is a great survey, as I have felt for a while that Teaching Fellows are really NOT very valued, by the institution, and there are not the same procedures in place for support (training, etc.) compared to permanent staff. I think students have no real idea who is permanent or not, so that doesn’t make a difference - and most other staff just treat everyone as individuals, so that’s fine.

Our main conclusions are:

- (1) We need further work, perhaps under the auspices of the professional societies, to drill down into the problem of status and esteem, given that it does not appear to be principally a problem of low pay.
- (2) We need to generate a sense of community. With the reduced funding of the HEA and the increase in the number of TF position and increased student fees, it is even more important that staff are supported and encouraged to develop their practice. Institutions need to recognise the importance of providing funding to attend meetings. One suggestion could be to include special sessions at

conferences on teaching and learning. It could also involve opportunities for publication of teaching innovations. For example, the *Community Directions* section of the HEA journal *New Directions in Physical Science* used to provide teaching fellows with a place to begin to engage with publication. The small size of the current community, as evidenced by conference presentations and publications, compared with the numbers of teaching only academics quoted in section 1, shows just how far we have to go. Only 1/3 of our respondents were aware of the existence of forums for Teaching Fellows (Q15).

- (3) We need to come together to coordinate policy recommendations. The Institute of Biology together with HEA, the Academy of Medical Sciences⁶ and the Physiological Society (Harris, 2011) are attempting to coordinate policy on reward and recognition for teaching in HE, but the focus appears to be once more for balancing progression regimes between teaching and research, rather than explicitly on the broader aspects of working conditions and status for teaching-only staff.

. In summary, we need to generate a virtuous circle that will engender mutual respect amongst academic staff who have different roles, to generate a new symbiosis between university research and teaching. We need to acknowledge that teaching fellows take on a heavier teaching load and teaching administration, engage with the scholarship of teaching and learning and carry out their own pedagogic research in order to make teaching as effective as possible. This should be recognised as a highly demanding and important role, particularly as in many (if not most) institutions it is now the case that student fees generate more income than research. It is not known how much more effective STEM teaching could be or how to make it so. The pedagogic research role is essential to the effective deployment of resources in HE.

Teaching fellows should be recognised as co-generators of the income from teaching to support their departments. The greater role in teaching played by such specialist staff then leaves research active academics to contribute effectively to teaching in more defined roles, drawing on their research experience and backgrounds, and to free up their time to generate the research reputation that attracts the students to their department.

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Table 1. Number of responses according to discipline

Table 2. Mode of employment. Top row gives the data from this survey for TFs. The bottom row is the HESA data for all academic staff. Percentages of the total over all modes are given in brackets. (Numbers are rounded so may not add to 100%.)

Figure 1. Annual pay (scaled to equivalent full time)

Figure 2. Salary distribution for the TFs in this survey, taken from the survey data, and for the sector, taken from HESA statistics. The salary bands from the two sources do not overlap exactly, hence the binning of the survey data introduces a measure of approximation.

Figure 3. Years of experience as a TF (disregarding any previous employment)

Figure 4 Difference in annual pay from the mean according to discipline

Figure 5. Percentage of TFs with a teaching qualification

Figure 6. Contact hours per year for full time and part-time staff

Figure 7(a). How valued do you feel? The bars give the percentages in each category

Figure 7(b) How valued do you feel by your institution broken down into salary bands. The bars give the fraction in each category at each salary level

Figure 7(c) How valued do you feel by students broken down into salary bands as in 7(b)

Appendix

Questions for STEM Teaching Focussed Academics

1. What subject area do you teach (e.g. Geography, Maths, Forensics)?
2. How much do you earn per annum (if you are part-time or hourly paid please indicate the salary you would receive if you worked full time)?

£20,000-£25,000; £25,000-£30,000; £30,000-£35,000; £35,000-£40,000; £40,000-£45,000; £45,000-£50,000; More than £50,000

3. Please select the statement that best describes your current University contract:
(select one box only)

Full time permanent; Full time fixed term; Part-time Permanent; Part-time fixed term; Casual (part time); Other (please specify:)

4. What is your highest academic qualification? (select one box only)

BA/BSc or equivalent; Postgraduate certificate; Postgraduate diploma; Masters degree; Doctorate; Other (please specify:)

5. Do you have a formal teaching qualification (e.g. PGCHE, PGCert, PGCert Modules)? Yes; No

If you answered yes to this question please state your qualification

6. If you answered yes to the question above please indicate how you are studying for this below (select one box only)

In your own time; In paid time as part of your contract; Both of the above

7. How many years have you been employed as a teaching fellow (include your present and all previous positions)?
8. Please indicate the areas you have responsibilities for Lectures; Tutorials; Examples classes; Laboratory demonstration or facilitation; Pedagogic research; Teaching development; Pastoral care; Other (please specify):
9. Please describe the freedom you have in exercising these responsibilities (e.g. use material supplied, write own lecture notes, develop innovative resources)
10. Please indicate the number of contact hours you have each year

11. Does your institution provide support for continuing professional development e.g. attendance at conferences, training workshops? Yes; No; Don't know

If so, what form of support?

