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STRATEGIC RESOURCE FOR
GEOGRAPHY DEPARTMENTS

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WORKING PAPER 94/11

SCHOOL OF GEOGRAPHY • UNIVERSITY OF LEEDS

WORKING PAPER 94/11

*A Graduates and Employers Database System as a Strategic
Resource for Geography Departments*

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ABSTRACT

With greater competition in the mass higher education market in UK, each institution will have to stimulate and promote greater interaction between itself and the world outside if it is to compete successfully. Presently such interaction occurs for a variety of reasons, at many different levels and over different time scales. This paper proposes an approach to fostering greater interaction at departmental level through a network of former graduates in geography and their employers. It describes the concept of a graduates and employers database system (GEDS) and outlines how such a system should become a key resource for strategic management and planning in geography departments.

INTRODUCTION

Over the last 15 years, the move towards mass higher education in the UK has brought about major changes to the organisation and funding of universities. As the move looks set to continue until the end of the century, universities must prepare for further changes to accommodate people at all stages of their careers, to initiate new formats and types of degrees and to allow for modular courses and the greater mobility of students. At the same time, they must become more responsive to the needs of the world outside. In this context, the world outside includes industry, business and commerce, as one would expect, but also government, schools, charities, welfare, community, voluntary and other groups or individuals.

Interaction between universities and the world outside already takes place at various levels. For example, at one level, there are the alumni associations. At another level, there is the careers service. There is however a strong case for developing and fostering links with graduates from one department and their employers. In designing a mechanism for doing this, one could create a key resource for strategic management and planning within a department. The School of Geography, University of Leeds, one of the largest departments of Geography in UK with some 750 undergraduate and 80 postgraduate students in 1994, has recently examined one way of approaching the problem.

This paper describes the concept and function of a graduate and employers database system (GEDS) for geography departments and discusses how such a system could become a key resource for strategic management and planning within a department. The paper has three parts: the first considers the background against which the move

towards developing a GEDS in geography was made; the second describes briefly the functions of such a system; and the third discusses some of issues involved in the creation of such a system.

2 BACKGROUND

The move towards mass higher education in UK is well underway. The proportion of 18-year olds going into higher education has more than doubled in the last 15 years, from 13 percent in 1980-81 to 31 percent in 1993-94. Though still a long way behind the 50 percent going into higher education in Japan and 38 percent in USA, this growth has raised many questions over the quality of higher education and whether the courses are appropriate and attuned to the needs of business, commerce and industry in 1990s.

Employers' organisations feel that universities do not take account of the growing demand from employers for a different, more flexible, concept of higher education. They argue that there needs to be more flexibility in universities so that they can offer access to people at all stages of their career, not just for three years after leaving school. (CBI, 1994). Universities have responded with a new, flexible system of academic credits and modules, with part-time degrees and other forms of "pick and mix" for mature students taking course modules and eventually degrees while continuing their career and with recommendations for the creation of new "associate degrees" which would be awarded mainly through vocational training. With extra credits, these could be upgraded to an eventual honours degree (Robertson, 1993; 1994).

The recent expansion in higher education in UK has come mainly from an increase in the number of 18-year olds entering universities for traditional three-year degree schemes. This trend looks set to continue. But the expansion has also come from an increase in the number of post-graduate students taking masters and other degrees, either full- or part-time, and in the number of mature students taking modules or degrees for professional advancement. As a result, the number of graduates from universities has increased significantly in recent years and the trend is likely to continue. This has occurred at a time when the economy in UK has been in severe and prolonged economic recession and when employment prospects for graduates have possibly been less favourable than they have been for a decade.

The effect has been somewhat traumatic for recent graduates in geography from the University of Leeds. During the late 1980's, a majority of graduates in geography who sought employment were able to find it within six months of graduation in diverse areas of business, commerce, industry or education and research. A survey of graduates in geography from Leeds in 1989, for example, conducted six months after graduation revealed that, from a total of 83 graduates, 63% found employment, 13% went into research or further training, 11% were not available for employment and 10% were seeking work, the destination of the remainder being unknown.

A similar survey of graduates in geography from Leeds in 1993 revealed a different pattern. Out of 151 graduates, 43% found employment, 32% undertook research or further training, 16% were still seeking work, 5% were not available for work, 0.5% returned to overseas countries and the destination of the remainder was unknown.

