Geography Discipline Network

INCLUSIVE • CURRICULUM • PROJECT

The Experience of Learning at University by Disabled Students in Geography, Earth and Environmental Sciences and Related Disciplines

Report on the Inclusive Curriculum Project (ICP) Student Survey

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About the

INCLUSIVE•CURRICULUM•PROJECT

This project is designed to develop, disseminate and embed resources for supporting disabled students studying geography, earth and environmental sciences in higher education and to transfer the generic lessons widely to subject-based academics, educational developers, learning support staff and disability advisors. The project is being run by the **Geography Discipline Network**, a consortium of old and new universities based at the University of Gloucestershire, and is being undertaken in consultation with the Learning and Teaching Support Network Geography, Earth and Environmental Sciences Subject Centre (LTSN-GEES). The project is funded by HEFCE under its Improving Provision for Disabled Students programme, and is scheduled to be completed by December 2005.

The [1]**GDN Team** for the project includes lecturers from geography, earth and environmental sciences, educational developers, disability advisors and staff with research experience of disability issues.

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Further information about the project is available on the GDN website at www.glos.ac.uk/gdn/icp and a list of planned publications is given at Appendix 4.

The Experience of Learning at University by Disabled Students in Geography, Earth and Environmental Sciences and Related Disciplines

Mick Healey and Tim Hall

Executive Summary

This report analyses the findings from the first ever survey of disabled students in geography, earth and environmental sciences and related disciplines. It focuses on the experiences of 80 disabled students from six different universities of teaching, learning and assessment. By giving this group a voice this report aims to contribute to their empowerment. The report is one of the first outputs from the Inclusive Curriculum Project funded by the HEFCE Improving Provision for Disabled Students Programme.

Perhaps the most surprising finding is that, with the exception of lectures, over half the disabled students, and often as many as three-quarters of them, have *not* experienced disability-related barriers with different forms of teaching and learning. Even fieldtrips, where it might be expected that the barriers to learning would be highest, only one in five disabled students reported they had experienced difficulties. However, the proportion doubled to slightly over two in every five disabled students in independent fieldwork (e.g. researching for an assignment or dissertation). Assessment generally caused the respondents greater problems, with between 37% and 63% reporting difficulties with various forms.

These findings suggest that using a general category entitled 'disabled students' is problematic and devising general policies to support their teaching, learning and assessment may not always meet the specific needs of individuals. Arguably in the long run the main beneficiaries of disability legislation and the need to make suitable adjustments in advance are the non-disabled students, because many of the adjustments, such as well prepared handouts, instructions given in writing as well as verbally, notes put on-line, and variety and flexibility in forms of assessment, are simply good teaching and learning practices which will benefit all students.

1. Introduction

The survey of students targeted disabled students at six universities in Geography, Earth and Environmental Science (GEES) subjects and related disciplines in England. The survey was questionnaire based and included a variety of open and closed questions which allowed the collection of statistical information and detailed qualitative testimony from students. Students were accessed by working with the disability advisors, or people in equivalent posts, at each university. All student responses were anonymous to the course team and only identifiable to disability advisors within each university.

The survey aimed to collect information on a range of issues relating to the disabled students' experiences of teaching, learning and assessment. In line with the social model of disability the emphasis was placed on the barriers that disabled students face. Identifying the nature of these barriers is important if they are to be overcome or reduced so that the quality of the learning experience is enhanced. A copy of the covering letter and questionnaire can be found in Appendices 1 and 2.

The questionnaire was divided into the following sections:

- Background information
- Experiences of teaching and learning
- Experiences of fieldwork
- Experiences of assessment
- Experiences of staff support

The questionnaire consisted largely of a series of questions asking students about the topics above. These used a likert scale and students were asked to what extent they agreed or disagreed with each statement. These were supplemented in each case with the opportunity for students to add detailed open comments. An example of a question from the survey and its format is give below.

Example Question

My learning experience in residential fieldwork (e.g. a UK or overseas fieldtrip) has been affected by my disability

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

In addition to these questions the questionnaire also asked for biographical information from students such as age, gender, disability and details related to their study.

The survey served three purposes. First it was intended to be one of a few systematic surveys of the teaching and learning experiences of disabled students in higher education and the first specifically in GEES disciplines (see Riddell, 2002; Fuller, et al. 2004). It supplements previous work on the staff experience of supporting disabled students undertaking fieldwork (Gravestock and Healey, 2001; Hall et al, 2002). It thus helps address an important gap in knowledge about disabled students. In addition the material gathered is being used in the production of a series of guides advocating and underpinning the development of inclusive curricula within the GEES disciplines. Finally, the team felt that the voices of these student populations had been largely absent from public debate. The survey was a conduit through which their concerns could be heard and, it was hoped, might act as a mechanism through which these groups might be empowered.

2. Characteristics of the Survey

In total the survey produced 80 returns from approximately 250 questionnaires distributed. This represented a response rate of 32 per cent. Table 1 shows that the responses were dominated by full-time, undergraduate students. All three levels of undergraduate study were well represented and an equal number of male and female students. Although the majority of the returns were from students aged 20 and under, a significant number of older students responded to the survey.

Table 1: Summary Statistics for Respondents

	Number	**Percentage**
Undergraduate	79	98.7
Postgraduate	1	1.3
	Number	**Percentage**
Level I	18	23.1
Level II	31	39.7
Level III	29	37.2
	Number	**Percentage**
Full Time	75	93.7
Part Time	5	6.3
	Number	**Percentage**
Male	40	50
Female	40	50
	Number	**Percentage**
20 and under	54	67.5
21-30	15	18.7
31-45	8	10
46-60	3	3.7
Over 60	0	0.0

The students who responded to the survey undertook a wide variety of subjects, combinations and types of degree which are detailed in table 2. All of the major GEES subjects were represented within the responses as well as smaller subjects, in terms of undergraduate numbers, such as local policy and environmental management and specialised subjects such as marine biology or third world development studies. A number of students indicated that they combined their GEES subject with non-GEES related subjects. These are included in table 2.

Table 2: Subjects Studied by Respondents

Single Honours (33)	Geography – 6; Earth Sciences – 4; Environmental Science – 4; Geology / Geological Sciences – 4; Third World Development Studies - 4; Landscape Architecture – 3; Applied geology – 1; Biochemistry – 1; Local Policy – 1; Marine Biology – 1; Tourism – 1; Psychology – 1; Environmental Chemistry – 1; Environmental Management -1
Major (13)	Geography – 4; Physical Geography – 4; Environmental Management – 1; Garden Design – 1; Heritage Management – 1; Psychology – 1; Sports Education - 1
Joint (56)	Geography – 18; Physical Geography – 7; Human Geography – 4; Environmental Science – 3; Psychology – 3; Environmental Management – 2; Planning Studies – 2; Economic 2; Anthropology – 1; Business Management – 1; Cartography – 1; Cities and Society – 1; Ecology – 1; Food Science – 1; Exercise and Health – 1; History – 1; Natural Resource Management – 1; Media – 1; Social Science – 1; Sports Development – 1; Sports and Exercise Science – 1; Third World Development Studies – 1; Transport - 1
Minor (14)	Geography – 3; Geology – 2; English Studies – 1; Environmental Science – 4; History – 1; Landscape Design – 1; Psychology – 1; Ecology - 1

Note: Several, but not all, students taking major, joint or minor programmes identified the other subject or subjects that they were studying

Five out of six of the participating universities were 'post 1992' institutions. The University of Gloucestershire produced the most returns by a single university. However, significant returns were also produced by the other participating universities (table 3).