12. Does your institution have a career path for teaching fellows? Yes; No; Don't know

13. Please indicate which, if any, of the following you sit on:

Boards of Studies (alias Teaching Committees); University Boards or Committees;
Departmental Staff Meetings; Student Staff Committee

14. How valued do you feel as a teaching fellow?

- by students Very valued/Fairly valued/No opinion/Fairly unvalued/Not at all valued
- by other staff Very valued/Fairly valued/No opinion/Fairly unvalued/Not at all valued
- by the institution Very valued/Fairly valued/No opinion/Fairly unvalued/Not at all valued

15. Are you aware of any discussion forums for teaching fellows? Yes; No

16. Please write any other comments you would like to make below:

FIGURE 1

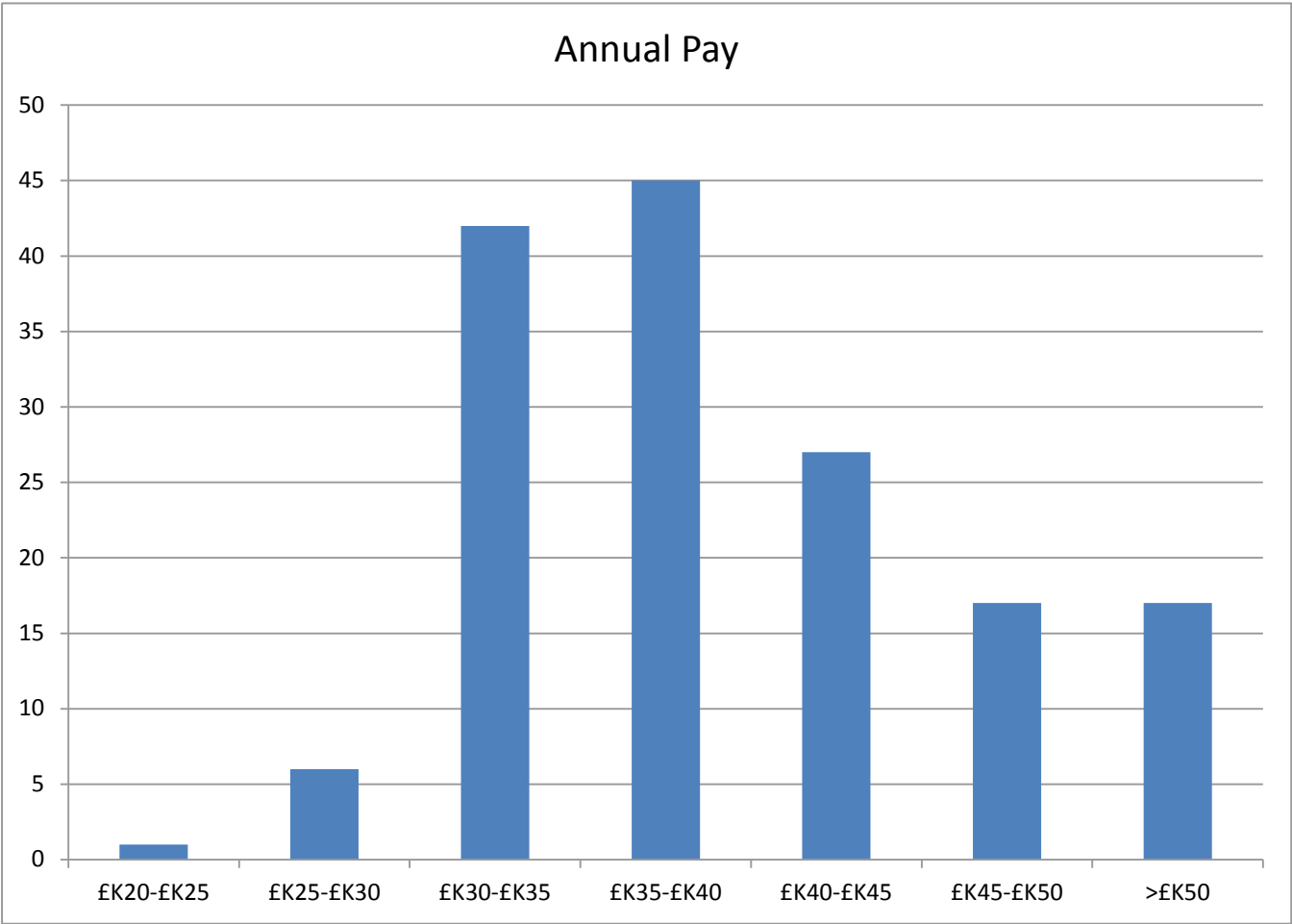


FIGURE 2

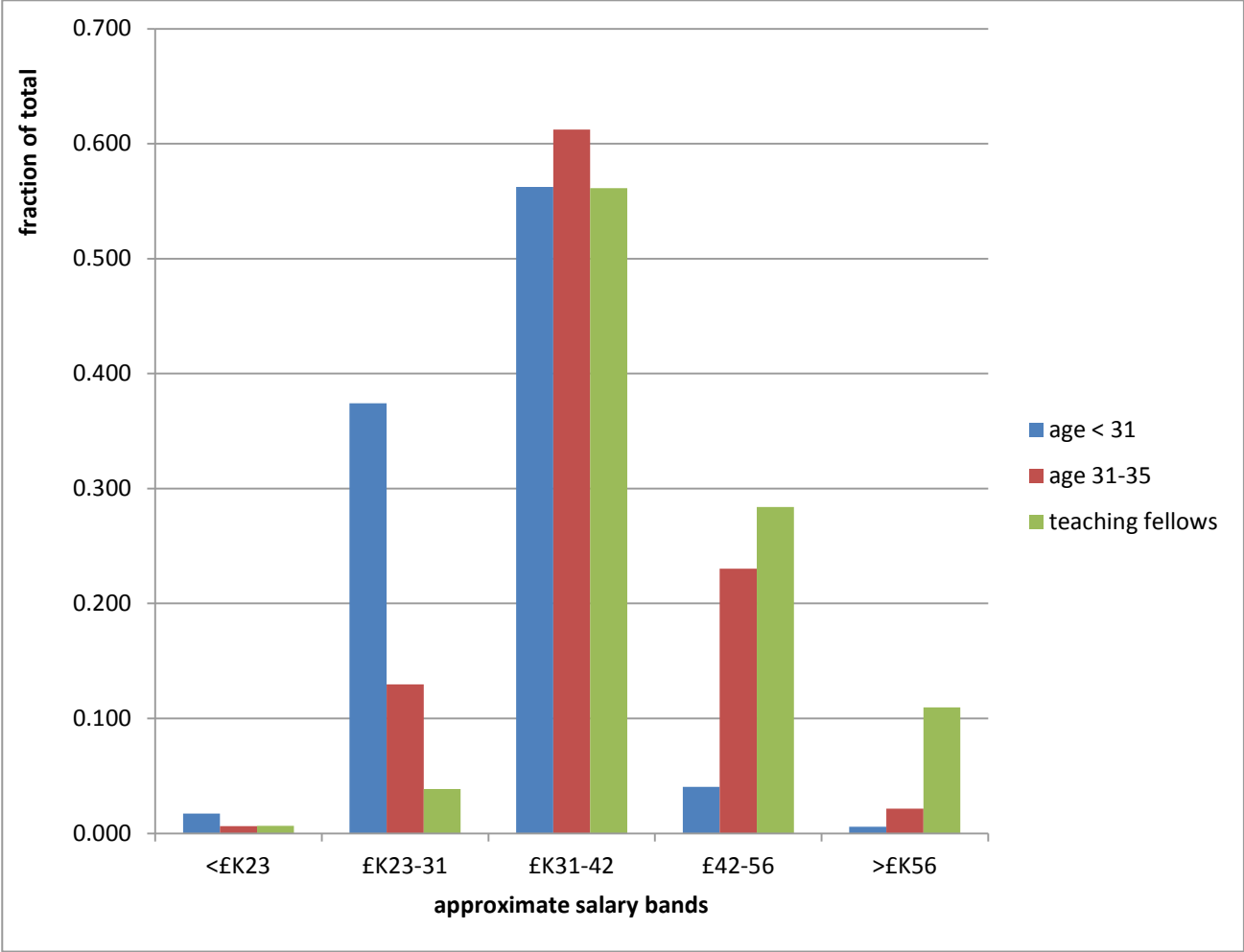


FIGURE 3

