

Neither fish nor fowl? The perceived benefits and problems of using Graduate Teaching Assistants (GTAs) to teach undergraduate students

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Based on a survey of perceptions within a research-led university, this article explores the benefits and problems of using Graduate Teaching Assistants to teach undergraduate students, from the perspectives of undergraduate students, graduate students, and their departments. Perceived benefits include enabling small-group teaching for large classes, providing funding for graduate study, offering teaching experience to graduate students, and freeing academic staff time for research. Perceived problems include the possibility that undergraduates feel 'short-changed', issues of fair pay and acceptable workloads for graduate students, and concerns about quality assurance for departments. Findings from the survey inform suggestions for the development of good practice in the use of GTAs in the UK.

Introduction

Like their counterparts across North America and Europe, universities in the UK are having to adapt to survive (Sporn 1999). One tangible reflection of this sea-change is the ongoing search for better ways of delivering an effective, high quality educational experience for undergraduates. A range of factors are driving these changes (Dill & Sporn 1999; Martin 1999), including relentless pressure on staff time (particularly for research), increasing student numbers and larger classes, rising student expectations, mounting competition between institutions, and deepening resource constraints. Many universities are making greater use of appropriate graduate students as Teaching Assistants (Gillon and Hoad 2001), who help out with teaching, particularly for first year undergraduates.

This paper explores the perceived benefits and problems of employing Graduate Teaching Assistants (GTAs) in the UK, as reported by academic staff and GTAs in a case study of one research-led university (Lancaster University in England). A GTA, as described here, is any postgraduate student who teaches (usually undergraduate students) part-time, on a paid basis, whilst also engaged as a research student at the university.

The context for GTAs

The main driver for increasing use of GTAs in the UK is the growing need to reconcile rising student numbers and expectations with serious resource constraints and pressure on academic staff time. It is a classic supply-demand tension. Levels of demand continue to rise - the number of undergraduate students in higher education in the UK rose by 9% between 1997-8 and 2001-2, and postgraduate numbers rose by 6% between 2000-1 and 2001-2 (HESA 2002). But there has been no concomitant rise in supply. Problems are compounded by the growing casualisation of employment of teaching staff, and increased employment of teaching staff on part-time or fixed-term contracts (AUT 2001c).

With this mismatch of supply and demand, a simple solution might be to expect GTAs the step in to bridge the gap. But it would be wrong to simply exploit GTAs as the potential “donkeys in the department” (Park and Ramos, submitted), who can carry heavy burdens at low cost, with great responsibility but limited authority, and often a very muted voice. We need - and the GTAs deserve - a much more balanced perspective on the multiple ways in which GTAs offer added value.

There is now a sizeable body of North American experience of employing GTAs, supported by an extensive literature (eg Marinkovich, Prostko and Stout 1998) that indicates many important lessons of relevance to the higher education sector in the UK. But North American GTA models cannot simply be transplanted into the UK, because of differences in quality assurance regimes, employment legislation and practice, and bases of graduate student recruitment.

The GTA experience in the UK is still relatively new, practices are still evolving, and demand and need continue to rise. Whilst this territory is not entirely uncharted the map is still very ill-defined. Research on the use of GTAs in the UK context has barely begun, and literature is thin and patchy, despite a decade of interest shown by interested parties such as the National Postgraduate Committee (1993), the UK Council for Graduate Education (1999), the Quality Assurance Agency (1999) and the Association of University Teachers (2001a, 2001b).

Case study of perceptions of GTAs

As a contribution to the broader dialogue on the use of GTAs in the UK, a survey was undertaken to probe what academic staff and GTAs perceived to be the pros and cons of employing GTAs, viewed from different vantage points.

The case study is based on Lancaster University, which enjoys a good reputation for the quality of its teaching and research, has a large population of graduate research students, and makes extensive use of GTAs in undergraduate teaching. During the 2001-2 academic year a total of 231 graduate students were employed part-time to help with teaching, as lab/practical demonstrators in the sciences and more widely as tutors and seminar leaders; a few delivered occasional lectures. Whilst the sample is drawn from within one (research-led) institution, there are few reasons to believe that it is not broadly representative of the UK context overall.

The survey was an attempt to identify the niche occupied by GTAs, both in theory and in practice, from the perspective of undergraduate students (recipients), graduate students GTAs (providers), and departments (sponsors and regulators). Only graduate students, heads of department and appropriate administrative staff were invited to take part; undergraduates were not included for two reasons - a tracker-group survey by the Students Union had revealed that undergraduates often did not know that those teaching them were graduate students, and the survey was carried out during the summer term while undergraduates were occupied with examinations.