Changes in the employment prospects for graduates in geography in the 1990's have been dramatic. Employment opportunities in management, banking and the financial

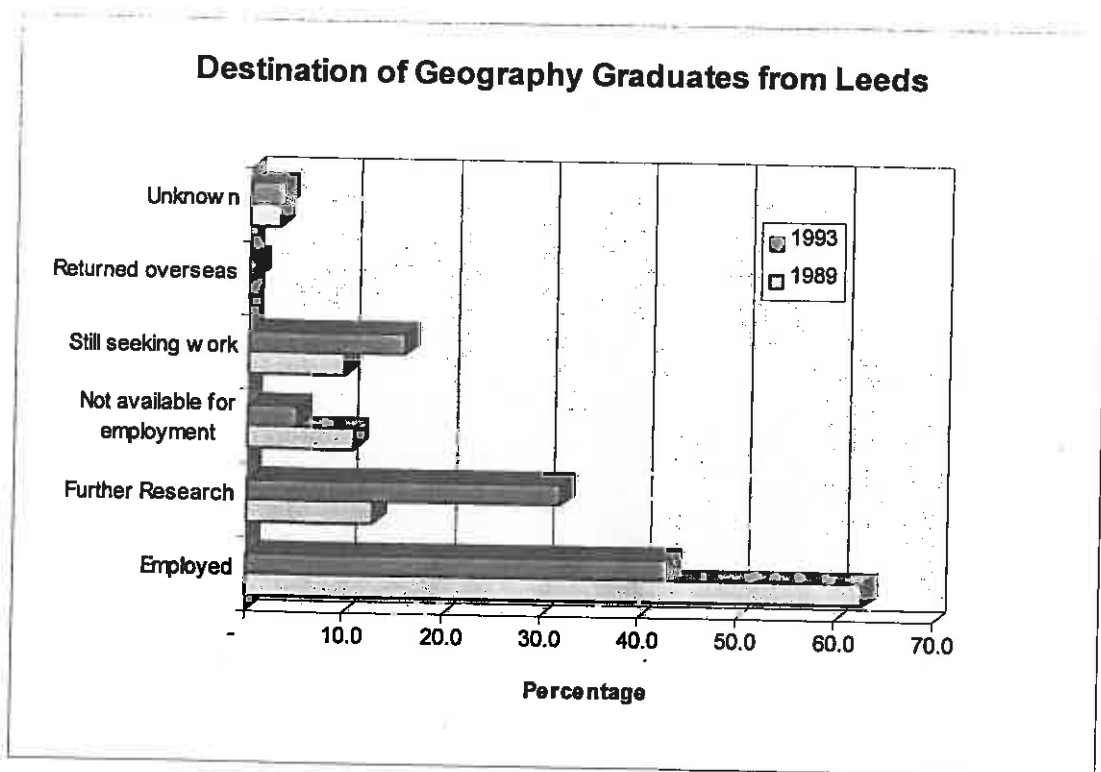


Figure 1. Destination of graduates from BA and Bsc Honours Degrees in Geography from Leeds in 1989 and 1990 (Source: Careers Service, University of Leeds).

services sectors - the categories where a majority of graduates in geography from Leeds found employment previously - have been severely hit by the economic recession and by changes as a result of developments in information technology. Employment in other areas has fallen though to a more limited extent. The number going on to do research or further training has increased dramatically. What is perhaps of greatest concern however is changes in the nature of jobs which geography graduates are being offered. Instead of embarking on a career, for example, as trainee managers, a growing proportion of jobs appear to be menial service jobs, to involve less responsibility and to offer quite limited prospects for developing a career. While graduates with good degrees are still being offered employment with good career prospects, there has been a surge in the number of graduates taking temporary work in non-professional/non-managerial occupations such as manual, clerical and

miscellaneous work in shops, fast-food outlets and offices. The tendency mirrors what is happening nationally where there has been a significant growth in casual, part-time and other short-term low-paid work, often undertaken by females, at the expense of full-time male employment.

