Empowering Geography Students in Large Groups

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Abstract

A common problem encountered in working with large classes is the difficulty of providing sufficient support and assistance to allow the students to develop both the skills and the confidence required for them to carry out original research. This paper reports on the use of group work with limited guidance to facilitate small-scale research. While one area of geography is used in the example, the method is applicable to a wide variety of other subject areas, both within geography and more widely.

Introduction

If students are to develop the ability to carry out genuine research for themselves, it is necessary to foster the growth of confidence at the same time as enabling them to acquire the relevant research skills. While the degree of guidance and support required by each student should diminish over time, the amount of input from staff can become burdensome when student numbers are large and staff availability is limited. The present paper is a report on the evolution of part of a module designed to encourage the development of research and transferable skills within the constraints of a large class group. While the work presented focuses on Sport and Leisure Geography, the general approach can be used for virtually any subject-area in Geography (or in other subjects).

Context

Students generally enter geography courses in higher education in the Republic of Ireland following a secondary education in the subject in which they commonly have had relatively little opportunity for independent research (even at a superficial level), or for presenting work other than in the form of answering written questions. A recent study of 268 1st year geography students in the National University of Ireland, Maynooth, (NUIM) revealed that in their final geography course at school 73.6% reported that teacher talk/lecture was a very common pedagogic method and, rather more surprisingly, 43.3% that copying notes and diagrams was very commonly used. Only 2.8% stated that small group work was used very often, while almost 88% had little or no experience of this and (unlike the UK) almost 60% had no experience of carrying out an individual project. Fieldwork would not be expected to be a very frequent activity, but it was noteworthy that 31 students (14.6%) had never carried out any fieldwork before coming to university. A large majority (83%) reported that they had no experience of giving a ‘talk’ to their classmates, while only five reported that these had been given either very often or fairly often. It is therefore unsurprising in the light of these findings that students often appear both to lack research and communication skills, but also the confidence that they can develop them. They appear to have a desire for ‘true’ answers, a certainly that these exist and a real uneasiness when confronted with the unknown – and the need to find out about it.

As one of the aims of the geography course in NUIM is for students to develop skills which enable them to carry out research both as individuals and as part of small groups, it is, therefore, necessary to devise a programme which builds from very limited previous experience towards this aim. While it could be considered desirable for this programme to be integrated with the rest of the undergraduate programme to facilitate transfer to other learning situations (as suggested by Healey, 1992), the structure of the degree programme in NUIM makes this very difficult to achieve in practice. A large majority of students take geography as part of a two subject BA programme, and within geography they have a wide choice of modules. To ensure that each student receives a balanced programme of skills would be extremely difficult without a great degree of overlap. Therefore, skills are taught in the context of ‘stand-alone’ modules in both the 1st and 2nd year. The 1st year module ‘Geographical Skills’ is one first year Geography programmes, consists of a series of independent classes, each focusing on a particular skill or technique, such as sketch-map drawing, the avoidance of plagiarism, and the development of skills such as group working and communication.

To build on this basic module in the 2nd year; all students (currently about 200 in total) take ‘Methods of Geographical Analysis’. Again, both geographical and transferable skills are taught and developed, but they are now set within the context of two research projects lasting over a number of weeks – (one in the 1st semester and one in Semester 2). That in the first semester is generally based on a single project carried out by the whole class, divided into teams of four; each working on similar tasks. These projects are based in the local area and have frequently involved work in conjunction with local community groups (see Waddington, 2001).
Greater independence: how the second semester project works

The second semester project was initiated to build on the skills and the confidence generated during the first semester and to develop group working and oral communication skills, particularly required in work in the third year. During the first cycle of the module when this second project was implemented, concern about logistics (and a lack of confidence on the part of the present author), led to the presentation of a very clearly structured project based on the urban geography of the town of Maynooth. This meant that, while each team produced an acceptable result and they were able to develop their organisational and presentation skills, they had very limited opportunities to devise their own aims or a different approach to the task. While this was popular with some of the students – those who lacked confidence in their own ideas (or those who wanted a simple life!), many reported in their evaluations that they did not find the project interesting, and would have welcomed the opportunity to do some ‘real’ research. While they were actively involved in their learning in some ways, they were in danger of becoming ‘so taken up with practical details that (they) fail(ed) to engage their brain on the underpinning reasons for the activity’ (Cotton, 1995:113). It also meant that differentiation in assessment was extremely difficult – with such strict guidance there was very little scope for students to display their own initiative or ideas.