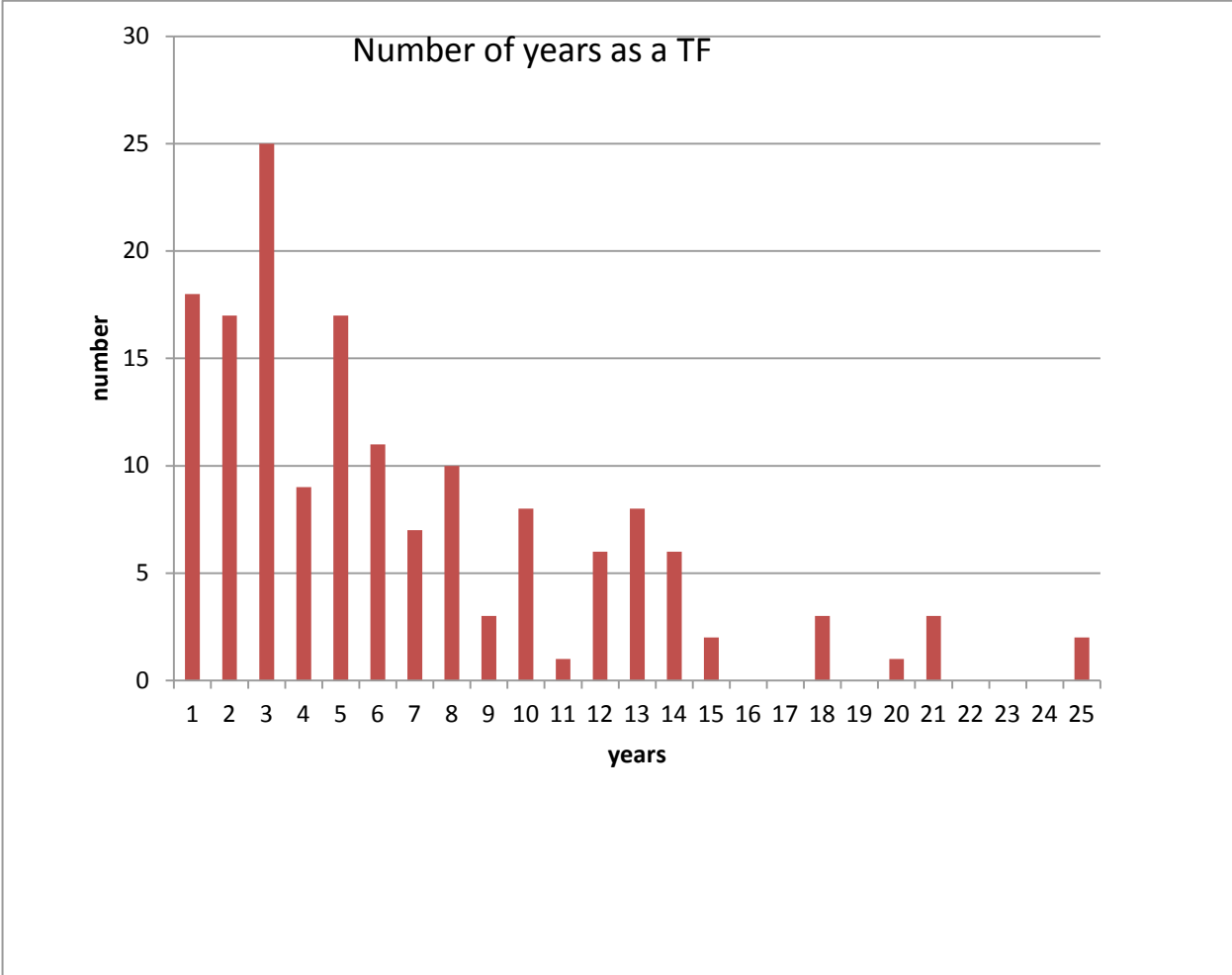


FIGURE 4

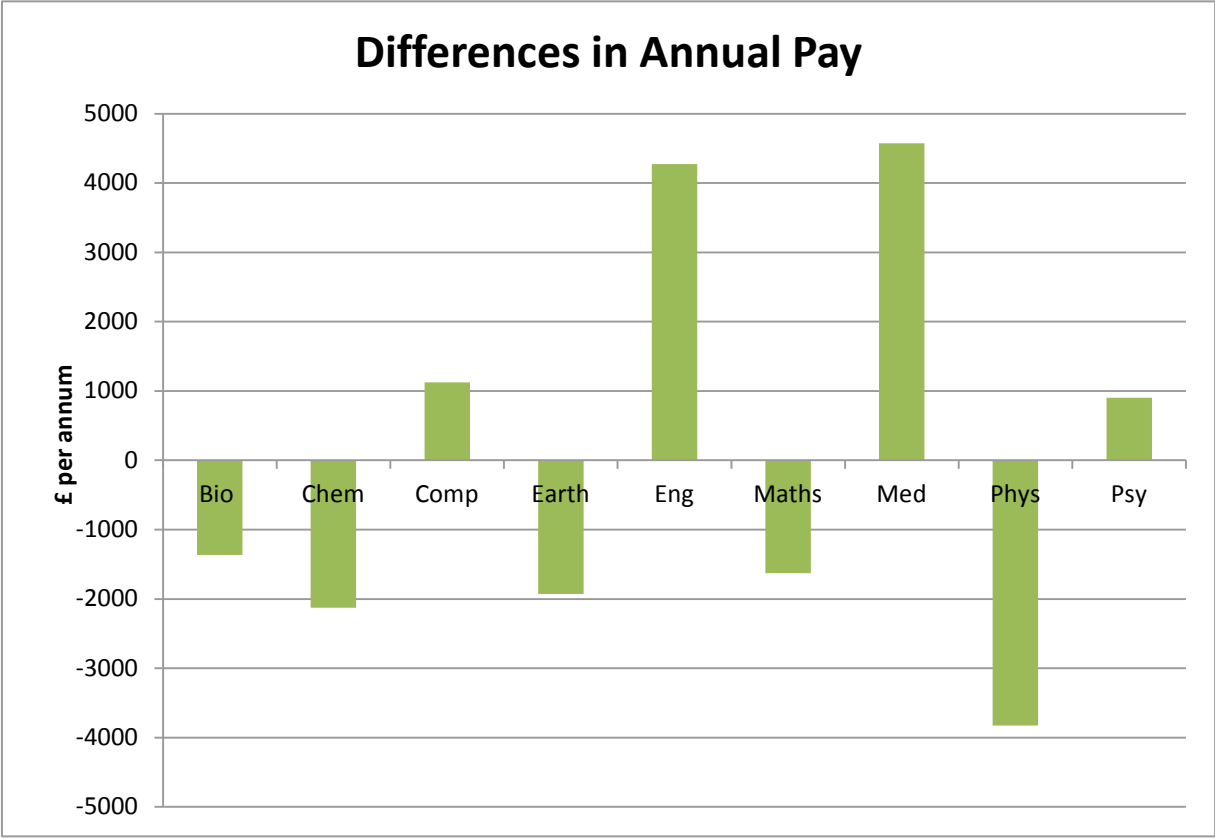


FIGURE 5

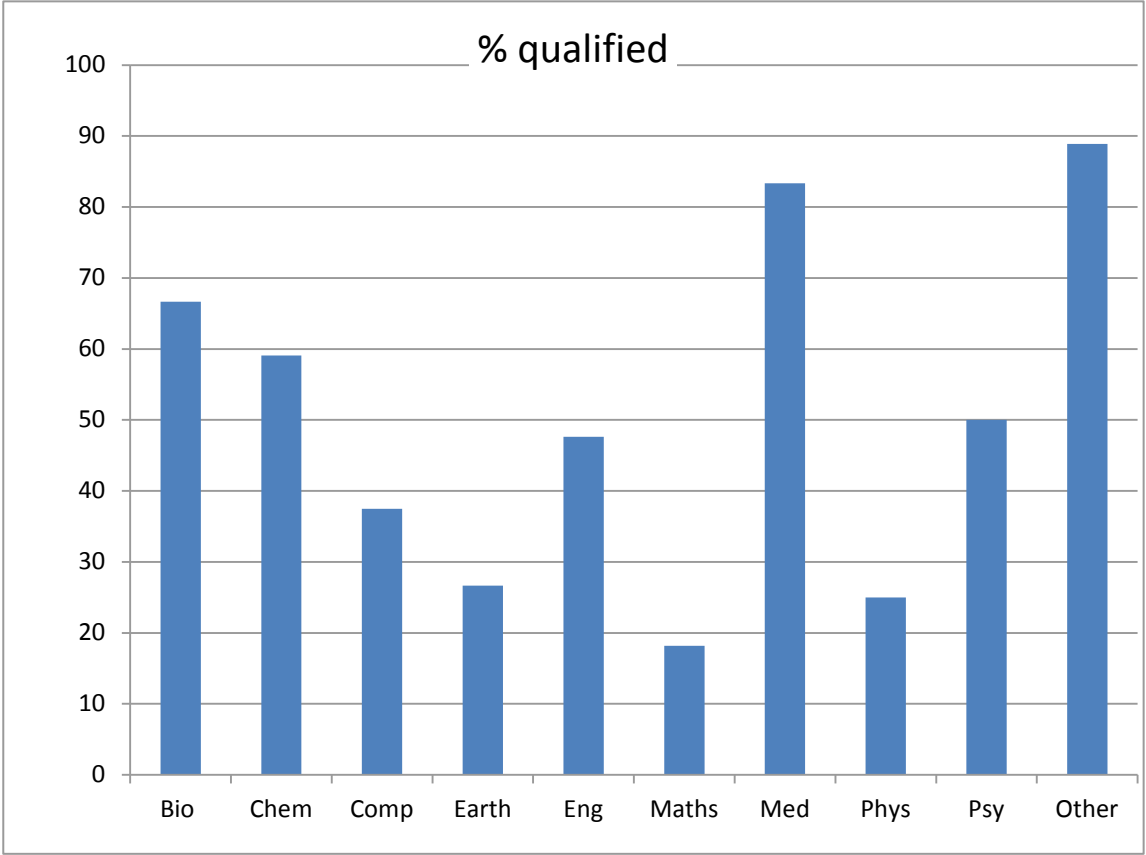


FIGURE 6

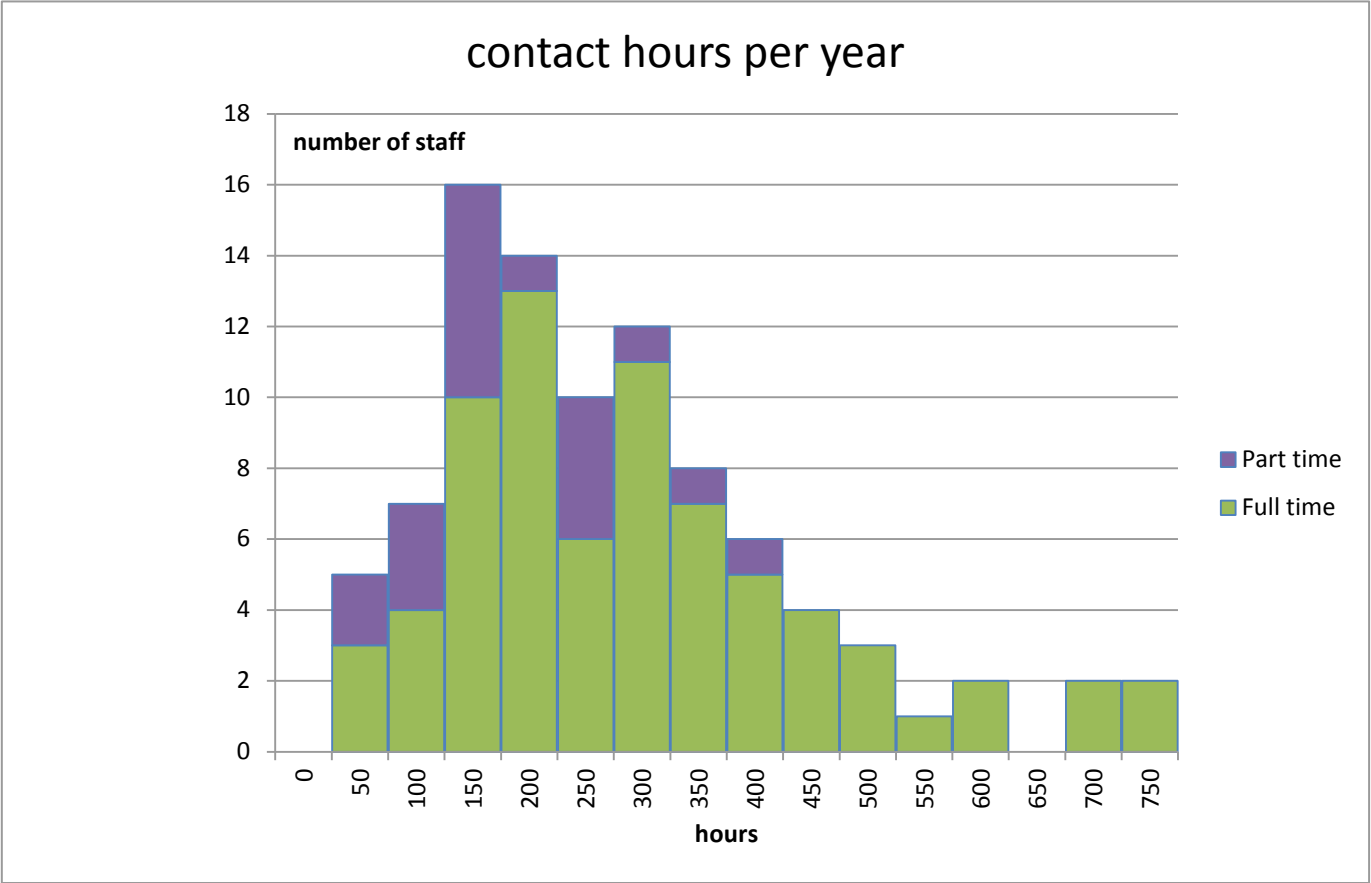


FIGURE 7(a)

