Please mind the gap: students' perspectives of the transition in academic skills between A-level and degree-level geography

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Abstract

This paper explores first-year undergraduates' perceptions of the transition from studying geography at pre-university level to studying for a degree. This move is the largest step students make in their education, and the debate about it in the UK has been reignited due to the government's planned changes to A-level geography. However, missing from most of this debate is an appreciation of the way in which geography students themselves perceive their transition to university. This paper begins to rectify this absence. Using student insights, we show that their main concern is acquiring the higher level skills required for university learning.

Introduction

Since at least the 1970s, academics writing in the field of pedagogy have been concerned about the transition from school to university education (Glenn, 1971). Research on multiple continents has examined a range of issues including, amongst others, the relationship between students' emotional intelligence, their academic achievement and continued enrolment at university (Parker et al., 2004; 2006); issues around social integration and retention (Kantanis, 1995); self-identity and adaptation to university life (Berzonsky and Kuk, 2000); the positive and negative effect of writing their first university assignments upon students (Krause, 2001); and the impact of additional tutoring on performance (Stevenson and Baker, 1992). Students have been central to this generic research. On the other hand, work which addresses subject-specific issues has tended to focus on curriculum issues, and geography is no exception.

In the UK, discussion of the differences between the kind of geography that is taught at A-level, and the way in which it is taught at university is longstanding. [1] The UK context is significant as it speaks to central issues

[1] Following the introduction of Curriculum 2000, an A-level now consists of modules studied over two years. Some of these modules are assessed during the first year and make up a stand-alone qualification called an AS-level. Further modules are assessed at the end of the second year. These second-year, so-called A2, modules do not form a qualification in their own right; the satisfactory completion of the AS and A2 modules in the same subject instead constitutes a completed A-level.

about geography's definition and purpose as an academic subject, with the debate ranging in focus from the content of A-level curricula (Castree, Fuller & Lambert, 2007); via the dialogue between teachers and lecturers (Birnie, 1999; Imrie and Cowling, 2006; Jeffrey, 2003); to more fundamental questions about the nature of contemporary geography (Bonnett, 2008), and the different theoretical perspectives from which curricula are developed (Huckle, 2002; Lambert, 2011). The debate still rages today. Most recently, discussion has focused around the UK government's National Curriculum Review, announced in January 2011 following the 2010 White Paper *The Importance of Teaching*. Attention has also been focused upon the government's plans to reform the way in which A-levels in general are taught and assessed, which in turn has implications for the skill set A-level geographers acquire.

To date, such debates have mainly been fruitful and led to embryonic links between schools, exam boards and universities, while also focusing the priorities of geographical organisations and prompting more open conversations between stakeholders. For example, in 2011 the Geographical Association ran a 'Curriculum Consultation' which addressed the impact that the government's proposed changes could have on geography, in which academic geographers were encouraged to participate. Not least, this sparked interesting international debate about the proposals amongst those signed up to CRIT-GEOG-FORUM (2011). At the same time, the Higher Education Academy Subject Centre for Geography, Earth and Environmental Sciences (GEES) established a special interest group on transitions to university, and A-level exam boards, such as AQA and OCR, have been

conducting roadshows around the UK designed to garner the views of academics on existing A-level curricula and to engage academics with the A-level curriculum-making process.[2]

However, too often absent from both these academic debates and practical initiatives are the voices of the students themselves. This paper seeks to address this lacuna, based on research carried out over two years at a Russell Group university in the north of England.[3] Student perspectives were gleaned through a first-year assignment and subsequent focus groups. As indicated above, while the existing literature focuses heavily upon the disjuncture in subject knowledge faced by those making the transition from A-level to university-level geography, students did not perceive this to be a significant obstacle to their learning and progression.

Contemporary thinking about the transition to university geography

Debates about perceived gaps between school and university geography appear to be almost cyclical in nature, re-emerging periodically since at least the 1970s (Morgan, 2002). In its most recent incarnation focus has been on the growing extent of the divide: ‘university and pre-university geography in

[2] OCR has also established a Higher Education Strategic Forum and ten subject consultative forums, although it is noticeable that, at the time of writing, geography did not have its own dedicated forum.