The author was, in fact, giving students some autonomy, but was not really helping them to develop their independence as learners, despite this being an explicitly stated aim of the module (and a personal belief of the author). In subsequent years, therefore, a number of different projects were tried out, all of which had less rigid structures, but which all provided the basic outline of the requirements, again depriving the students of the opportunity to actually carry out ‘real’ research based around their own interests. The success and popularity of these projects varied with the team’s satisfaction with the topic allocated. The teams still lacked confidence and many of them asked to be told the ‘right’ answer. In contrast to Cotton’s suggestion that students respond badly to a ‘pseudo-heuristic’ approach, where teachers ‘try to manipulate the learner into thinking that they have discovered new information ... for themselves, whereas in fact, the teacher has planned a very careful series of learning steps’ (Cotton, 1995:13), the students often wanted reassurance that they were being ‘deceived’ in this way. The very clear guidance which had to be provided for the more technical aspects of some of the projects appeared to contribute to this lack of confidence in their research. The students appeared to believe that if the technique was explained clearly this meant that the author must have actually carried out the research (or have access to results from another source). They were anxious to ensure that they obtained the ‘right’ answers. This was particularly acute when teams had what they perceived as no results (i.e. negative findings, such as that the atmosphere in the town was not heavily polluted). The students did, in fact, carry out the research tasks generally in a very satisfactory manner and obtained apparently credible findings. They could identify a number of skills which they were developing, but did not, generally, report an increased sense of confidence in their abilities to ‘do’ research.

Following detailed review of the project, I realised that in an effort to overcome the twin problems of lack of engagement and a fear of ‘getting it wrong’, a different approach was needed. It was decided that if the students were going to develop both the skills of research (which they did appear to be doing) and also the confidence to apply these, it was necessary to remove the formal structure of providing specific projects. Initially, the possibility of allowing each group complete freedom to select its own project was considered and, indeed, this could be regarded as the most satisfactory approach. However, one essential aspect of the work was the need to ensure that these projects were successfully completed by teams who were prepared to carry out the necessary work. One requirement for this was clearly that encouragement, support and technical assistance was available to help the students develop both their skills and their confidence in their own abilities. However, there were 180+ students in the class and only one staff member and three post-graduate students to provide the required supervision and guidance. It was, therefore, decided that a general topic would be identified and, within minimal constraints, the small groups allowed to plan and carry out their own projects. The guidance provided is replicated in Figure 1.

The aim of this project is to investigate the geographical aspects of leisure (i.e. not paid employment or study) activities. This will focus on the activities of group members, or on one particular activity or text analysis (images, articles, photographs) of an activity. It could relate, for example, to a sport which one member plays (but which is of general interest to the group); to shopping or club/pub related activities. Whatever you chose to explore, maximum credit will only be obtained for a project which has a clear focus on the geography of the topic.

Your work will be reported:

a) in the form of a poster [details provided later]
b) as an oral presentation [lasting approximately 10 minutes]

Step 1:

Identifying the actual topic – you can not find out everything about leisure time activities, so you must think carefully about what you actually wish to investigate. (See Session 1Aim and objectives)

Work to be done:

1. Working as a group identify a suitable general topic (aim) for your project.
2. Identify more specific objectives for your project
3. Identify the type of information that you need to collect to carry out your project.
4. Prepare a very brief report on your topic, which you will share with the rest of the class at the start of the next class. Only one person needs to speak.

Step 2:

Deciding on the methods to investigate the topic – clearly this will depend on the topic selected for investigation. This will involve reviewing the sessions/ information sheets on Interviewing, focus groups/ group interviews, discourse analysis, diaries, photographs.

