



Assessment Series No.8

A Briefing on Assessing Disabled Students

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Generic Centre Guides and Briefings

LTSN Generic Centre – Assessment Series 2001 Welcome to the Learning and Teaching Support Network Generic Centre's series of Assessment Guides and Briefings. They aim to provide a series of overviews of important issues and practices in the field of assessment for the higher education community.

The Assessment Guides are intended for colleagues with particular roles and for students, as their titles suggest. The Briefings are primarily intended for lecturers and other staff involved in supporting learning.

The Assessment Series is a snapshot of a field in which development is likely to be rapid, and will be supplemented by specific case studies produced by the LTSN Subject Centres.

The series was developed by Brenda Smith and Richard Blackwell of the LTSN Generic Centre with the support of Professor Mantz Yorke. Experts in the field were commissioned for each title to ensure that the series would be authoritative. Authors were invited to approach the issue in their own way and no attempt was made to impose a uniform template.

The series editors are grateful to colleagues in LTSN Subject Centres and other senior colleagues who refereed the series, and of course to the authors for enabling its publication.

We hope that you will enjoy the Assessment Series and find it interesting and thought-provoking. We welcome your feedback and any suggestions you may have for future work in the area of assessment.

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Summary

For people with disabilities to fully participate in a university experience it is important that they are able to measure academic achievement. The aim of this paper is to provide academic and support staff with information that can be used to provide assessments for students with disabilities, so that they are not disadvantaged.

Much has been written about assessment in higher education and the series of papers of which this is part is a welcome 'one-stop resource' for all higher education staff. This paper first outlines some of the issues relating to disability and education generally, and goes on to show how these affect assessment of students with disabilities.

Additionally, staff are now operating against a backdrop of new anti-discrimination legislation, so a review of guidance and legislation affecting institutions in the UK is included.

Introduction

The initial drive towards Equal Opportunities in education began by acknowledging the under-representation of particular social groups, primarily linked to social class, gender, and ethnic minority communities. More recently, though, higher education has also begun to move towards ensuring that people with disabilities have improved access to institutions and their courses. This shift has been driven recently by the Disability Discrimination Act (DDA) (1995) and the Human Rights Act, but education has until now, been exempted from the DDA. From September 2002 this will no longer be the case, and all student services must be made accessible to all students; the Special Educational Needs and Disability Act (SENDA) was given Royal Assent in May 2001, and this in part amends the DDA. (See www.legislation.hms0.gov.uk/acts/acts2001.htm)

Attention is also shifting towards improving the quality of the experience provided by the institutions for their students with disabilities. Whilst acknowledging that currently there are some controversial questions concerning the role of the Quality Assurance Agency, its Code of Practice (1999) did serve to direct attention to what students experience and to some extent anticipated the subsequent legislation. The QAA Code is made up of 24 precepts that encourage institutions to be pro-active in developing provision, to ensure that reasonable adjustments are made, and to avoid discriminating against students with disabilities.

Setting the Context

'As a society we are not especially inclusive'. Until recently, the compulsory sector of education was organised around a system that segregated learners according to the nature of their impairment and sent them to special schools. The impact of segregated schooling was that at an important, formative stage in life, the majority of people did not encounter anyone with a disability. Since personal experience is lacking, information about disabilities comes via the mass media, whose portrayal of people with disabilities varies between a focus on the medical aspects of the impairment to the *'super cripp'* and the *'triumph over tragedy'*.

This low level of experience is part of society's background knowledge; it applies to almost everybody including staff working in higher education. Tutors might never have encountered people who are blind or deaf and so they lack personal knowledge and personal experience. Because of this there is a danger of basing contacts on stereotypes and on ill-informed attitudes. These then could emerge as reluctance/refusal to consider the possibilities of accepting the individual on to their courses, let alone thinking about assessment regimes and how they might need to be modified. Another aspect of this lack of knowledge is that staff are unaware of developments in assistive technology and therefore see barriers where none may exist. There is a need to ensure that meeting the needs of disabled students is included in both initial induction for all staff and is a routine feature of continuing professional development (CPD) for academics.

The context in which people, including students, with disabilities have been approached by other parts of society, is clear from the language that has been used. For example, 'wheelchair bound', 'educationally sub-normal', 'handicapped'. Therefore it is important that the use of language in working with students with disabilities is approached in a sensitive manner that will not marginalize or patronise students.