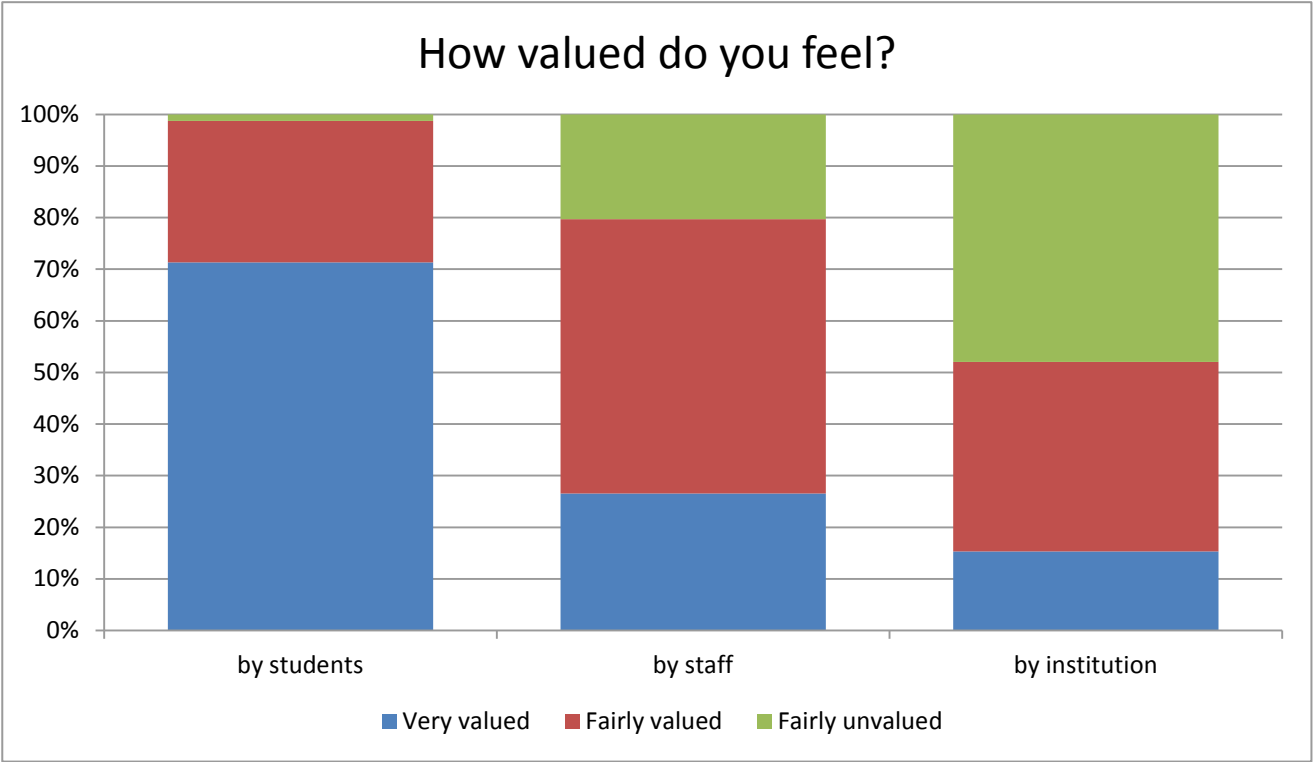


FIGURE 7(b)