Table 3: Responses by Institution

University	**Number**	**Percentage**
Oxford Brookes University	16	20
Plymouth University	10	12.5
Middlesex University	6	7.5
Liverpool John Moores University	7	10.1
Lancaster University	11	31.4
University of Gloucestershire	30	37.5

Over half of the responses indicated that their disability category was dyslexia (table 4). This reflects the dominance of dyslexia as the most frequent category amongst higher education students in the UK. The 'unseen disability' and 'other disability' categories were also significant. A higher percentage of students in the survey ticked 'dyslexia' than in the national statistics for the GEES group of subjects and a lower percentage ticked 'unseen disability'. However, some students with dyslexia may have self-declared themselves with an 'unseen disability'. Together approximately three-quarters of the students both in the survey and the national statistics identified themselves with one or other of these two disability categories.

Table 4: Responses by Disability Category

Disability category	Number*	Percentage of total responses	Percentage of UK disabled students in LTSN-GEES, 2001/02**
Dyslexia	41	54.6	38.1
Unseen disability	14	18.6	19.4
Wheelchair user / Mobility difficulty	3	4.0	6.0
Mental health difficulty	3	4.0	4.6
Deaf / Hearing Impairment	1	1.3	7.3
Blind / Partially sighted	1	1.3	3.1
Multiple disability	10	13.3	9.2
Other disability	2	2.7	11.9
Aspergers syndrome / Autism	0	0.0	nsi
nsi	75	100.0	100.0

Note: * Five respondents did not identify their disability category
** Based on special tabulation for LTSN from HESA statistics; 453 students identified a disability or 5.0% of the 8,900 HESA registered population (the responses of 119 of these were not known or information not sought);
nsi - not separately identified

The dominance of dyslexia within the sample has two related implications. First, it will affect the results of the survey. All of the disability categories are unique in terms of the experience of impairment. The dominance of a single category within the sample means that the results will have an inherent bias towards one category. Extrapolating

the results across a range of disability categories is, therefore, problematic. However, given the uniqueness of the experiences of different impairments this would be problematic regardless of the sample size or distribution between different disability categories. To talk of a single group 'disabled students' is both an objectification and generalisation. Second, it is important to remember that in the majority of categories any results will be based on a very small number of returns. Again, generalisations from the results of the survey, even within individual categories, are difficult.

The final questions in the introduction section sought to explore the influence of respondents' disabilities on their decision to study at a particular university and on their choice of subject (tables 5 and 6). Overall there was little evidence that disability was a factor in these regards. Only 11 respondents indicated that their disability was a factor in their choice of university and only 12 in their choice of subject. However, for those respondents who were thus affected, these were serious issues (boxes 1 and 2).

Table 5: My disability was a factor in my choosing to study here

	Number	**Percentage**
Strongly Agree	5	6.3
Agree	6	7.6
Disagree	30	38.0
Strongly Disagree	38	48.1

Box 1: Responses from students who indicated that their disability was a factor in their choice of university

- I felt that the University had good support facilities for dyslexic students. (Dyslexia)
- They offered loads of support. People were about to talk to when we came to look at the Uni on an open day. No other Uni appeared to do this. (Dyslexia)
- When I first started looking at universities, support was not the first thing I looked for. But after I had to choose from a start list of places it became important. (Dyslexia).
- XXXX is near to my home – so if I get ill it's easy to travel home or for my parents to come here. (Mental health difficultly).
- I decided not to apply to XXXX University as they sent me a questionnaire several pages long on my disability (to be filled out in my own handwriting) after I had said that I had difficulty writing on my UCAS form. (Other disability: arthritis)

Table 6: My disability affected my choosing of subjects to study

	Number	Percentage
Strongly Agree	2	2.5
Agree	10	12.7
Disagree	28	35.4
Strongly Disagree	39	49.4

Box 2: Responses from students who indicated that their disability was a factor in their choice of which subject to study

- I have had to cope with my injuries for a very long time. I chose what really interested me – and I knew I would have to cope. I had hoped to do more fieldtrips, e.g. XXXX (in Asia), but I realised [it was] just not possible. I do not believe other student's studies should be adapted / limited for me. (Complex, multiple disability)
- To a point yes. I wouldn't be able to study a maths, engineering degree or English. I couldn't cope with the amount of writing. (Dyslexia)
- More recently I have chosen courses with less coursework and especially easy formats, because I'm not able to read around a topic enough in the time given. (Dyslexia)
- I find science-based subjects easier to understand. (Dyslexia)
- I was originally at another university doing a course in textile design which had a negative effect on my disability, therefore, I had to change to a course more suitable for my health. (Unseen disability)
- I have always wanted to be a solicitor after years as a legal secretary. I chose a subject that I was passionate about. I suffer some cognitive impairment and choose a subject that I thought was 'less intellectual'. What I now lacked intellectually I hoped my enthusiasm and passion could make up for despite having started a law degree before my illness. (Unseen disability)

3. Experiences of Teaching and Learning

Of all of the forms of teaching the most problematic for disabled students were lectures. Over half of all respondents indicated that they had faced disability related barriers which have impacted on their learning experience in lectures. While this might in part be related to the almost universal experience of lecture-based teaching compared to other forms of teaching and learning, respondents did indicate a range of barriers they had faced in lectures (box 3). In addition a large number of dyslexic students indicated that they had difficulty taking notes or copying down information from OHPs, PowerPoint or white boards.