The language that we use is linked to the wider approach that has led the thinking of our society as a whole, which has concentrated upon the medical model of disability, whereby the medical condition is seen as a barrier to 'normal' interaction with society. Efforts are made to overcome the medical condition so that people with disabilities can fit into society as it is, or on removing these people from society if that cannot be achieved. The focus is on impairment rather than the needs of a person. An alternative to this is the social model of disability, which recognises that it is the attitudes and structure of society which is the disabling factor, and places the responsibility for a fully inclusive society in the hands of all of its members. For example there are many locations which people who use wheelchairs find difficult or impossible to access. The problem should not be that someone uses a wheelchair, but that the building is not accessible. This is a result of decisions taken about the way we design our environment.

Today, there are laws about access to new buildings and the facilities they contain; access to public transport is improving as a result of newly designed buses and trains, though the attitudes of people operating those services, and the public at large, cannot be legislated for so easily.

It is also important to note that the society we are seeking to live in should synthesise the medical and social models of disability; doctors and health care professionals should continue to seek medical solutions whilst we all attempt to make our society less disabling. One of the ways we can do this in education is to recognise properly the achievements of disabled students, to ensure the methods of assessment we are using are creating a level playing field for all students.

Higher Education Context

Legislation

The context for students with disabilities in Higher Education will be linked for the foreseeable future to the new Special Educational Needs and Disability Act (SENDA), which was passed into law on 11 May 2001, and will begin to come into effect from 1 September 2002. The Act removes the previous exemption of education from the Disability Discrimination Act (1995), ensuring that discrimination against disabled students will be unlawful. Institutions will incur additional responsibilities in 2003, with the final sections of legislation coming into effect in 2005.

As the Act is an amendment to the existing Disability Discrimination Act 1995 (DDA), it only protects people defined as disabled according to that legislation. This definition is based on an individual's ability to carry out 'normal day-to-day' activities, and so may exclude some students who are usually considered disabled by the support systems within their institutions.

The following is taken from an article on the JISC Technology for Disabilities Information Service (TechDis) website.

'It will be unlawful for institutions to treat a disabled person 'less favourably' than they treat, or would treat non-disabled people for a reason which relates to the person's disability. For example, it would be unlawful for an institution to turn a disabled person away from a course, or mark them down in an assessment because they had dyslexia or were deaf.'

'Part of not discriminating is making 'adjustments'. If any arrangements at the institution place a disabled person at a 'substantial disadvantage', the institution is required to take such steps as are reasonable to prevent that disadvantage.'

'From 1 September 2002 institutions will be required to change policies and practices, for example:

- Allow disabled students more than the usual 'one hour at a time' access to college computers.
- Allow disabled students to use computers for examinations.'

'From 1 September 2003 institutions will need to provide auxiliary aids and services where these would help to prevent substantial disadvantage. Examples might include:

- Installing induction loops into classrooms.
- Introducing specialist software on computers for a visually impaired or dyslexic student.
- Providing training for IT support staff on working with disabled people and their equipment.
- Providing handouts in Braille or other formats.
- Purchasing specialist technology for a science student with mobility difficulties to work safely in the lab.'

'From 1 September 2005 institutions will also need to make physical adjustments. The new provisions do not require institutions to lower academic or other standards to accommodate disabled students. An institution would be 'justified' in discriminating in such circumstances.'

'The duty to make reasonable adjustments is a duty to disabled people generally, not just to particular individuals. The 'anticipatory' aspect of this duty means that institutions need to consider what sort of adjustments may be necessary for disabled people in the future, and where appropriate make these adjustments in advance. It is not enough to wait until a disabled student request that the intranet is made accessible. Institutions should be ensuring accessibility in advance.'

As we can see, the fair and even assessment of disabled students is at the heart of the SENDA, and the context in which we view the academic assessment of disabled students will be guided in part by this legislation. It is worth noting, though, that whilst SENDA is a major driving force, individuals around the country have been deeply involved in making education as accessible as possible already; although the 'stick' that this legislation provides will force some changes to be made, this will work in synergy with the attempt to create an accessible educational environment for its own sake, because it is worth doing, and not because the legislation has set minimum standards.

Individual Requirements

An important point for induction, and worth repeating in any continuing professional development, is to note that staff cannot assume students who share a similar impairment have similar needs; whilst some blind students prefer materials in Braille format, others feel more comfortable working with cassette recordings. Preferences such as this should be identified and discussed preferably in advance of the course starting so that appropriate systems are in place to make study materials available at the same time as they are for all students. This might involve tutors in rather more advanced planning than they are accustomed to but planning ahead is a good practice likely to benefit all students (this observation is expanded upon later).

Disabled Students are Students

An interesting brainstorming session is to ask those participating to respond to the prompt word “student” and “disabled student”. Usually two different lists of associations emerge – ideally there should be only one. Disabled students are first and foremost students – and have the full range of qualities, skills, attitudes and shortcomings as everyone else. This is a point worth stressing since sometimes there is a danger of trying to be too understanding, for example with extending deadlines for the submission of coursework assignments.