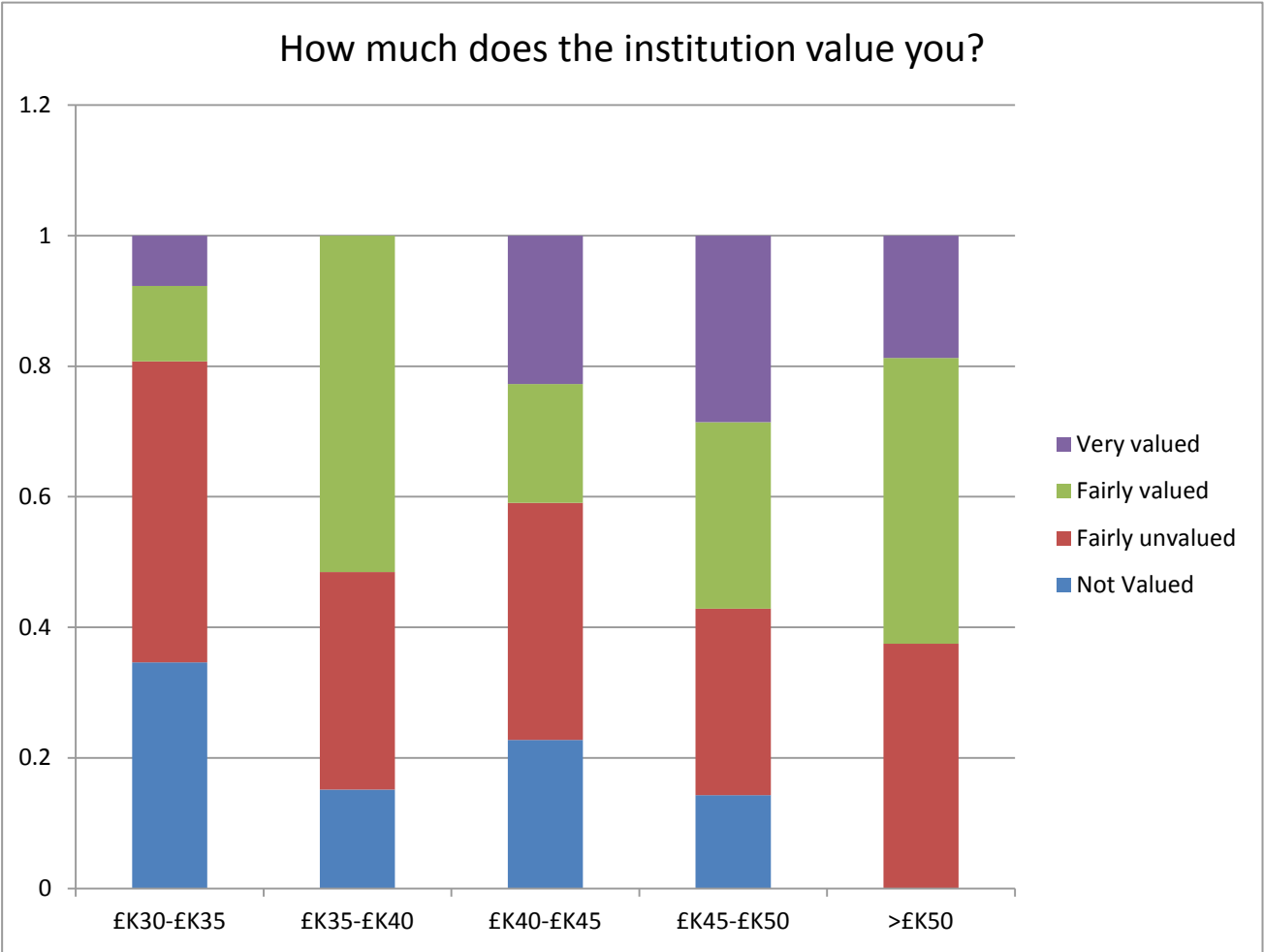


FIGURE 7(c)

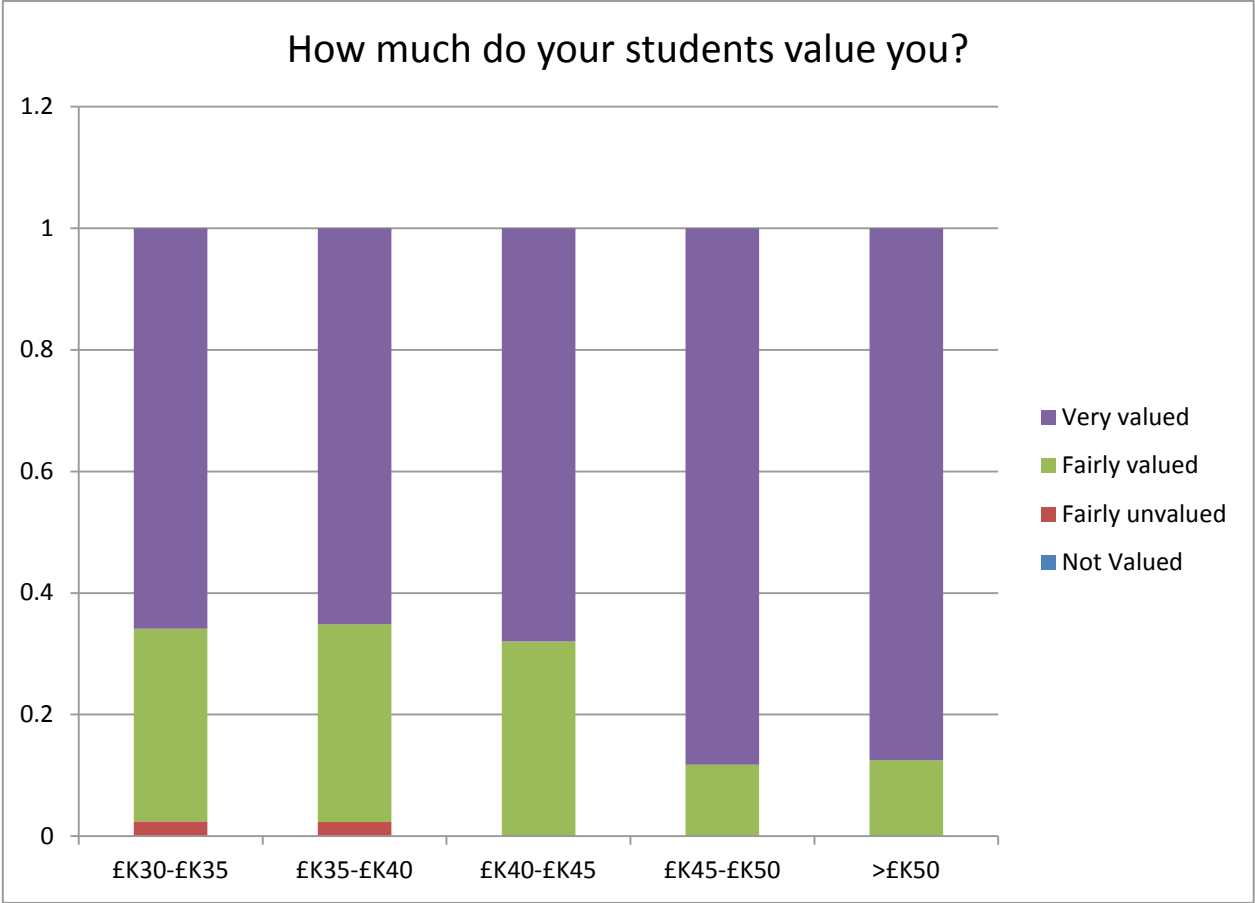


TABLE 1

Bio	Chem	Comp	Earth	Eng	Maths	Med	Phys	Psy	Other	None
24	22	24	15	21	11	6	4	14	9	10

TABLE 2

Full time permanent	Full time fixed contract	Part time permanent	Part time fixed contract
109 (68%)	19 (12%)	14 (9%)	19(12%)
95515(49%)	32655 (17%)	29310 (15%)	36765 (19%)