Table 7: I have faced disability-related barriers which have impacted on my learning experience in lectures

	Number	Percentage
Strongly Agree	7	9.0
Agree	35	44.9
Disagree	24	30.8
Strongly Disagree	12	15.4

Box 3: Responses from students who indicated that they had faced barriers which have impacted on their learning experience in lectures

- The three hour lectures could pose a problem if no break was given as it's important for me to eat to avoid hypo's and if they clash with lunch / dinner times this can be awkward. (Diabetes)
- In Geography there are not so many slides and notes on the intranet as in sport. This means I have to take more notes and I find this difficult when I am trying to concentrate on what is being said. (Dyslexia)
- My assimilation of knowledge is made more difficult by my having to take medication which slows the process down; so many more hours than would usually be expected are taken at study within the laboratories and trying to recall data within lectures. (Mental health difficulty and spondylosis)
- Couldn't get to some distant lectures for a while – missed out on vital information. (Wheel chair user / mobility difficulty – broken leg)
- Note taking, lack of confidence to participate in lectures. (Dyslexia)

Respondents generally indicated that they found laboratories and practical work less problematic learning environments than lectures. Despite this, 19 students indicated that they had faced barriers related to their disability which had impacted on their learning experience in laboratory and / or practical work (table 8). This can be attributed to two factors. First, a number of courses contain little or no laboratory or practical work. The experience of this form of teaching and learning is likely to be lower than other forms of teaching and learning. Second, the nature of teaching and learning in laboratories is likely to make it less problematic for dyslexic students. Although, some dyslexic students did outline barriers (see box 3), dyslexic students, and well as some of those with other disabilities, indicated that they found laboratory / practical work easier to negotiate and benefited from the presence of demonstrators and technicians during these sessions.

Table 8: I have faced barriers related to my disability which have impacted on my learning experience in on-campus laboratory and / or practical work

	Number	Percentage
Strongly Agree	5	6.5
Agree	14	18.2
Disagree	39	50.6
Strongly Disagree	19	24.7

Box 4: Responses from students who indicated that they had faced barriers which have impacted on their learning experience in on-campus laboratory and / or practical work

- My short-term memory has been a problem leading to errors. (Dyslexia)
- Unclear written instructions. (Dyslexia)
- Microscope work difficult. (Blind / partially sighted)
- Some difficulties have been experienced in more accurate work that needs a steady hand, also in using bulb pipette fillers, as I am unable to operate the buttons. There are, however, often sliding fillers that I have used instead (but not always). (Other disability – arthritis).

Similar numbers of students reported barriers relating to their disability which have impacted on their learning experience in other on-campus classes (e.g. seminars and tutorials) (table 9). While the issue of note-taking arose again for dyslexic students, a number also mentioned the problems they experienced in being actively involved in the generally more interactive settings of seminars and tutorials (box 5). Some students indicated that these smaller group settings meant help was more readily available, more easily accessed or individual needs more easily addressed than in lectures.

Table 9: I have faced barriers related to my disability which have impacted on my learning experience in other on-campus classes (e.g. seminars, tutorials)

	Number	Percentage
Strongly Agree	3	3.9
Agree	19	25
Disagree	36	47.4
Strongly Disagree	18	23.7

Box 5: Responses from students who indicated that they had faced barriers which have impacted on their learning experience in other on-campus classes (e.g. seminars and tutorials

- Can only remember about three words that the teachers say. Try to write it down, then they have moved on by three sentences. (Dyslexia)
- Reading for tutorials – way too much to do on top of other work (Dyslexia)
- I rarely participate in open discussions in seminars – it often is difficult for me to explain something. (Dyslexia)
- Sometimes feel I am unable to participate fully in seminars as I get mixed up and tongue-tied. (Dyslexia)
- The room is large and I have problems seeing the board. So I tend to sit at the front, but when it comes to group work I have to move, so I have problems seeing the OHP or PowerPoint. (Visual impairment)

Again, around 25 percent of respondents indicated they had experienced barriers relating to their disability which had an impact on their use of University library(ies) (table 10). A common issue was dyslexic students feeling the need to have library books for longer than the normal loan period (box 6). This was accentuated where books were only available on restricted loan or were in demand and likely to be recalled by other library users. The size of the library and volume of information available caused problems of orientation for some. Some found the actual act of locating books difficult because of their disability. This suggests that while university libraries are generally excellent in terms of physical access and negotiation, the needs of the large numbers of dyslexic students are not being fully met at present.

Table 10: I have faced barriers related to my disability which have had an impact on my use of the University library(ies)

	Number	Percentage
Strongly Agree	1	1.3
Agree	18	23.1
Disagree	37	47.4
Strongly Disagree	22	28.2

Box 6: Responses from students who indicated they had faced barriers related to their disability which have had an impact on their use of the University library(ies)

- I recently have admitted problems and asked for more help. Eyes are also getting old – bi-focals not good for library book choosing. But handling books with fingers very, very hard. Also dust mites – itchy, wheezy. The way to the library from the disabled car park was a mystery for 4.5 of 5 years! (Complex, multiple disability)
- I felt that I needed to have some books longer than their due date and extensive

photocopying was needed or constant renewing [of] books. (Dyslexia)

- The library could let dyslexic students have short loan books out for longer as it takes longer to read them. (Dyslexia)
- Due to the size of the library I do find it difficult to find the information that I require. Often find myself disoriented, frustrated and confused. (Dyslexia)
- I find the library easy to use, however, I find overnight loans very restrictive as it takes me quite a while to read and make notes from a book. (Dyslexia)
- I find it difficult and frustrating looking for books. (Dyslexia)
- Sometimes I find it difficult to find the books I need. (Dyslexia)
- Restricted mobility. Difficult to carry books around when you have crutches in your hands. (Mobility difficulty – broken leg).

The majority of respondents were not affected by difficulties related to their disability which had an impact on their use of technical facilities (table 11). However, those that did experience such barriers tended to find it difficult to spend long periods of time using computers or alternatively suffered financially through their heavy reliance on photocopied materials. The latter was particularly an issue for dyslexic students.

Table 11: I have faced barriers related to my disability which have had an impact on my use of technical facilities (e.g. computers, multimedia, audio/visual equipment, photocopying)

	Number	**Percentage**
Strongly Agree	3	3.8
Agree	11	13.9
Disagree	38	48.1
Strongly Disagree	27	34.2

Box 7: Responses from students who indicated they had faced barriers related to their disability which have had an impact on their use of technical facilities (e.g. computers, multimedia, audio/visual equipment, photocopying)

- Financial restraints of photocopying which I find useful to learn with. (Dyslexia)
- Reading from the computer screen. I lose track of what I am reading and constantly have to re-read it. (Dyslexia)
- My technical assessment stated that I could use my scanner to photocopy journal articles and therefore (was given) no photocopying allowance. I now either pay for lots of ink cartridges or I spend a fortune to get photocopies of papers. (Dyslexia)
- IRLENS syndrome can reduce amount of time spent on a computer. (Dyslexia and hearing impairment)
- There are no anti-flicker screens and I really need one. (Mental health difficulty)
- Being sat at a computer or desk of any sort does have an impact. The disability

department allowed me to have a computer at home and thereby created a greater degree of freedom away from other students, allowing me the ability to optimise my time. (Mental health difficulty and spondylosis)

- Computers – none of which have anti-flicker screens. I have one at home but it is easier often to use them at Uni which means I have to limit how long I use them. (Unseen disability)
- Because of my epilepsy I cannot work very long on computers. (Unseen disability)

Relatively few students indicted that they have faced barriers relating to their disability which has affected their use of learning resources (e.g. lecture handouts, computer assisted learning packages) (table 12). Indeed the consensus amongst respondents was that these things are very important support mechanisms to them (box 8). However, some dyslexic students indicated they had problems reading handouts which were in inappropriate formats.