[3] The Russell Group is an association of 24 British public research universities. It is headquartered in London and was established in 1994 to represent its members' interests, principally to the British government.

[the UK] are like distant relations: there is a family connection but it is fairly weak' (Castree, Fuller & Lambert, 2007, p.130). Amongst geographers, interest has tended to fall into two discrete strands. The first addresses the issue of the growing divide by questioning 'What is Geography?' (Bonnett, 2008) and discusses the perceived disjuncture between the different types of geography that prevail in schools and universities (Castree, Fuller & Lambert, 2007; Marriott, 2007; Prykett and Smith, 2009; Stannard, 2003). There is merit in these debates, as on closer inspection the emphasis on traditional, regional geography within many school syllabi becomes evident. While it is true that recent concern with geographical 'issues' such as environmentalism has also begun to feature, there have been considerable difficulties along the way, with parental cries of "is this geography?" permeating the debate (Harrison, 2002; Wilce, 2003). This situation can be contrasted with geography in universities, as evidenced within human geography by the recent introduction of cultural and postmodern themes, its interest in new ways of working (such as through visual methodologies or participatory research) and through its engagement with other disciplines such as sociology and politics (see for example Blunt and Wills, 2000; Ley, 2003; Johnston and Sidaway, 2004, for discussion). While many academic geographers might reflect that this is hardly new – indeed Edward Soja's classic text *Postmodern Geographies* was written in the 1980s – it is worth pointing out that few of these themes have filtered into school curricula, so increasing the divide. On the physical side of geography, technological advances have similarly increased the divide between university and school teaching and learning. For example, while schools are able to access free Digimaps from Ordnance Survey, it was only in the late 1990s

that the ICT capabilities of trainee teachers were formally assessed as part of their PGCE training. Much of the equipment for field mapping, GIS, recording accurate weather data, etc. also remains out of the financial reach of schools (see Birnie, 1999, for a wide-ranging discussion of the difference between school and university physical geography). These differences led Huckle (2002) to juxtapose postmodern academic geography with stubbornly modern school geography, while Prykett and Smith (2009, p.35) express the concern of many teachers who 'have not been able to keep up-to-date with current developments in an ever evolving discipline'.

The second strand within the geography transitions literature has focused on government-prompted discussion of curricula changes and the relationship between schools and universities. Research has sought to improve the school-university transition by improving dialogue between geography teachers and lecturers (see Birnie, 1999; Imrie and Cowling, 2006; Jeffrey, 2003). Much of this debate is worthwhile and imbued with an appreciation of the practical realities of teachers and academics finding the time to commit to such endeavours: for example, Prykett and Smith (2009) discuss a range of options from informal seminars and continuing professional development courses, through to MAs which would update and expand geography teachers' subject knowledge; while Stannard (2003, p.320) suggests that 'academic geographers have a great deal to contribute in any debate over the content of school geography' (see also Rawling and Daugherty, 1996).

While opportunities for schoolteachers to update their subject knowledge should be welcomed, somewhat overlooked within this literature is the way in which geography students understand and negotiate this A-level-to-university gap when beginning their degree. Do they perceive the new subject knowledge required at university to be the most problematic transition that they are faced with as new undergraduates? Are the skills that academics expect from their new geography undergraduates a more significant problem? What do students think is the best way to resolve these transitional issues within geography? If we can empower students to speak, then perhaps the debate between teachers, academics and exam boards can be re-ignited in such a way as to produce practical changes that will benefit those that matter most: the students.