• Some of these methods, particularly diaries and photographs are unlikely to provide sufficient material when used alone – a combination is likely to be much more useful.
• There are other methods of carrying out qualitative research, but these may involve either ethical or logistical problems which are not appropriate for this project.
• If your work involves contact/ research involving anybody other than members of your group in any way other than those covered in class, you must check with SW before embarking on your research.

Work to be done:

1. Working as a group, identify appropriate methods for collecting the information.
2. Draw up a timetable for carrying out your research – allotting tasks to each group member.
Classes were held which dealt with specific techniques which could be of use in the project, for example, the use of group interviews and the keeping of diaries. At a mid-point in the project, students were provided with a short questionnaire which required them to review their progress. The team then compared responses and agreed a programme for completion of the work. Later sessions were devoted to the production of posters (where a modified version of that suggested by Kneale, 1996 was used) and oral presentations by groups. Then, in the final two sessions of the year each team of four students was required to give a 10 minute presentation about their research and to display their work in the form of a poster.

Assessment of the Work

Students receive marks and are provided with feedback on individual sessions during the project, but the main assessment is focussed on the final outcomes, (i.e.) the poster and the oral presentation. As part of the poster and oral presentation sessions, the students consider appropriate assessment criteria and they also vote on the total mark allocated to the poster and the presentation.

At the presentation sessions, the lecturer plus two other observers independently complete proforma recording sheets on each oral and poster. Their results are then compared to provide a final mark. The teams of students also contribute to the process by selecting the best presentation in terms of technical merit and in content. They also do this for the posters, which are displayed around the room and inspected after the presentations. The student results are used by the staff ‘assessors’ to inform their own final decisions.

Results and Discussion

The response of many of the students during the initial (revised) session varied between horror and panic. The demonstrators and I were inundated with requests for guidance on what research should be done. However, when it became clear that we were not going to provide this, but instead asked questions about the students’ own and other people’s leisure interests, they began to focus on their plans. It was found to be important at this stage to ask students questions that encouraged them to review their own ideas and to question them on details, to help them to clarify their thoughts and to overcome any immediate problems. During the course of the next week I had several visits from students who merely required reassurance that their ideas were suitable. While some groups needed assistance to refine their topics, all of the teams were able to find suitable research. I did, however, find it very hard to no to interfere, particularly when I considered that a better approach could have been used. I found it a great challenge to raise points in such a way as to avoid imposing my ideas on the group and, I must concede, that I am not sure that I succeeded on all occasions. I learned a great deal about my own style and at the end of the process felt that I had greatly developed my own facilitation skills.

The standard of presentation varied considerably between the groups. However, out of almost 50 presentations only one gained less than a pass mark, in contrast to previous years when a number had been very poor indeed. The students all appeared to have made considerable efforts and their work often showed real insight into their projects. The audience listened with apparent interest to the very varied topics, which included:

- The geography of canoeing;
- Trumpet and travel – the geographical experience of a marching band;
- When I was your age - the changing geography of leisure activities over time;
- The geography of pub location – a very popular topic!
- The geography of shopping.

From a personal point of view, this variety and my lack of prior knowledge of the type of project made the experience of spending 12 hours listening carefully to inexperienced presenters much less traumatic than in previous years. I actually found myself listening with great interest, particularly to the group who had researched the marching band and who used a trumpet and a very ornate hat with long feathers (part of the band uniform) as visual aids and finished by playing the band’s CD.

The student evaluations of the experience were generally very positive, with 89% (140 students) agreeing that they had enjoyed the teamwork aspects of the project and 96.8% reporting that their group working skills had been improved. Similar percentages also reported development of their skills in oral communication, project planning and data collection and analysis (Table 1). This represented considerable improvements from the responses of a previous group of students who had taken part in the earlier, more guided, version of this project. A further positive result of the empowerment of the students was that the average mark obtained increased from 49% during the first cycle of the project to 55% in the most recent year.