Table 12: I have faced barriers related to my disability which have affected my use of learning resources (e.g. lecture handouts, computer assisted learning packages)

	Number	Percentage
Strongly Agree	1	1.2
Agree	13	16.9
Disagree	38	49.3
Strongly Disagree	25	32.5

Box 8: Responses relating to the use of learning resources

- Many of the handouts and learning packages were clearly explained and easy to follow. (Dyslexia)
- Lecture handouts – can't always read them as they are black and white and don't cover everything in lectures. (Dyslexia)
- Most lecturers now supply handouts on buff paper. Some do not. (Dyslexia)
- [Problems with] lecture handouts if the text is really small. (Dyslexia)
- Especially in one of my modules where instructions for weekly assignments and the assignments themselves were contained in a handout. (Dyspraxia and dyslexia)
- Sometimes I feel tired or unwell and cannot read lecture handouts. Sometimes when I read lecture handouts I simply do not absorb what I am reading. (Unseen disability)

4. Experiences of Fieldwork

Relatively few students indicated that fieldwork was a concern for them before they started their course because of their disability (table 13). The concerns raised by the

13 students who indicated that this was an issue for them were varied and reflected the diversity of their experiences (box 9). The majority of concerns revolved around being away from familiar environments and support mechanisms, concerns about physical mobility and stamina and concerns about note taking and information gathering in the field. A number of students indicated that they had experience of fieldwork prior to coming to university which had allayed any such concerns.

Table 13: Before I started the course I was concerned that my disability would affect my experience of fieldwork

	Number	Percentage
Strongly Agree	7	9.1
Agree	6	20.8
Disagree	30	39.0
Strongly Disagree	24	31.2

Box 9: Responses from students who indicated that before they started the course they were concerned that their disability would affect their experience of fieldwork

- I knew I would have to struggle – and try not to hold up others (e.g. do not drink for 18 hours before, so loo no problem). (Complex, multiple disability)
- Mobility, i.e. my gait and balance. (Deaf / hearing impairment)
- I was slightly worried about how I would cope with medical access while away. (Diabetes)
- [Concerned] that I would not understand. That I would be behind everyone else. (Dyslexia)
- Very concerned. Put it off, was unaware of the support available. (Dyslexia)
- Hindered by slow writing of notes in the field. I'm told to use a Dictaphone and write up later [this] is not acceptable. (Dyslexia)
- Sometimes I suffer panic attacks – these would affect my fieldwork. (Mental health difficulty)
- Before starting the course my disability was not under control so I was concerned there would be an effect on my experience of fieldwork. (Unseen disability)
- I have juvenile myoclonic epilepsy which causes me to have fits. I was concerned about this, and was worried I would have a fit in XXXX (North Africa). (Unseen disability)
- I was worried that I would fall sick during my fieldwork. (Unseen disability)

Again a relatively low number of students had indicated that their experience in residential fieldwork had been affected by their disability (table 14). Those that did indicate that their experience had been affected included a number of dyslexic students who found difficulty taking notes in the field (box 10), in addition a number of other students mentioned the physical challenge of fieldwork and some problems related to

the disruption to routine, especially where this involved administering medication or adhering to special diets.

Table 14: My learning experience in residential fieldwork (e.g. a UK or overseas fieldtrip) has been affected by my disability

	Number	Percentage
Strongly Agree	1	2.7
Agree	12	16
Disagree	24	32
Strongly Disagree	12	16
No Experience	25	33.3

Box 10: Responses from students who indicated that their experience of residential fieldwork has been affected by their disability

- Not really in a negative light, but on fieldtrip to XXXX (Southern Europe) was difficult to get hold of food sometimes. Couldn't really get involved in the clubbing till four am as needed to do night injection at regular time. (Diabetes)
- Note taking in the field was tricky as notes needed to be done quickly and roughly making it difficult to follow later. (Dyslexia)
- I am very scared about my fieldwork trip, whether I will be able to cope. (Dyslexia)
- Not yet, but from what I gather about the Easter field trip we are expected to do a lot of reading around at nights of quantities I won't be able to handle. (Dyslexia)
- Difficult to write notes. Notes are written in a field notebook which has to be given in, therefore, has to be legible and not always [is] in my case. (Dyslexia)
- Can't find fossils etc. (Dyspraxia and blind / partially sighted)
- On a second year residential trip my joints got progressively worse. The staff, however, were very good in allowing me to do what I could, and in helping me in the field centre. (Other disability – arthritis)
- Lots of fast uphill walking affects my asthma and found it hard to keep up. (Unseen disability)
- I have not yet had much fieldwork to worry about this year, although on a day trip to Bath we were walking round with a tour guide all day, which made very exhausted and I struggled to keep up with the pace. (Unseen disability)
- I found it very hard in XXXX (North Africa) as my myoclonic twitches (jerks) were very frequent in the mornings, the medication helps to subdue them but the drugs are always very sedating. (Unseen disability – epilepsy)

Fifteen students indicated that their experience of non-residential fieldwork had been affected by their disability (table 15). The issues of the physical challenge of fieldwork and problems with note taking and recording written information in the field again cropped up in these students responses (box 11).

Table 15: My learning experience in non-residential fieldwork (e.g. a half-day or one day fieldtrip as part of a module) has been affected by my disability

	Number	Percentage
Strongly Agree	3	3.9
Agree	12	15.8
Disagree	25	32.9
Strongly Disagree	26	34.2
No Experience	10	13.2

Box 11: Responses from students who indicated that their experience of non-residential fieldwork had been affected by their disability

- I can't walk fast – so always get to the 'chat zone' too late to hear full story. I do not expect anyone to plan field trips round me. Nor do I want to miss them. Enjoy them. Missed too much of life already. (Complex, multiple disability)
- I am quite well controlled in my diabetes and as long as I eat regularly and as teachers are aware of my condition there are no problems. (Diabetes)
- I think primarily because it involves a lot of personal organisation. (Dyslexia)
- Although I have been on three trips, I only had difficulty on one of them, where we had to copy stuff down from information boards when we looked round a visitors centre. (Dyslexia)
- In these instances I have always had to voice concern about the amount of walking and it seems that these concerns have either been forgotten or disregarded, leaving me at times in quite considerably pain both during and after field trips, with little / no consideration taken for this. (Other disability – arthritis)
- My fieldwork activities have been limited by my disability. I have had to take part at a lower-impact level and would have had to take longer to carry out activities especially when walking long distances. (Unseen disability and wheel-chair user / mobility difficulty)

Independent fieldwork emerged as a serious issue for disabled students with over 40 percent of respondents indicating that their learning experience in independent fieldwork had been affected by their disability (table 16). This was significantly higher than for other types of fieldwork. The fact that the dissertation fell into this category, probably the most challenging single piece of work undergraduates face, clearly affected these results. While undergraduates find the dissertation a challenge this appeared to be especially so for dyslexic students. The task of independent research was particularly challenging for these students as, by its very nature, staff support was less available for this. This issue of lack of confidence emerged as a major barrier to dyslexic students (box 12). Likewise, the fact that dyslexic students tended to take longer to complete assignments became especially significant for the longer dissertation project.