A notable exception to this position is Marriott's (2007) *Geographical Association* research with 12 undergraduate geographers, designed to canvass views on the school-university transition. While Marriott's work was insightful, it appeared in a journal aimed at teachers but read by few academics. Therefore, while his work may have encouraged some teachers to reprioritise the importance of preparing students for university, it had little effect upon the way in which academics manage the skills transition of their new undergraduates through the first year of their degree. Going back further in time, some student-centred contributions have appeared within academic journals: examples include Bryson's (1997) 'Breaking through the A-level effect: a first-year tutorial in student self-reflection'; Haigh and Kilmartin's (1999) 'Student perceptions of the development of personal transferable

skills'; and Maguire, Evans & Dyas's (2001) 'Approaches to learning: a study of first-year geography undergraduates'. These papers report attempts to encourage undergraduates to reflect critically upon their study habits and how they have evolved. However, such contributions are now at least a decade old and, following the introduction of Curriculum 2000 by the UK government, the education landscape has been substantially reshaped. Having identified this lacuna, we hope that we can begin the work of filling it in the next section of the article.

Researching the transition through student engagement

The body tasked with oversight of university curricula in the UK, the Quality and Assurance Agency for Higher Education, provide benchmarks which all degrees must meet. Section 3.9 of the Geography subject benchmark statement requires that:

> "Geographers should have a critical and reflexive sense of the nature of the discipline as dynamic, plural and contested. They should be aware of its development and changing relationships with other fields of enquiry." (Quality Assurance Agency for Higher Education, 2007, p.4)

For BA (Hons) and BSc (Hons) Geography undergraduates at Newcastle University, the issues raised in this benchmark statement are introduced in the first year of their degree as part of a module exploring the transition to university geography. Through a series of lectures, seminars and workshops,

students examine the relationship between the various approaches to the discipline and how these differ between school and university. The module is primarily about the contested and changing nature of geography as a discipline and is designed to engage with, and to some extent smooth out, what the department feared was a gap between what is taught at A-level and content delivered on its degree courses. The module culminates in a 2000-word assessment, which asks the students to evaluate critically either the particular A-level geography syllabus they studied or the university's first-year geography syllabus. Students are required to make changes to their chosen syllabus and to justify why their changes would improve either its content or their own experience of the academic transition to university. The assessment is intended to encourage students to develop their own vision for contemporary geography and its role in the modern world. The assessment is, in effect, a variant of the traditional first-year undergraduate essay which asks 'what is geography?'

Marking this assessment, it became clear that the students were reflecting carefully on their transition from studying A-level geography to studying for a degree. This provided us with a rich set of insights into their views and experiences, which in turn prompted a small research project to delve further into the points drawn to our attention. The project ran over two years and drew upon the views of two cohorts of students, who enrolled at Newcastle

University in 2009 and 2010.[4] From these we selected 91 students, approximately one-third of the total number who had undertaken the module in the stated years. The criteria for selection included: those who attained a mark of at least 60% for the module, and therefore had shown an inclination to engage with the issues in some depth; a near-equal number of human and physical geographers (48 human, 43 physical); and a willingness on the part of the students to participate in the study. Having previously re-read their assessments, we asked the students to attend focus groups to explore the issues they had raised in more detail. We conducted nine focus groups with a total of 53 students (five in the first year of data collection and four in the following year). These focus groups, along with the students' original assessments, formed the core of our data collection and are the basis for the findings presented below. To preserve anonymity, names have been replaced by an alphanumeric system.

Students' perspectives of the transition between A-level and degree-level geography

It immediately became obvious from the revised curricula, which the students submitted as part of their final assessment, that they were less concerned with the perceived disjuncture in content than geography staff at Newcastle University imagined. For example, few students felt the need to introduce aspects of degree-level geography at A-level (or vice versa) as a means of

[4] Entry requirements for both the BA (Hons) and BSc (Hons) Geography degree programmes at this time were ABB at A-level (or equivalent), which placed the students at the upper end of those entering university in the UK.