The result is that both academic staff and students in geography have had to reappraise their objectives and aims when preparing and choosing courses in geography. Staff are re-examining the geography curriculum, its aims and methods of teaching, its academic content, its progression of knowledge, its development of skills and its methods of assessment and course evaluation. For example, the trend is towards encouraging students to take greater responsibility for their own learning, for acquisition of skills and even for self-assessment. Underlying this is the notion of making students more aware of their abilities, strengths and shortcomings and of encouraging them to address and remedy any shortcomings. As a result, students are beginning to look far more critically than in the past at what a degree in geography will give them.

All this is happening at a time when the body of knowledge and skills that constitutes the discipline of geography is probably more relevant as a subject for advanced study than it has ever been. While undergraduate students clearly appreciate this, they show more awareness of the need to acquire basic skills, to create learning opportunities for developing their knowledge and transferable skills as part of their geography degree and for fulfilling their aspirations to equip themselves for a career. At the same time, students seem more aware than ever before that their chance of finding a job after graduation depends as much on their initiative, personality and motivation to do well

as on their knowledge and skills in geography as reflected in their type and class of degree.

As in most departments of geography, the School of Geography in Leeds has many contacts with the world outside though these are not specifically with graduates and their employers. Up until now, links with graduates and employers have often tended to be on an *ad hoc* basis. An academic member of staff has typically kept in touch with past graduates who for example took advanced courses or who did projects under the supervision of that member of staff as part of their geography degree.

Similarly, a member of staff has usually maintained links with selected employers because he has shared interests in a field of study. For example, the author has contacts with many graduates who took optional courses in photogrammetry, digital mapping, remote sensing and geographical information systems for environmental resource management. He has professional contacts with companies which work in these fields and which are employers of geography graduates. But this is essentially a haphazard and individualistic approach. Some departments appear to have a more systematic and concerted approach and to have gained significantly from this (Briggs, 1988). While the work involved in collecting and revising the information about graduates' careers is undoubtedly considerable, the information and network of contacts that it provides represents a significant and valuable source of information for the department.

There is now growing recognition amongst my colleagues that the informal arrangement between individual members of staff and students is no longer adequate or appropriate. As student numbers have grown, there is difficulty in maintaining contacts and in keeping track of where former students have found employment. Yet

if we are to succeed in finding, and indeed, in some cases, in creating new employment opportunities for graduates in geography, we must be proactive in developing and maintaining channels of communication with the world outside the university. What we shall need to do in future therefore is to adopt a more formal and systematic approach to developing and maintaining links with graduates in geography and employers of these graduates. This perceived need arises partly from changes taking place in the nature and opportunities for graduate employment in UK and Europe and partly from the pace and nature of changes taking place in higher education as a result of the move towards mass higher education in UK, including new forms of access through part-time, associate and modular degrees and quality assessment of research and teaching.

The author has recently explored the possibility of creating a Graduate and Employers Database Systems (GEDS) as a key resource for strategic management and planning within the School of Geography. GEDS would be linked indirectly to an existing Student Information System (SIS) in the School. When students are awarded their degrees, part of their records would be transferred from SIS to GEDS. New information would be added to GEDS about what graduates in geography do and what employers of graduates think about their ability, knowledge, skills and motivation after they have been working for them for one, three or five years. In this way, GEDS would serve as a key departmental resource and would inform decision-making processes. Initially it would provide a vehicle for developing and fostering links with employers of graduates and with graduates themselves. Eventually it could be expanded in various ways to explore new areas such as employment opportunities for graduates in geography. But it could also be expanded to inform academic staff about a broad range of issues, such as the geographic curriculum, methods of teaching

and learning, development of key skills and possibly new topics or activities to be included in degree courses. Just as one of the most valuable assets of a business is its database of customers and their particular needs and aspirations for goods and services, the concept of maintaining a graduate and employers database as a key strategic resource for management and planning within the School of Geography has taken shape.

3 FUNCTIONS OF GEDS

Given the pace of changes in higher education and in the employment prospects for graduates in UK and Europe, universities need to devise more effective ways of equipping students of geography for identifying and taking hold of learning opportunities and for preparing them for employment. An essential first step in this process is to ascertain what graduates in geography do after graduation, to develop profiles of typical career paths and to find out what employers of geography graduates think about the performance of geographers, their range of skills and fitness for the work environment (Unwin, 1986).