The methodology used was an email survey to heads of department, appropriate administrative staff, and graduate students. This e-consultation approach has obvious

advantages, including speed, economy, and ease of distributing and responding. Each Head of Department, appropriate administrative staff and every graduate student was sent an email inviting them to take part. Each person was asked to outline at least one positive aspect (what they see as the benefits for) and one negative aspect (what they see as being less beneficial for) of employing graduate students to teach, viewed from the perspective of undergraduates, graduates and the department. The questions were open in format.

Email responses were received from a total of 22 staff (mostly Heads of Department) and 15 graduate students. This return rate was relatively small, partly because the survey was carried out during one of the busiest times in the academic calendar (the summer exam season), but there are no grounds for suspecting that the views of respondents might be untypical of the institution as a whole.

Responses were grouped into themes, structured in terms of positive and negative aspects, and - within each – from the perspective of undergraduate students, GTAs and the department. The responses were textual, and the analysis was qualitative. Respondents speak in their own voices where appropriate below

Survey results

POSITIVE ASPECTS

Benefits for undergraduates

The staff and GTAs who responded in the survey suggested that employing GTAs offers a number of distinct advantages to the undergraduates. A prime benefit is that it allows tutorials and seminars to be run in large courses. Small-group teaching provides undergraduates with opportunities to interact with each other and a subject-specialist tutor, to discuss course themes, explore ideas and material in an informed setting, and to develop their skills in critical inquiry and academic discourse. It is believed that undergraduates appreciate exposure to a variety of appropriate people teaching them, so the GTAs provide diversity of learning experience.

Whilst inevitably most undergraduates expect to be taught by a subject-specialist with appropriate teaching experience, in some situations a GTA can offer important specific expertise and subject knowledge that might otherwise be lacking within a department. This was commented on mostly from within the scientific domain, for example within computing where some GTAs are “more deeply immersed in the tools (eg programming languages) than staff and can offer more detailed technical advice when students get stuck” (staff response). Sometimes a GTA will bring specific practitioner expertise into a department, such as a professional Stage Manager who served as a GTA in Theatre Studies, who “introduced the students to a standard of practice that is required, if not expected, in the professional theatre” (GTA).

By virtue of age and status, GTAs can often offer added approachability and informality that undergraduates benefit from. Graduate students in general “have more recently been undergrads and can identify with some of the concerns of the undergrads, or might be able to explain things in a more relevant way” (GTA), and as one staff member commented,

undergraduates relate better to “individuals who are more easily identifiable as ‘like me’”. Many staff, in particular, recognised that GTAs can empathise with undergraduates better than they can; this then allows the GTA to teach from a position of understanding what it is like to be an undergraduate in terms of levels of knowledge, handling conceptual difficulties, familiarity with discourse, ways of approaching study, recognition of difficulties, coping with life as a student, and so on.

GTAs can also enrich and enliven courses, as “teachers who are not putting across the same material for the tenth or more time” (staff). As one Head of Department noted, undergraduates “benefit from youthful enthusiasm of one who hasn’t already done it all before, can better remember what it’s like to be an undergrad, is desperate to do it really well – and usually does”.

An undervalued benefit to undergraduate exposure to GTAs is the role models the graduate students provide. Most undergraduates have little idea what postgraduate study and research is about or how it works. Contact with GTAs can provide them with a window into this relatively unknown world, which can strongly influence their views about further study and career options.

Benefits for graduate students

For the graduate students themselves, perhaps not surprisingly, the two most important benefits of working as a GTA are that it offers them income and teaching experience.

Given the difficulties of securing ongoing funding for graduate research, the relatively low levels of most research council and other graduate scholarships, and rising undergraduate debt, most graduate students are eager to “work their passage” in a department by undertaking appropriate teaching work. A GTA assignment brings much-needed income, even though hourly rates of pay vary (from department to department, and from task to task), and are generally regarded as too low (particularly given the large amounts of time required for preparation and marking, in addition to contact time). Payment represents perhaps the most contested and contentious dimension of the GTA experience, although it is widely agreed that rates of pay for GTAs need to be increased.

Graduate student attitudes towards teaching experience are less contentious. This might partly reflect the self-selecting sample of staff and GTAs who responded to the survey, but - given that teaching is the task they are employed to perform – it must also reflect the self-selecting nature of the GTA population. As one GTA reported, teaching the subject provides them with the opportunity to “experience the feel of teaching”. GTAs highlighted a number of dimensions of the teaching experience, including having opportunities to read students’ essays, to understand departmental marking criteria, and to become familiar with departmental teaching materials. Being engaged in the teaching process also encourages GTAs to become reflective practitioners, and to think seriously about their reasons for wanting to teach.