Table 16: My learning experience in independent fieldwork (e.g. researching for an assignment or dissertation) has been affected by my disability

	Number	Percentage
Strongly Agree	4	5.5
Agree	27	37.0
Disagree	18	24.7
Strongly Disagree	11	15.1
No Experience	13	17.8

This is an especially significant finding as it is an issue that has not been previously highlighted in the research literature. Further, given the centrality of the dissertation to the disciplines and its significance within the undergraduate degree, this issue merits further investigation.

Box 12: Responses from students who indicated that their experience of independent fieldwork has been affected by their disability

- I found it difficult to get started on the dissertation and I felt that extra support from a tutor helped as well as a disability tutor. (Dyslexia)
- Takes me longer than others to carry out the research for this, should have asked about an extension. (Dyslexia)
- It does take me longer than most to understand assignments and what I need to research for. (Dyslexia)
- I'm not confident doing this sort of thing because of my disability. (Dyslexia)
- Dissertation research was very hard and in large quantities. This made me base my dissertation on physical work so that I didn't have to read as much. (Dyslexia)
- Concentration for long periods of time can be a problem. If I work for days on end I find by the end I'm not taking in as much as I would have at the beginning. (Dyslexia)
- It takes me longer to work when not guided. (Dyslexia)
- Having extra tutor to help me with my English - GODSEND! But when I was doing my dissertation it would have been fantastic to see her over the holidays. An area I was very disappointed in was the fact that when I said I was dyslexic to my tutors some of the geog department said "Oh that would explain it!" I feel they should be trained to pick up on dyslexia - because mine was picked up so late I probably will not get a 2:1 which I feel I would have done if I had help earlier. (Dyslexia)
- Yes, I feel my epilepsy holds me back as on days I am not feeling well [it] affects my work considerably. In general, the seizures do affect my long-term concentration and I take a long time to do work. (Unseen disability – epilepsy)
- I was feeling constant headache, dizziness and tiredness throughout the time I was doing research for my dissertation, up to now I still feel the same way. (Unseen disability)

The issue of fieldwork and disabled students was explicitly explored in a previous project that resulted in the production of a number of web-based guides. These are detailed in the resources section at the end of this report.

5. Experiences of Assessment

While it was common for disabled students to face barriers related to their disability in all assessment types, the most problematic were written examinations and written coursework. In both of these cases over half of the respondents indicated that they had faced such barriers (tables 17-20). Again this is a reflection of the high number of dyslexic students within the sample (box 13). In addition to the writing issues experienced by dyslexic students, the problems of concentration and nerves, for a few, related to speech impairments, appeared to be a particular issue for disabled students. The problems relating to assessment appear to be a particularly serious area of concern for disabled students. This question drew far more lengthy qualitative responses than any other question on the survey.

I have faced barriers related to my disability which have affected my experience of the following types of assessment:

Table 17: Written examinations

	Number	Percentage
Strongly Agree	22	28.6
Agree	26	33.8
Disagree	20	26.0
Strongly Disagree	9	11.7

Table 18: Multiple choice / other examinations

	Number	Percentage
Strongly Agree	8	11.0
Agree	25	34.2
Disagree	28	38.3
Strongly Disagree	12	16.4

Table 19: Written course work (e.g. essays, reports etc.)

	Number	Percentage
Strongly Agree	15	19.2
Agree	34	43.6
Disagree	19	24.4
Strongly Disagree	10	12.8

Table 20: Oral presentations

	Number	Percentage
Strongly Agree	7	9.6
Agree	20	27.4
Disagree	29	39.7
Strongly Disagree	17	23.3

Box 13: Responses from students who have faced barriers related to their disability which have affected their experience of different types of assessment

- **Written exams** – I get pain, even though [I'm] given longer. Hard to concentrate. (Complex, multiple disability)
- **Written exams and course work** – hard to concentrate because I suffer from tinnitus and am easily distracted; **oral presentations** – speech problems sometimes. (Deaf / hearing impairment)
- **Written exams** – have worried about having a hypo in an exam and I'm a little shy about telling the examiners so I must let them know about my condition beforehand. Also high blood sugars can affect performance and revision can lead to tiredness. (Diabetes)
- **Written exams** – short-term memory affected my ability to answer exam questions effectively but extra time does help. **Written course work** – structuring an essay can be tricky as ideas can end up being scattered and not following well, as well as language. **Oral presentation** – I felt that dyslexia affects my ability to explain clearly orally. (Dyslexia)
- I always feel I need more time, particularly if more than one assignment is due at the same time. I have difficultly organising my time and workloads.
- I am rubbish at writing so I get help with **exams** but it makes it hard to get across what I want to say.
- I always read the questions wrong in **written exams**. **Multiple choice** is better but I get confused quickly when I try to read fast. I am really bad at **course work**. Luckily my course is mainly portfolios. Good at **oral presentations** but sometimes misspell on OHPs then everyone sees. (Dyslexia)
- I have struggled at all these due to processing information, constructing essays, putting thoughts onto paper, remaining on the subject and understanding questions. (Dyslexia)
- I am often told my **written work** doesn't pay credit to my understanding of the subject. I am continually frustrated by my inability to convey my understanding and views of a subject whenever written work is involved. (Dyslexia)
- I am much better doing a **multiple choice** exam than a **written exam** as it is difficult for me to explain the knowledge of a subject I know in **essays** but I would be quite confident in a multiple choice exam because I would know the information in order to be able to answer the question and would not have to worry about language structuring and spelling and grammar. I hate **oral presentations** because it is very difficult for me to converse my ideas out aloud and this is not to do with confidence but speech

problems. (Dyslexia)

- **Written exams** - Well in exams I panic anyway and on long essay questions my spelling goes to pot so the markers [chances of] understanding my writing are slim so there is some barrier there but there always has been so you just get on with it. (Dyslexia and unseen disability)
- My disability does not affect me **orally**. However, in **written exams** I need the use of a scribe, which is very difficult, as I lose my train of thought. Other exams, I write myself, and if they are **multiple choice** I don't have too many problems, but short answer tests tend to be more difficult. In **course work**, it takes me a lot longer to write stuff up. I have also had problems in getting deadline extensions. (Other disability – arthritis)

6. Experience of Staff Support

The survey revealed that students had felt that staff (both academic and support staff) had been helpful when they had approached them with concerns about disability related barriers (table 21 and 22). In both cases over three quarters of respondents had either agreed or strongly agreed with this. Isolated incidents where students had not felt this to be the case were noted in responses. However, these were relatively rare compared to the generally positive response of the majority. Given the largely positive response to these questions it was a little surprising to see mixed qualitative responses (see box 14). Generally, those who are happy with the staff support they have received are less likely to provide a qualitative response compared to those who have experienced problems or are less than happy with the staff support they have received.