When one attempts to find out what we know about graduate employment of geographers, the information from the surveys conducted by the careers service six months after graduation is extremely useful. Other surveys have been reported from time to time in the literature (Balchin, 1983; Johnston, 1989; Healey, 1989; Clarke et al, 1990). While these provide insights into the career choices of geography graduates in the 1980s, graduates in the 1990s have to face a different economic situation. And what happens to geography graduates as their careers develop is more difficult to

ascertain (Johnston, 1989, Hebden, 1982). While some surveys are conducted regularly by geography departments after one year, the information is not always available in a standard form over a period of years. Though useful, it is often limited in scope and coverage. The aim is therefore to devise a more systematic and effective system of recording what happens to graduates in geography throughout their early careers and to see what lessons we can learn from this information about how well higher education prepares graduates in geography for jobs in diverse fields of employment.

The central idea is that GEDS will form a departmental resource, managed and used by staff in geography. While it may contain information from various sources, it will hold much more information about former students and employers than that typically held by the careers service, alumni association or others. The role of a GEDS is envisaged as impingeing on all activities within the School, including undergraduate teaching, post-graduate teaching, short course provision, short-term and long-term research, research contracts and departmental administration. As a first step, staff will have to agree a broad strategy and initiate more interaction with organisations outside the university and to begin the process of developing key contacts both with employers and with past graduates. This will inevitably involve extra work. Some of this may however be linked to other activities in the School such as those of the Yorkshire and Humberside Regional Research Observatory (Gouldson, 1994).

The case for fostering links with employers of geography graduates and graduates themselves can be made on many grounds. For example, there could be benefits for

employers, for new graduates, for academics in universities and for undergraduate students. The specific aims might include:

- ♦to determine jobs taken by graduates from each degree scheme involving geography;
- ♦to sample the career profile of graduates in order to determine how their perception of their degree in geography from Leeds changes and to feed this information back to undergraduates, curriculum development, etc.;
- ♦to survey views about a degree scheme involving geography and its relation to employment function as graduates progress in their chosen career;
- ♦to cultivate links with employers of geography graduates for a broad range of functions such as encouraging sponsorship, student placements, donations, supply of data, access to equipment and facilities in industry or in university, prizes and continuing professional education for employers;
- ♦to find out what employers think about geography graduates from Leeds, their skills and training in key areas and their preparation for employment;
- ♦to invite employers to contribute to curriculum development, seminars, teaching, staff secondments and a host of related activities, some of which individual members of staff may already do but rarely in a coordinated and purposeful manner.
- ♦to inform employers about changes in geography as a discipline, about seminars, training sessions, conferences, contract and consultancy services which the School can offer on a broad range of subjects.
- ♦to place stronger emphasis on achieving strategic goals within the geography department, to monitor trends in the rapidly changing market for geography

graduates and to react more quickly to new opportunities for graduate employment, for research or for education and training involving geography, such as new associate degrees.

Feedback from employers of geographers and geography graduates would be analysed in GEDS and used to inform processes of management and planning in the School.

Feedback would serve many functions: it would for instance be taken into account in procedures for reviewing the content of courses, methods of teaching and learning, scope for new degrees or course modules, student placements, staff development, staff recruitment, staff exchanges with industry and so forth. By storing the feedback and other information in a single comprehensive GEDS within the School itself, the types of data and functional aspects of the system could be tailored to match perceived demands for management information. Such information might be historical, current or predictive to give maximal value for management and planning.

GEDS would be used to identify major employers of geography graduates in recent years and to target these for developing mutually beneficial links and interactions. Like most departments, geography has paper records of past, present and potential employers, has knowledge of former graduates who are now in various positions within large organisations and has a list of their current employer. If we could add to this the names and backgrounds of key people in an organisation with whom we might foster links, then we would have a much more valuable system. Presently the School has information from diverse sources and in various formats. These are not readily accessible, making it difficult to use effectively. When it is required, for example, to search for a particular student or employer, to prepare a mail-list for a

specific purpose or generate statistical performance indicators for management planning, current methods involve considerable labour and resources.

A GEDS in geography would allow these tasks to be done much more efficiently. It would also allow a range of tasks which we do not presently attempt to do to be carried out. As a GEDS would contain information about graduates, employers, survey results, placements, prizes, seminars, job opportunities, research opportunities with employers, sponsorships and similar information, it would be possible for instance to search for graduates with particular knowledge and skills to match a job vacancy, for employers requiring specific knowledge and skills in new graduates and so forth. In this way, the functions of GEDS can be seen to cover routine low-level activities as well as generating high-level reports and statistics for management and planning of the department.