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Figure 1. Leisure activities briefing sheet

Step 3:
Collect data

Work to be done: depends on type of project/methodology selected

Step 4:
Analyse/ present data/ reach conclusions

Work to be done: depends on type of project/methodology selected

Step 5:
Prepare poster/ oral presentation

- Guidance on how these should be done will be provided in class at the appropriate times

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Issue 12 April 2004

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There are still aspects of this project which require further review: for example, some groups’ projects did not focus on the more spatial aspects of their topic (maybe their Sociology or Anthropology courses were influential). However, overall, the project did achieve the basic aim of allowing students to develop their own research skills, and generally seemed to provide sufficient structure to give them the confidence to carry out original research. An advantage of this approach is that it is extremely flexible, providing enough freedom to allow virtually every student to find something of personal interest, without leaving the choice so open that staff would be unable either to provide appropriate support or to be qualified to judge the results. It is planned that a similar project will be undertaken in the current academic year – when class size has increased again and there will be 200 participants.

<table>
<thead>
<tr>
<th>Skill area</th>
<th>1998-1999 (before revision)</th>
<th>2002-2003 (after revision)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>52%</td>
<td>83%</td>
</tr>
<tr>
<td>Team working</td>
<td>90%</td>
<td>97%</td>
</tr>
<tr>
<td>Written communication</td>
<td>50%</td>
<td>79%</td>
</tr>
<tr>
<td>Oral communication</td>
<td>78%</td>
<td>93%</td>
</tr>
<tr>
<td>Data collection</td>
<td>72%</td>
<td>93%</td>
</tr>
<tr>
<td>Research planning/aims/</td>
<td>78%</td>
<td>94%</td>
</tr>
<tr>
<td>objectives/objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data analysis and synthesis</td>
<td>62%</td>
<td>96%</td>
</tr>
<tr>
<td>Reaching conclusions</td>
<td>78%</td>
<td>90%</td>
</tr>
<tr>
<td>Total respondents</td>
<td>35</td>
<td>158</td>
</tr>
</tbody>
</table>

Table 1. Student recognition of skills developed during the project before and after the project was revised.

Conclusions

The major lessons learned in carrying out these group projects was that greater freedom for the students to make decisions about their learning and ways of working led to a much more positive experience for both the students themselves and the staff involved. The participants developed their skills and confidence in their own abilities (and learned about both the satisfactions and the frustrations of carrying out research). The staff member received real reinforcement for her stated belief that students generally wished to do well and were willing to carry out work when they were actively engaged in the process.

The temptation when faced with large classes is to make the work carried out as structured as possible, since this apparently makes the logistics easier. However, as this paper suggests, the need to deal with large numbers can provide the impetus to try out ‘freer’ approaches to learning and as such, lead to a more satisfactory and successful learning experience for all concerned.

References


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Editor’s Note

If you have particular views on this article, and any others in PLANET, then why not contact the editor (sgaskin@plymouth.ac.uk) and express your ideas.

HERODOT Thematic Network and the Tuning of Geography Education in Europe

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Abstract

This article outlines the aims and role of the European HERODOT Thematic Network for Geography in Higher Education. It focuses in particular on one of the project’s research pillars, which considers Europeanisation in Geography and the curriculum. The Tuning of academic subjects, through subject specific Thematic Networks, addresses several of the recommendations of the Bologna Declaration. This pillar is currently undertaking a survey of academics, students and employers in order to identify the importance placed on both subject specific and generic competences. The outcome of this research is the self-Tuning of Geography in Europe leading ultimately to curriculum changes and course developments based upon an increased awareness of the needs of employers.

Introduction

The HERODOT Thematic Network

HERODOT is the European Geography Network of higher education institutions. At its outset in October 2002 it had just 42 partner organisations. This number has continued to expand and at the end of its first year reached over 100 higher education Geography and environmental studies departments and geographical associations, with representation in 30 European countries (European Union, European Economic Areas and candidate countries). The members of HERODOT have begun to establish links by working directly and indirectly with national, European and multinational organisations and associations in the field of Geography and in geographical education. The purpose of the HERODOT Thematic Network is to establish a trans-national forum for the study, analysis and development of Geography in higher education and to promote the professional development of Geography teachers and lecturers. HERODOT thus plans to enhance co-operation, encourage mobility between countries and share information and expertise between higher education institutions. HERODOT functions as a focus of activity in matters concerning geographical education in Europe.