Table 21: Academic staff (e.g. lecturers / tutors) have been supportive and helpful when I have approached them with concerns about disability -related barriers I have experienced

	Number	Percentage
Strongly Agree	19	25.7
Agree	38	51.3
Disagree	15	20.3
Strongly Disagree	2	2.7

Table 22: Support staff (e.g. administrators, technicians, librarians) have been supportive and helpful when I have approached them with concerns about disability-related barriers I have experienced

	Number	Percentage
Strongly Agree	12	19.3
Agree	39	62.9
Disagree	8	12.9
Strongly Disagree	3	4.8

Box 14: Responses – support from academic and technical staff

- **Academic** - Almost always [helpful], although everyone assumes I am simply fat. My hands as well as legs do not seem so bad. What happens 'in my head' I try to hide. (Complex, multiple disability)
- **Academic** - I have not received any extra help from my lecturers with any of my concerns about my disability barriers. I don't find them very approachable. (Dyslexia)
- **Academic** - A lecturer with experience and understanding of a dyslexic student helps. (Dyslexia)
- **Academic** - They have been in some small way helpful. But I tend not to go to them. I ask fellow students or ask my Dyslexic tutors. (Dyslexia)
- **Academic** - Some have, others haven't e.g. problems experienced with dissertation tutor. (Dyslexia)
- **Academic** - Obviously there is a big difference; some are very approachable and helpful, others are totally against the idea. In general, staff are supportive but the occasions they're not it is very frustrating explaining that I know what's going on even if I spelt it wrong. (Dyslexia)
- **Academic** - You are made to feel that you should know the module or that they do not have the time. (Dyslexia)
- **Academic** - As my disability is not too extreme I tend not to advertise it too much. The department knows of the problem but I don't think the lecturers take enough personal interest in students and therefore assume there is no problem. (Dyslexia)
- **Academic** - Some yes very helpful, others no. Some experience of lecturers [who] are very condescending and patronising. (Dyslexia)
- **Academic** - Any aid I have asked for has been granted without any question. (Dyslexia and hearing impairment)
- **Support** - Practically useless at XXXX; even the things they should definitely do like inform lecturers and [make] exam arrangements aren't always carried out and need to be checked. (In my year out at XXXX in North America, they were very helpful and organised). (Dyslexia)
- **Support** - The support staff have always done their utmost to help me and are very good. (Dyslexia)
- **Support** - It is more my inability to ask for assistance than their lack of help. (Dyslexia)

Over half of the respondents to the survey had consulted one of the University support services (table 23). Of those, the majority outlined the support they had received, predominantly from disability advisors. While the majority of this suggested a positive experience, there were a few instances where students were critical of the support they had received (box 15).

Table 23: Have you ever consulted one of the University support services (e.g. disability advisor, counsellor, Student's Union, student services) about disability-related issues affecting teaching, learning and assessment?

	Number	Percentage
Yes	44	56.4
No	34	45.9

Box 15: Responses from students who had consulted one of the University support services

- I did early on, found it a useless exercise that made me feel lousy. (Complex, multiple disability)
- Not very good. I had to wait 5 weeks to see dyslexia woman and the resources at my disposal very unclear. (Dyslexia)
- The department of disabled students acted upon my behalf to pressure extra available time during exams and on occasion it has been an asset. (Mental health difficulty and spondylosis)
- I have had help from the disabled students advisor, which has again been helpful in informing staff of my condition. Help was also set up for Internet access in my halls, which was paid for my the LEA. (Unseen disability)

7. Other Issues

Respondents were invited to outline any other issues of concern to them at the end of the questionnaire. This drew a number of detailed responses. The majority of responses to this section were negative or critical. This is typical of such surveys and reflects the greater propensity of those with issues to respond compared to those who are happy with their situation or ambivalent. These comments should be seen in their own terms and not necessarily as reflective of the opinions of the majority of respondents. A selection of these issues is outlined below with salient quotes from student respondents.

Box 16: Criticisms of the design of the questionnaire / covering letter

- Please can you put a bit more effort in structuring your questionnaire, can you just make each question on the same page. It doesn't take a lot does it. Many people don't like anyone knowing they are dyslexic and feel it means they are not clever, so the confidentiality is fine, but by saying that they are disabled I think is quite offensive. Most people don't like being called disabled which you have done several times in your letter. Thanks. (Dyslexia)

- I know this questionnaire is not just for dyslexic students but it is a pain to please explain your answer. Why can't you have more multiple choices? And as this is confidential I can't really and don't want to ask someone to go through it with me. It's bad enough when I get them to go through job applications and loan forms without getting them to do this as well. (Dyslexia)

Box 17: Society (and / or higher education) failing to understand the nature, complexity and impacts of disability and failing to provide appropriate support.

- I have had epilepsy for 17 years. It has taken me a very long time to come to terms with this and the fact that I am on anti-epileptic drugs for life! I only recently found out that I was entitled to help from the DSU although I told them about my epilepsy in my first year, they didn't provide me with any help until now as they forgot about me. Initially I was given the impression that epilepsy isn't a disability that affects academic work unlike dyslexia, this upset me, my doctor contacted the DSU, the entire situation has been dealt with now and I am getting support, however, I felt very let down by the University Disability Support Unit. Apparently there are not many epileptics at the university. I suppose they didn't know what to do with me in terms of support. (Unseen disability)

Box 18: The importance of suitable accommodation

- Accommodation as a disabled student is an important factor and I found that XXXX and the general accommodation office was very helpful in organising a place for myself on campus in the first year despite applying through clearing. (Unseen disability and wheelchair user / mobility difficulty).