improving the transition. Likewise, few students seemed to expect, or want, degree-level geography to be a continuation of A-level geography. Unlike so much of the academic literature discussed above, these were not major concerns for the students (cf. Castree, Fuller & Lambert, 2007; Standish, 2008; 2011). In contrast, the students were far more concerned with the different skills required to study for a geography degree and whether they were adequately prepared by their A-level studies for the challenges that lay ahead. Indeed, students expressed a range of emotions from disappointment through to anger and fear at how inadequately prepared for university they considered themselves to be. Despite this, as they neared the end of their first year, the students were able to reflect upon their experiences and, in many cases, were able to suggest innovative and radical ideas to improve this preparation for future cohorts. This was demonstrated most clearly by the number of students who wanted degree-level study skills to be taught at A-level, and the number who suggested the return to prominence of skills (such as extended essay writing) which have been increasingly side-lined by the successive restructuring of A-level syllabi. As academics, this convinced us of the need to place students' perceptions of pedagogical issues at the heart of contemporary teaching and learning debates and persuaded us to investigate further the skills gap perceived by students enrolling on university geography courses.

This skills gap identified by the students can be separated into two broad types: practical skills, and cognitive or critical-thinking skills. The following

sections expand on these missing or underdeveloped skill sets, as explained in the students' own words.

Practical Skills Gap

Changes to the structure of geography A-levels, not least via the introduction of Curriculum 2000, have changed the balance of AS and A2 exam papers towards more structured and shorter exams, in contrast to older essay-style A-level exams of up to three hours duration. Together with the removal of coursework from geography syllabi, many more geography students seem to come to university without the requisite writing skills. Poor undergraduate spelling, grammar and essay writing skills are, therefore, a well-known issue for many academics – yet this was not perceived as an issue amongst our students. This may be because the cohort was not fully aware of the longer assessments (especially essays requiring extended prose) that lay ahead of them, or it could be a quirk of the sample.

In contrast, referencing was highlighted as a useful skill that should be introduced at A-level, not least because it was seen as a first step towards encouraging students to reflect critically upon the subjective nature of what they were reading:

> "…referencing, [is] a concept which is arguably the hardest to grasp for first year geography students." (Student B9)

In addition, difficulties associated with writing coursework submissions were highlighted by a series of students who felt they had been let down by its absence during their A-levels:

> "…students wishing to go into higher education to study geography lack practise [in] conducting coursework which will lead them to be disadvantaged…Coursework also encourages students to read around the subject as is done in university." (Student B38)

A further skill set which the respondents felt they were lacking were those practical skills learnt on fieldwork, in laboratories and through IT. In relation to fieldwork, this translated into the difficulties the students experienced with knowing what a fieldwork notebook was, how to keep effective notes in the field, and reflexive approaches to recording and understanding data:

> "fieldwork is fundamental, not only as a learning process for students to rely on their own knowledge and research, but also as an introduction to the process of self-taught learning that universities rely on." (Student B30)

While a minority of the students had been fortunate enough to have been taught by someone with, for example, GIS skills, the majority felt they were at a disadvantage and were playing 'catch-up'. They appreciated the time, resource and cost pressures faced by schools and colleges when trying to provide fieldtrips, laboratory work and IT resources, and the structural

hindrances on how such assessment could be marked, but nonetheless frequently called for the inclusion of skills modules in their A-levels:

> "My proposal, in an attempt to eradicate this problem, is to introduce a 'Geographical Study Skills' module at A-level, in which students will be required to write critical essays using a range of academic sources." (Student B9)

Cognitive Skills Gap

A second skills gap was identified by participants who had found that the learning styles and expectations at university were entirely different to those at school or college. When introduced to Bloom's *Taxonomy of the Cognitive Domain*[5], and asked to reflect upon their own experiences of learning, the first-year students overwhelmingly located themselves near the bottom: as descriptive learners with little evaluative, critical or argumentative skills. The respondents felt this left "students unprepared for the massive change in approach to the study of geography at university" (Student A10). Every student recognised the 'spoon-fed' approach used at GCSE and A-level (see Bryson, 1997), and wanted to see it changed. As one student put it: "there needs to be a fundamental change in the geography curriculum to allow a

[5] We acknowledge that Bloom's work has been subject to critique and revision (see, for example, Anderson and Krathwohl, 2001), but it was employed here only as a tool to help students to begin to think about different modes of learning.

move from a spoon-fed learning experience" (Student B37). Some placed the blame squarely on the exam boards: "students on the [exam board name removed] course are left with no idea of the university curricula ahead…" (Student B39).