Experienced teachers know full well that the process of teaching is not one-way, and that it also benefits the teacher. A number of GTAs pointed out that interacting with students, having to deal with their questions and provide sensible answers, challenged their existing

understanding and encouraged them to think more deeply about their own subject. Having to teach their subject also encourages the GTAs to learn more themselves - “teaching something is a way for you to learn it, as well”, as one GTA commented. From a staff point of view, teaching tends to enhance the GTA’s “actual knowledge and proficiency within the subject increases – including better grip of the subject discourse.” The challenge of “being obliged to formulate their ideas in ways that are approachable for undergraduate students” (staff) also benefits GTAs, as does the “opportunity to realise that different people have different viewpoints, even for the simplest things” (GTA).

One unexpected benefit for some GTAs was the encouragement they received from successfully engaging with the process of teaching. One described the “great happiness, when your students acknowledge your efforts and provide you with feedback” (GTA), and another commented how seminar teaching “gave me a tremendous sense of satisfaction as it was the first time I had taken a seminar group on my own all through the academic year.” (GTA). Encouragement tends to build confidence, which benefits not just the teaching but also their research work. As one Head of Department commented, “through teaching, the [graduate student] comes to feel more solid in their understanding of their subject matter, even if it is not connected with their research, which has a knock-on effect on their confidence in their own learning. They also come to realise how much more they knew than they thought, and that they know how to find things out when they don’t know – both of which are confidence boosting in terms of their own learning and research.”

There is a range of broader benefits for the GTA, too. Having a more structured week can bring bonuses to the GTA. As a member of staff who is closely involved in training GTAs pointed out, “the break from their own study/research is therapeutic, demanding different ways of thinking and skills of operating whilst staying within the academic culture.” Becoming more conscious of the constant interplay between teaching and research also helps the GTA, because, “teaching can often provide a focus for your research where it connects to it - seeing how students react to your ideas is really useful and vital in a sense as they are the researchers of the future.” (GTA). In an even broader sense, “the teaching embeds the [graduate student] more into the departmental and subject cultures – helping their wider understanding of academic practices and principles.” (staff). As one Head of Department commented, “the whole GTA experience helps to keep the [graduate student] ‘in touch’ with the department, with the subject, and with others in ways not evident when the [graduate student] focuses only on their own research.”

Teaching experience also helps the personal and career development of the GTA. This is not only “something to bargain with in the employment market” (GTA), but also something that offers “insight into what actually is involved in an academic career” (staff), and thus a good way to “find out before accepting a position at a university whether they really want to spend 30 years teaching students” (GTA). But the GTA experience also offers invaluable opportunities to develop as an individual by acquiring broader transferable skills such as speaking in public, controlling group dynamics and learning to work as a team.

Benefits for the department

Staff and GTAs perceive a number of important benefits to the department of using graduate students to help with undergraduate teaching. The most important one is delivering

teaching to large numbers of students with optimum use of academic staff, thus freeing staff time for other appropriate activities (particularly research). Put simply, “it makes little sense to tie up academic staff for tasks that can often be better done by [graduate students]” (staff), and using GTAs “enables a lower staff/student ratio to be sustained alongside increased research activity” (Head of Department).

GTAs provide “a relatively inexpensive way of maintaining small group teaching” (Head of Department). But it’s not just about cost, because GTAs are often well motivated – they provide “high-commitment teaching at low cost” (Head of Department). In short, GTAs bring “cheap, motivated labour” (staff), which is also relatively flexible labour, because most departments have graduate students willing to work at short notice (GTA). Many GTAs also provide a demographic bridge between undergraduate students and full-time academic staff (staff).

As noted above, some GTAs bring additional subject knowledge or particular expertise into a department (staff), and this inevitably benefits the department by enhancing its ability to deliver high quality teaching to students.

The injection of enthusiasm and vitality that many GTAs bring provides yet further benefits, particularly if it leads to innovation and more reflective attitudes and practices within the department. One member of staff welcomed having “younger people around, keen and enthusiastic people often with new ideas about research, how to organise things, and nowadays, teaching innovations that are really good”.

Departments also benefit from using GTA appointments to fund postgraduate activities. Whilst generally not used as pro-actively as in North America, the possibility of offering additional funding to those graduate students able and willing to serve as GTAs does offer a useful “carrot to attract potential [research students]” (staff).