Box 19: The need for subject specific as well as disability related support

- I think that students who are dyslexic such as myself often lose motivation when a barrier arises with coursework. I tend to lose the ability to believe that I am able to complete difficult assignments without having a tutor constantly checking on my work efforts. And when I fall behind I find it so hard to get back on track again. The tutorials that I have with a tutor outside of university are not really helpful as she has no idea about my subject degree. I would find it much more helpful to be able to have an appointment for about 15 minutes every week with a tutor of my modules who can see how I'm coping with the assignments and make sure I am doing them so I don't fall behind by offering me guidance. (Dyslexia)

Box 20: The positive impacts of higher education

- Have enjoyed course SO MUCH - very diverse modules. Just finishing now. Want to do Masters (urban regeneration) but can't afford to. After years of isolation / boredom / loneliness, felt like I came back to life. Sad because my intelligence/education/skills wasted. I sometimes try for jobs but overqualified / under experienced. My disabilities do not tidily fit into a box - plus very personal (some of them). What I am is wasted. Shame. Try to ignore/keep busy. (Complex, multiple disability)

8. Summary and Conclusions

This project is significant academically as it represents the first ever survey of the barriers faced by disabled students in the GEES set of disciplines across a range of universities. Further, it has enabled the teaching, learning and assessment experiences of disabled GEES students to be heard. By giving this group a voice this report, hopefully, contributes to their empowerment.

The report has identified the disability categories of the respondents, because it is recognised that the lived experience of students with different impairments varies. It is also apparent from the findings of the report that the experiences of students with the same disability vary significantly. Although impairments are identified, the research is carried out firmly within the social model of disability. This is apparent in the emphasis in the survey on the barriers to teaching, learning and assessment faced by disabled students.

Perhaps the most surprising finding is that, with the slight exception of lectures (46%), over half the disabled students, and often as many as three-quarters of them, have *not* experienced disability-related barriers with different forms of teaching and learning. Even fieldtrips, where it might be expected that the barriers to learning would be highest, only one in five disabled students reported they had experienced difficulties. However, the proportion doubled to slightly over two in every five disabled students, who agreed that their learning experience had been affected by their disability in independent fieldwork (e.g. researching for an assignment or dissertation). Assessment generally caused the respondents greater problems, with between 37% and 63% reporting difficulties with various forms.

Although the survey found that in many cases the minority of disabled students faced barriers in teaching, learning and assessment, for those who did face these barriers, they were serious in their impact. This is clearly apparent from many of the direct quotations in the boxes throughout this report.

These findings suggests that using a general category entitled 'disabled students' is problematic and devising general policies to support their teaching, learning and assessment may not always meet the specific needs of individuals. The experiences of disabled students clearly vary widely and different adjustments may be needed for students with identical disabilities. This emphasises the importance of individual discussion with disabled students, rather than assuming one solution fits all.

It is invidious to treat disabled students as a separate category; rather they fall along a continuum of learner differences and they share the same challenges and difficulties that face all students in higher education. However, in developing an inclusive curriculum, which is accessible to all students regardless of background or capabilities, it is sometimes easy to forget that individual needs vary and some disabled students, as seen in this survey, report facing additional barriers.

Arguably in the long run the main beneficiaries of disability legislation and the need to make suitable adjustments in advance are the non-disabled students, because many of the adjustments, such as well prepared handouts, instructions given in writing as well as verbally, notes put on-line, and variety and flexibility in forms of assessment, are simply good teaching and learning practices which benefit all students.

> "One unintended consequence of this (disability) legislation is that as departments and institutions introduce more flexible learning and alternative ways of assessment for disabled students, demand is likely to rise for giving greater flexibility for all students. Disability legislation may prove to be a Trojan horse and in a decade, the learning experiences of all students may be the subject of greater negotiation."
>
> Healey (2003, 26)

Acknowledgements

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Appendix 1

Copy of letter sent out with questionnaire

April 2003

Dear Student

I am writing to ask for your help in our 'Inclusive Curriculum Project" (ICP) funded by the Higher Education Funding Council for England, that we are undertaking in collaboration with five other universities. This project focuses on the teaching and learning experience of disabled students taking geography, earth and environmental sciences and related subjects.

We are approaching you, as one of the students who identified that you have a disability, such as dyslexia, a hidden disability (e.g. asthma, diabetes), a mental health difficulty, a hearing or visual impairment, or a mobility difficulty. To maintain confidentiality this letter has been addressed by staff in _____, who collect the registration information. Hence we, as the researchers, do not have access to your name or address.

The aim of our project is to identify and evaluate ways in which teaching, learning and assessment in this University take account of disabled students' needs and rights as learners, within the geography, earth and environmental science subject areas. The findings of the research will be widely disseminated within the UK and overseas and will be used to inform the development of policies and practices to improve the quality of students' learning. A copy of the report will be put on the Geography Discipline Network Web site (www.glos.ac.uk/gdn/icp). It is a common experience that practices facilitating inclusion of disabled students also benefit all students.

To ensure the highest quality of education for disabled students we need to learn about the personal experience of as many students as possible. So we would be most grateful if you would complete the attached questionnaire and return it in the attached FREEPOST/stamped and addressed envelope preferably **within the next seven days** but no later than Monday _____. Selected respondents who are agreeable will be invited to partake in a short interview to explore issues raised in greater depth.

For every completed questionnaire we receive we will donate £1 to Skill, the National Bureau for Students with Disabilities, which is a charity.

If you would like the questionnaire in an alternative format, please visit the project website where an electronic version of the questionnaire can be downloaded (http://www.glos.ac.uk/gdn/icp/quest.htm) or feel free to contact me. I would be happy to go through the questionnaire with you if you feel this would help. My contact details are given below. I shall look forward to hearing from you.

Best wishes

Room No: Tel: email:

Appendix 1 continued

Complying with the Data Protection Act 1998

The data you supply in the questionnaire will be used by the "Developing an Inclusive Curriculum for Disabled Students: The Case of Geography, Earth and Environmental Sciences" project team in accordance with the Data Protection Act 1998. Members of the project team have had no access to any of your personal data so far and any data you supply will be used in the same anonymous manner.

The data you supply will be used for research purposes only as part of the project outlined above and for no other purpose. The final report that will be produced will be written in such a way that it will not be possible to identify individual research subjects or participants.

In order to retain your anonymity we will use the fact that you return your completed questionnaire to us as evidence of your consent to use your data in the manner outlined above.

Appendix 2

Survey questionnaire

Inclusive Curriculum Project (ICP)

Section A: General Information

A-1 Which of the following categories best describes your disability? (please tick as many as apply to you):

[ ] Dyslexia
[ ] Unseen disability (e.g. asthma, diabetes, epilepsy)
[ ] Deaf / Hearing impairment
[ ] Wheelchair user / Mobility difficulty
[ ] Aspergers syndrome / Autism
[ ] Mental health difficulty
[ ] Blind / Partially sighted
[ ] Other disability (please give details below)

A-2 Are you:

[ ] An undergraduate student
[ ] A postgraduate student

A-3 If you are an <u>undergraduate</u> student are you currently studying in:

[ ] Level I
[ ] Level II
[ ] Level III

A-4 What subject(s) are you studying?

Single subject: [ ]

or

Major: [ ] Minor: [ ]

or

Joint: [ ] Joint: [ ]

A-5 Are you a full time or a part time student?

[ ] Full time [ ] Part time

Appendix 2 continued

A-6 Gender:

[ ] Male [ ] Female

A-7 What was your age at date of commencement of study of this course?