Of particular concern to students was the practice of using a very narrow range of reading. By the end of their first year at university, the students were beginning to realise that they needed to rely on more than one source, to analyse the validity of a range of sources, and to form an argument. Here the participants agreed that these were new skills that should be introduced at A-level:

> "Sixth form students go from using a small selection of text books to using massive amounts of literature spanning journals, books and research papers. It makes the transition from 6th form to university a time consuming battle. It would be more efficient and more productive for the students to have already experienced this method of learning before reaching higher education." (Student B17)

The need for skills to help analyse a variety of sources was paralleled by arguments for teaching greater independence of thought:

> "the A-level curriculum I studied did not enable students to think for themselves and consider other possible explanations…it could be said facts were just taken at face value." (Student A2)

Again, the students offered alternatives or solutions to these problems. A strong theme which came out of the focus groups was the need to teach more up-to-date geographies at school as a way of filling the skills gap. Given the nature of the module from which our sources were derived, unsurprisingly much of this discussion focused on replacing what the students perceived as the out-dated paradigms dominating A-level geography (namely regional and 'traditional' quantitative geography) with more issues based, cultural and postmodern approaches. The respondents believed that the critical edge of such approaches provided more scope for the development of higher-level evaluative skills, while also giving the subject matter taught an up-to-date and relevant feel by enabling students to grapple with real-world issues:

> "…at A-level nowhere in the curriculum does it encourage students to challenge what they are being told, and this is what radical geography would bring to the curriculum if it were studied in more detail." (Student A4)

The absence of radical geography was not universal, however. Defined in the broadest sense, its effectiveness as a learning tool was thought to be dependent on how it is used and whether praxis is explicitly dealt with:

> "A-level has very little radical geography within the course, and where the paradigm does appear the point made is biased and there is very little room for students to expand on the matter." (Student B4)

Suggestions to include more cultural and postmodern geography were not as common, but some participants believed the plurality afforded by some postmodern approaches would be useful as a means to teach students how to evaluate the quality of a variety of sources.

Before drawing this section to a close, it is important to add that the students who undertook this essay were not wholly critical of A-level geography. The majority enjoyed their courses, as one would expect from students who are reading geography at university. But more than that, the respondents highlighted the usefulness of synoptic papers as a means to draw together and test the principles and concepts taught at A-level in a less structured way. There was also praise for the way human and physical topics were taught closely, not in silos as frequently happens at university. Nevertheless, it is clear from the research that amongst undergraduates there is resentment that the foundations of some important practical and cognitive skills are not laid and developed at A-level, due to drastically different teaching styles and curriculum requirements. Some solutions have been proffered by our students, but there are, of course, a range of constraints on what can and cannot be achieved. In the next section, we offer some suggestions for changes to both A-level *and* degree programmes that navigate the obstacles faced by teachers, lecturers and exam boards.

Conclusion: constraints and ways forward

One of the biggest constraints when addressing the transition to university is the inflexibility of A-level curricula. The problem is twofold. Firstly, A-levels are highly politicised and subject to fierce debate between stakeholders – change is therefore difficult and requires careful navigation between sometimes competing demands. Secondly, at the time of writing, five exam boards offered A-level syllabi. Consequently, co-ordinating change across them is not a straightforward task. In contrast, the autonomy which UK universities are provided with in terms of curricula development means changes can be made year-on-year. Another important question in this debate is whether teachers appreciate what is required from students by universities today. Are teachers out of date? Have things really changed so much in universities since many teachers completed their formal education? Why aren't lecturers communicating these issues to teachers through continuing professional development opportunities? There is clearly a constraint upon what individual members of the profession can do acting in isolation. The structure of syllabi and the pressure to complete a vast amount of teaching militates against this. Yet, it is also true to say that, while teachers have innovative pedagogical approaches with lower year groups, these are too frequently eroded when teaching higher year groups due to the pressures produced by the increasing amount of material to be covered (Leat and Nichols, 1999; Leat, 2001). The changes needed to improve the skills acquisition of students, therefore, need to be more structural in nature. Radically, this might mean syllabi requiring the teaching of less material, thus empowering teachers to use more time-taking evaluative and enquiry-based approaches. Change might also require heads of geography to reprioritise the factors that make them choose one exam

board's A-level syllabus over another. A source of frustration for the students was their perception that the syllabi offered by some of the five exam boards provided much better preparation than others for beginning their geography degree. As this suggests, greater consistency (or fewer exam boards) could also be part of the solution.