4. DISCUSSION

One of the criticisms of a GEDS is that it would inevitably involve staff in more work. While this is probably true, (and there will of course be some work in developing the GEDS software), any extra work must be balanced against potential gains for the department and its staff. A significant proportion of the information that would form the basis of GEDS is probably already available in most departments. It is however often held as it was obtained, in questionnaire returns, requests for references, personal letters to individual members of staff and so forth. For a modest amount of extra effort, this information could be collated and stored in

a GEDS in a systematic and comprehensive manner. Undergraduates could be employed over the summer vacation to begin this work.

If a GEDS in geography is simply a database system, its functions would be limited and it might not reach its full potential. To ensure its success, a GEDS would need to have a series of small applications attached to it. For example, there could be one for writing references for former students. In this way, information in a reference such as the name and address of an employer might automatically be added to the database, along with any job specification and the name of the graduate. While the creation and maintenance of a GEDS would clearly involve additional work, this would be offset to some extent by the benefits to the department as a whole from having a single integrated system.

The systematic collection of information from the world outside would need clear objectives and careful planning in order to meet the strategic goals of the department and to succeed in meeting the diverse functions of a GEDS. In most departments of geography, this would represent a major additional workload. While there are departments in universities that have established working relations with one sector of industry and that can arrange student placements, graduate employment and even staff placement or exchanges with industry by a single telephone call, this is rarely the case in geography. This is because geography graduates find employment in diverse areas. Establishing contacts with the world outside would therefore need to be done by a variety of means and by a sustained, concerted effort by all staff in a department. Whatever means are used to gain these contacts, they would involve some effort and investment of resources. In essence, the argument is that for a modest increase in effort and resources, organised and promoted at departmental level, there would

probably be significant benefits both in the short- and long-term through developing the notion of a GEDS for geography.

The notion of a GEDS for the School of Geography in Leeds came to the author when he was invited to look into ways of stimulating more contacts with the world outside under the Enterprise in Higher Education Initiative. It commanded wide support from colleagues in Geography but a bid for funding to develop and implement a GEDS in the School was rejected by the University on the grounds that the idea had major significance for all departments. The University has therefore taken charge of developing both a Student Information System (SIS) and a GEDS which each departments could have. A successful SIS has been developed using the Microsoft Access database and is being used across many departments. It is expected that a GEDS package will follow shortly.

In the author's experience, graduates often welcome contact with lecturers and their former academic department long after graduation. Some like to keep in touch with developments in geography as a discipline; many like to hear news about staff and other changes in a department; and most want to hear news about their contemporaries. Graduates who have moved into jobs in the world outside can, in turn, provide the department with valuable information, albeit with hindsight, about the geographic curriculum. They can debate its relevance to their careers, inform discussions about methods of teaching and assessment and contribute ideas for new courses. They can contribute to a broad range of matters such as the demands of employers for new staff with certain knowledge and skills, employment opportunities for graduates, demands for professional training and potential research contracts. In short, there are mutual benefits to be derived from actively encouraging

and maintaining contacts between graduates in geography and their former department and the concept of a GEDS at department level would help realise these benefits .

The lessons for other departments appears to be that the notion of a GEDS is one whose time has come. While there has been widespread support for the notion, debate about how best to design and implement it has gathered heat. On the one hand, a modest extension to the SIS would serve a range of functions and be relatively straight-forward to implement and use. On the other, some see a GEDS as playing a crucial role in strategic management and decision-support within the department. In this case, the role of a GEDS in geography is a more ambitious proposal but one that is currently favoured.

REFERENCES

- Briggs, J. (1988) Jobs for Geographers: Some Hard Evidence. *Geography* Vol 73(2) No 319 pp 137-140.
- CBI (1994) *Thinking ahead: education into the 21st century*. Confederation of British Industry, London, June, 1994, 40 pp.
- Clarke D. Healey M.J. & Kennedy, R (1990) Careers for geographers. *Journal of Geography in Higher Education* Vol 14 pp 137-149
- Gouldson, A. (1994) Industrial initiatives for environmental protection in Yorkshire and Humberside. *The Regional Review* Vol 4 No 1 p21-22.