[ ] 20 and under [ ] 21-30 [ ] 31-45
[ ] 46-60 [ ] Over 60

Below each of the following statements please indicate where on the scale between 'Strongly Agree' and 'Strongly Disagree' most reflects your experience or opinion. Please tick the appropriate box.

A-8 My disability was a factor in my choosing to study here

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

A-9 My disability affected my choice of subject(s) to study

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

Appendix 2 continued

Section B: Your experiences of Teaching and Learning

The remainder of the questionnaire refers to your experience of teaching and learning specifically with regard to Geography, Earth and Environmental Sciences and related subjects. Please refer to these subjects rather than to any others you might be studying when answering the questions.

B-1 I have faced disability-related barriers which have impacted on my learning experience in lectures

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

B-2 I have faced barriers related to my disability which have impacted on my learning experience in <u>on-campus</u> laboratory and / or practical work

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

B-3 I have faced barriers related to my disability which have impacted on my learning experience in other <u>on-campus</u> classes (e.g. seminars, tutorials)

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

B-4 I have faced barriers related to my disability which have had an impact on my use of the University library(ies)

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

B-5 I have faced barriers related to my disability which have had an impact on my use of technical facilities (e.g. computers, multimedia, audio / visual equipment, photocopying)

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

B-6 I have faced barriers related to my disability which have affected my use of learning resources (e.g. lecture handouts, computer assisted learning packages)

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

Appendix 2 continued

Section C: Your experiences of fieldwork

C-1 Before I started the course I was concerned that my disability would affect my experience of fieldwork

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

C-2 My learning experience in residential fieldwork (e.g. a UK or overseas fieldtrip) has been affected by my disability

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

C-3 My learning experience in non-residential fieldwork (e.g. a half-day or one day fieldtrip as part of a module) has been affected by my disability

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

C-4 My learning experience in independent fieldwork (e.g. researching for an assignment or dissertation) has been affected by my disability

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

Appendix 2 continued

Section D: Your experiences of assessment

D-1 I have faced barriers related to my disability which have affected my experience of the following types of assessment (please tick all that apply)

a) Written examinations

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

b) Multiple-choice / other examinations

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

c) Written course work (e.g. essays, reports etc.)

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

d) Oral presentations

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

Appendix 2 continued

Section E: Your Experiences of Staff Support

E-1 Academic staff (e.g. lecturers / tutors) have been supportive and helpful when I have approached them with concerns about to disability-related barriers I have experienced

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

E-2 Support staff (e.g. administrators, technicians, librarians) have been supportive and helpful when I have approached them with concerns about disability-related barriers I have experienced

Strongly Agree	Agree	Disagree	Strongly Disagree

Please explain your answer:

E-3 Have you ever consulted one of the University support services (e.g. disability advisor, counsellor, Student's Union, student services) about disability-related issues affecting teaching, learning and assessment?

[ ] Yes [ ] No

Appendix 2 continued

Section F: Other information

Is there any other information relating to your experiences as a student at University that you think may be of interest to this study, for example, details of positive experiences or anything else that would improve the quality of your learning? If so, please give details below (please continue on an additional sheet if there is insufficient space).

We may wish to explore some of your responses in a little more detail. If you are willing for us to do this on a confidential basis please give us your name and indicate the best way to contact you.

Name: **Tel:** **Email:**

Thank you for your cooperation in completing this questionnaire
Please return it in the FREEPOST envelope

Appendix 3

Resources from Previous GDN Project

BIRNIE, J. and GRANT, A. (2002) Providing Learning Support for Students with **Mental Health Difficulties** Undertaking Fieldwork and Related Activities <http://www.glos.ac.uk/gdn/disabil/mental/index.htm>

CHALKLEY, B. and WATERFIELD, J. (2002) Providing Learning Support for Students with **Hidden Disabilities and Dyslexia** Undertaking Fieldwork and Related Activities <http://www.glos.ac.uk/gdn/disabil/hidden/index.htm>

GARDINER, V. and ANWAR, N. (2002) Providing Learning Support for Students with **Mobility Impairments** Undertaking Fieldwork and Related Activities <http://www.glos.ac.uk/gdn/disabil/mobility/index.htm>

HEALEY, M., JENKINS, A., LEACH, J. and ROBERTS, C. (2002) **Issues in Providing Learning Support** for Disabled Students Undertaking Fieldwork and Related Activities <http://www.glos.ac.uk/gdn/disabil/overview/index.htm>

SHEPHERD, I. (2002) Providing Learning Support for **Blind or Visually Impaired** Students Undertaking Fieldwork and Related Activities <http://www.glos.ac.uk/gdn/disabil/blind/index.htm>

WAREHAM, T., CLARK, G. and LAUGESEN, C. (2002) Providing Learning Support for **d/Deaf or Hearing Impaired** Students Undertaking Fieldwork and Related Activities <http://www.glos.ac.uk/gdn/disabil/deaf/index.htm>

Appendix 4

Further planned ICP publications

The following guides are scheduled to be published separately as outputs of the Inclusive Curriculum Project during 2005. Please note that exact wording of titles may change slightly by the time of publication.

For information on when individual titles become available, see the GDN website at www.glos.ac.uk/gdn/icp.

- **Issues in developing an inclusive curriculum** in Geography, Earth and Environmental Sciences
  Mick Healey, Alan Jenkins and Jonathan Leach

- Developing an inclusive curriculum for students with **mobility impairments** in Geography, Earth and Environmental Sciences
  Clare Milsom, Naseem Anwar and Sue Thompson

- Developing an inclusive curriculum for **blind or partially sighted students** in Geography, Earth and Environmental Sciences
  Ifan Shepherd

- Developing an inclusive curriculum for **deaf or hard of hearing students** in Geography, Earth and Environmental Sciences
  Terry Wareham, Gordon Clark and Rosemary Turner

- Developing an inclusive curriculum for students with **mental health difficulties or Autistic Spectrum Disorder / Asperger Syndrome** in Geography, Earth and Environmental Sciences
  Jacky Birnie and Jonathan Leach

- Developing an inclusive curriculum for students with **hidden disabilities or dyslexia** in Geography, Earth and Environmental Sciences
  Brian Chalkley and Judith Waterfield

- Developing an inclusive curriculum: a guide for **heads of departments and course leaders** in Geography, Earth and Environmental Sciences
  Margaret Harrison

- Developing an inclusive curriculum: a guide for **lecturers** in Geography, Earth and Environmental Sciences
  Phil Gravestock

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- Developing an inclusive curriculum: a guide for **departmental support staff** in Geography, Earth and Environmental Sciences
  Carolyn Roberts

- To A Degree**: a guide for students** of Geography, Earth and Environmental Sciences with specific learning difficulties, long-term medical conditions or impairments
  Gordon Clark, Terry Wareham and Rosemary Turner