NEGATIVE ASPECTS

It is not all good news, however, because the survey inevitably uncovered a number of important negative aspects of using GTAs to help with undergraduate teaching.

Problems for undergraduates

Viewed from the perspective of an undergraduate on the receiving end of GTA teaching, a major area of concern is the assumed reduction in access to academic experts with detailed subject knowledge and teaching experience. Undergraduates “may feel they’re palmed off with inexperienced and junior tutors” (staff) and “students sometimes prefer someone older for added gravitas” (GTA). The worst-case scenario is employing GTAs “who are teaching for the first time and discovering that they’re not very good at it” (staff), particularly if they are not “being properly mentored, [have] language or cultural difficulties” (staff).

Appropriate training, mentoring and support can reduce but not entirely eliminate these risks. There is also the possibility of dumbing-down, particularly if the undergraduate students are “not being sufficiently challenged in seminars if for one reason or another the [GTA] does not develop appropriate pedagogic skills” (staff).

Problems also arise from the relatively limited access that many students have to their GTAs outside contact time. "Postgrads are (understandably) keen to limit their student contact to the times for which they are paid. Actually, many postgrads are quite altruistic in this regard, but struggling undergrads sometimes need help outside of scheduled labs and tutorials, and this can be a problem" (staff).

Undergraduates can also be adversely affected by unreasonable expectations held by GTAs, particularly inexperienced ones, because they "can sometimes be very tough on the average student as postgrads are hard-working, able and motivated" (Head of Department).

GTAs are also quite capable of causing confusion amongst students, particularly if they lack an overall sense of the course, and/or if they teach in a different way to the course leader (GTA). Of course, GTAs do not have a complete monopoly in any of these problem areas!

Problems for graduate students

It is probably no surprise that the two most important negative aspects for the GTAs themselves relate to time (workload) and money (payment). Other important themes are the nature of the task, and ownership of the process.

Workloads vary through the year and from one GTA to another. Many GTAs expressed great concern over the non-contact time required to service their teaching, which often includes preparation, assessment, dealing with students, taking training courses and attending departmental meetings (staff and GTA).

Inevitably, time spend on teaching is time lost to research, and as a result many GTAs make slower progress with their research degrees than their non-teaching colleagues (staff). One GTA confessed that "it eats into your time and you become resentful and sometimes don't do a very good job", and another advised "I don't recommend teaching for final year PhD students (even though this is when you often need the money)." GTA duties have an adverse impact on completion rates, which matter to the graduate student, their department, and the institution.

For many GTAs the payment received for teaching is important if not critical, but many GTAs claim that the payment is unfair. There are several dimensions to this claim. Overall the rate of payment for GTA is regarded as too low, particularly relative to the amount of work and level of commitment expected, and the level of specialist understanding involved. As one GTA commented, it is "all too easy to do too much for the money". But there are also major concerns over what the payment covers (contact time only, or preparation and marking time as well), lack of gearing of payment to GTA-student ratios (thus workloads), and inconsistency in payment between departments. Some GTAs also expressed concern over the inherently temporary nature of their teaching contract, which usually only covers one year at a time, making it very difficult for them to plan ahead.

The nature of the GTA job also brings difficulties, particularly for the inexperienced (GTA). Many GTAs have to teach beyond their specialist subject area, so a great deal of preparation is usually required (GTA). Even with preparation, the experience can be daunting - "sometimes it feels like you are having to learn things yourself about half an hour before

trying to teach it to others (which can at times be rather a nerve-wracking experience, and it is generally not conducive to doing a very professional job).” (GTA). Many GTAs would like to see compulsory training courses for new teachers (including themselves), conscious that this would mean even more time lost to research. Practical difficulties also arise in finding appropriate office space for many GTAs because few graduate students have their own offices, making it difficult to arrange regular office hours, have effective discussions with students, and guarantee confidentiality (GTA).

The role of the GTA is often repetitive – many lead the same practical or tutorial/seminar session several times a week, particularly on large courses – and this can sap enthusiasm and vitality. Repetitive teaching doesn’t necessarily broaden the GTA’s teaching experience or expertise, nor does it necessarily increase their subject knowledge or enhance their academic credentials (GTA).

A key tension for many GTAs is their lack of ownership of the teaching process, because GTAs usually “operate in a system in which they execute only, and have little or no influence over design and planning” (GTA). This can fuel lack of engagement with broader pedagogic and conceptual dimensions of the courses they teach, which then increases the risk of uninspired and uninspiring teaching, and a lower quality experience for those they teach.