In the short term, universities need to address the issues highlighted by our respondents. Study skills training for first-year students is a common feature of tutorials and dedicated practical modules in most geography departments. But do university lecturers know how A-level geography is taught and assessed, or how it has changed since they completed their own A-levels? From personal experience we would suggest that, while this knowledge is a prerequisite for developing effective first-year undergraduate modules, the majority do not. This is a view shared by others: 'many university academics do not appreciate the extent to which essay writing has disappeared from the A-level geography curriculum' (Marriott, 2007, p.49; see also Ballinger, 2003; Bassett et al., 2009; Pointon, 2008).

UK institutions should also look beyond their own shores. Through international conferences, teachers and lecturers have opportunities to learn from counterparts in other parts of the world. Such insights can bring fresh perspectives. Let us consider briefly, for example, the work of E. D. Hirsch, emeritus professor of English at the University of Virginia and founder of *The Core Knowledge Foundation*. Hirsch's research has nothing to do with geography per se, but he does have something interesting to say about the

role of knowledge versus the role of skills in curricula. Hirsch's initial impetus was his concern with the reading ability of school and college students in Virginia. In proposing a carefully prescribed and sequenced core knowledge-based curricula for US students, Hirsch is critical of skills-driven learning, which he argues ignores core knowledge through the mistaken belief that 'instead of burdening our minds with a lot of dead facts, we should become expert in solving problems, in thinking critically' (Hirsch, 2007, p.11). In contrast, Hirsch's own view is that a 'good education' creates a symbiotic relationship between core knowledge and skills. In other words, what transforms critical-thinking skills into 'general all-purpose abilities is a person's possession of general all-purpose knowledge' (Hirsch, 2007, p.12). We agree with much of this, for it reinforces the importance of developing skills in a useful way, which is related to (rather than divorced from) subject content. Indeed, it is too often a weakness of first-year undergraduate courses in the UK that, rather than embedding skills in all modules, they expunge them into a separate, generic "skills module". That said, we accept that defining the core knowledge for any subject is a controversial, politicised discussion, as highlighted by debates about the Saffron agenda in India; the place of creationism in US science curricula; and the selective inclusion of Aboriginal histories in Australian school curricula. Together, these examples again point towards the selective and socially constructed nature of the curriculum-making process.

Ultimately, our research findings support Castree's (2011, p.4) recent idea that geography lecturers, teachers and exam boards should liaise together

further on the development of new GCSE and A-level curricula. In that sense, initiatives such as that from the AQA and OCR exam boards are a step in the right direction, although the voices of geography students themselves must be included in future strategic and policy-making forums; for they have something unique and interesting to add. In addition, while the responses garnered from the students as part of this research suggest that it is A-level geography where the most substantial changes to the teaching of skills needs to occur, there is an appreciation by students that changes should be made to first-year geography degree programmes, too. Therefore, we suggest that geography teachers can and should reciprocally contribute to debates about the first year of university teaching and learning. If we are genuinely seeking to improve teacher-lecturer relations, it seems a missed opportunity for teachers not to be afforded the opportunity to engage in pedagogical debates with their university counterparts on at least equal terms. Our conclusions are therefore a little more complex and less unidirectional than Castree's (2011), who enthuses about how school geography could benefit from the input of university geographers. In this article we have also sought to widen the debate by moving the focus away from being predominantly about the subject knowledge geography students acquire, to being about the skills they want (and need) to develop for university and future employment.

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