Lack of ownership and engagement partly reflects the ambiguity of the GTA role within a department. Students typically view GTAs as teachers, but departments see them as teaching assistants and graduate students (GTA). GTAs often perform the same role as full-time academics, but with less pay, no job security, lower status (GTA). As a result, the GTA “is neither fish nor fowl – not a tutor, yet performing like one. Students and departments expect performance, but we receive none of the benefits of staff” (GTA). The ambiguity of niche occupied by GTAs creates some unfortunate uncertainties about identity, value and importance, as a result of which GTAs “can sometimes be taken advantage of by their department, and are not in a strong position to complain” (GTA).

Problems for the department

Whilst employing GTAs to help with the teaching of undergraduates brings many advantages to the department, it is not problem-free. One challenge is how best to cope with the “sense that teaching by GTAs is less important than that by academic staff” (Head of Department).

For departments it is usually very difficult to plan ahead from one year to the next, not just because of uncertainty about budgets but also because “as a group [GTAs] necessarily have a high turnover rate” (staff) “there’s always an uncertainty about supply” (HoD). Using GTAs to cope with increasing class sizes, expedient as it might be, can undermine a department’s case for increasing full-time staffing because it generally offers such a cost-effective, flexible solution (HoD).

Employing GTAs to help with teaching also creates risk and uncertainty, by using “people who are teaching for the first time and discovering that they’re not very good at it” (staff). Providing appropriate induction and training is important in reducing risk, but even with

these, as one Head of Department noted “we take something of a gamble on employing any new teacher – postgrad or postdoc – in terms of their easing into the teaching role”.

Closely related to risk is the matter of quality assurance - will the GTA provide teaching of an appropriate quality? Departments “need to monitor teaching closely, [because GTAs] can be much stricter with undergraduates than are lecturers” (staff). They also have to “deal with fall out from undergrads who don't think much of their postgrad teacher” (staff), and to cope effectively with the “over-reliance on [GTAs] leading to [the] perception of disjointed courses” (HoD). Departments also have concerns over “poor evaluation results if the [GTAs] are not properly mentored and supervised” (staff).

Departments have responsibility for the selection, appointment, induction and training of GTAs, and this gives rise to some recurrent tensions. Selection is a particularly contentious area because “some problems inevitably come from the system departments use to choose who does the teaching, as it seems widely inconsistent and sometimes appears unfair.” (GTA) One Head of Department stressed that “we can't – and should not – guarantee every postgraduate student some teaching, so there are sometimes resentments on the part of those not given teaching”. Resentment can also build up over unrealistic expectations of what successful service as a GTA entitles the graduate student to - “it can build up a sense that we owe them a job at the end” (staff).

Conclusions

Perception of the pros and cons of using GTAs inevitably varies between the undergraduates (recipients), the graduate student GTAs (providers) and the departments (sponsors and regulators), and this survey has attempted to identify the main ones as seen from each vantage point. The potential benefits offered by an effective GTA system are multi-layered and often complementary. All stakeholder groups - undergraduates, graduates and departments - have a vested interest in an effective system that embeds graduate students into their department, offers fair financial rewards, broadens transferable skills and enhances career prospects. But there are major problem areas too, including appropriate payment and workloads.

The findings of this survey have implications for future good practice, including the need to have a fair, transparent and consistent framework for using and rewarding GTAs within an individual institution. A key element in this framework is the need for unambiguous definition of the role, responsibilities and rewards of being a GTA. Each individual GTA appointment should be accompanied by a contract, agreed by both parties (the Head of Department and the GTA) that includes a clear statement of the expected workload, level of payment, and what tasks and time the payment covers. The framework should be informed by existing codes of practice, including those of the National Postgraduate Committee (1993), the UK Council for Graduate Education (1999), the Quality Assurance Agency (1999) and the Association of University Teachers (2001a, 2001b).

Some major themes – such as the vexed question of ownership and engagement, and the ambiguous niche occupied by GTAs – must be tackled beyond the boundary of a formal framework, and will require nothing less than a wholesale rethink of traditional academic roles and structures. North American experience of using GTAs has valuable lessons for

universities in the UK, but structural differences between the two systems must be recognised and taken into account.

If GTAs in the UK are not to remain “neither fish nor fowl”, the time is right for a dialogue within the UK, on what sorts of GTA model might be most appropriate to our higher education culture and context. This dialogue will need to focus on how best to reconcile the multiple objectives of delivering high quality teaching and learning experiences to ever-increasing numbers of undergraduates, while university funding is severely constrained, and at the same time provide appropriate funding opportunities for graduate study and further enhance the research culture, critical mass and academic productivity of UK universities.

Note

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