Hidden Impairments and Disclosure

There is a distinction between impairments that are obvious and those that are hidden. As has been noted above, many of the adjustments that must be made in order to comply with the DDA will only apply if a student has disclosed their disability. Many students will feel reluctant to do this, as they may fear that it will count against them, or because they do not wish to be labelled. A particularly serious example of this involves students experiencing mental health difficulties. Despite encouragement to disclose – for example in the Universities & Colleges Admissions Service Guide and in institutions’ Disability Statements – there remains anxiety and reluctance about passing on information. Even if the decision is taken to tell somebody, the onus then shifts and those holding information given in confidence face dilemmas. This may well affect the method and details of assessments used with individual students (for instance, a student with dyslexia, who has not declared this to the institution, will not be eligible for additional time in an examination).

More information on general matters that need to be taken into consideration when teaching students with disabilities can be found in the *Coordinator’s Handbook* (Skill 1997).

Terms and Definitions

The level of support that is given to help create that level playing field is often dependent on how a given body may try to define 'disability' as a generic term, emphasising further the use of language. Definitions of disability vary, and it is useful to outline some of these definitions here, and to evaluate the extent to which they are predicated on a particular model.

The key terms for the purpose of this paper are "disability" and "assessment". With regards to disability, there are a number of different 'levels' of approach. For example the World Health Organisation in 1980 distinguished between an impairment (any loss or abnormality of psychological, physiological, or anatomical structure or function), a disability (any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being resulting from an impairment, and a handicap (a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal for that individual depending on age, sex, social and cultural factors). Within the UK national and legal context, the Disability Discrimination Act 1995 defines 'disability' as a physical or mental impairment, which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities. It is then felt necessary to clarify this further in the following way:

- *impairment* – include physical impairments affecting the senses such as sight and hearing and mental impairments including learning disabilities and mental illness (if it is recognised by a respected body of medical opinion)
- *substantial* – for an effect to be substantial it must be more than minor. The following are examples that are likely to be considered substantial: inability to see moving traffic clearly enough to cross the road safely, inability to turn taps or knobs, inability to remember and relay a simple message correctly
- *long term* – these are effects that have lasted at least 12 months or are likely to last at least 12 months or are likely to last for the rest of the life of the person affected. Long term effects include those which are likely to recur
- *day-to-day activities* – normal activities carried out by most people on a regular basis and must involve one of the following broad categories : mobility – moving from place to place, manual dexterity – for example the use of hands, physical coordination, continence, the ability to lift, carry or move ordinary objects, speech/ hearing/ eyesight, memory or ability to concentrate/learn/understand, being able to recognise physical danger

The relevance of this definition is that it has been adopted in the Special Educational Needs and Disability Act 2001 and therefore applies to higher education.

There are also definitions of “disability” which are specific to the sector. Thus, the QAA Code of Practice (Paragraphs 15 and 16) states:

“There are many different ways of defining who is disabled. This code follows no particular model. Institutions should be aware that disability covers a wide range of impairments including physical and mobility difficulties, hearing impairments, visual impairments, specific learning difficulties including dyslexia, medical conditions and mental health problems. Some of these impairments may have few if any implications for a student’s life or study. Others may have little impact on day-to-day life but may have a major impact on a student’s study, or vice versa. Some students may already be disabled when they apply to an institution, others may become disabled or become aware of an existing disability only after their programme has started. Others may have fluctuating conditions. Some students may be disabled temporarily because of accident or illness.

Institutions will want to ensure that their provision and structures take into account, so far as possible, the full range of needs which disabled students may have, and that their provision is sufficiently flexible to cater for individual’s changing needs throughout their period of study”.

Turning now to consider definitions of “assessment” the task is less complicated. The major distinction to be made is between “diagnostic” and “academic” assessment since the term “assessment” is used interchangeably within the sector.

Diagnostic assessment refers to the procedures that are available to identify barriers to learning, and strategies/technology that can be used to overcome them. For example, when students are identified as having some form of specific learning difficulty, a test will be arranged with a trained educational psychologist who will report on the nature of the student’s difficulties and make recommendations about study support. Many higher education institutions are members of the National Federation of Access Centres (NFAC), which recognises their expertise in undertaking diagnostic assessments regarding the use of assistive technology. These centers are equipped with a variety of equipment, students evaluate the extent to which it best meets their needs and having identified this, can purchase the equipment using the Disabled Students Allowance (advice on assistive technology is available via the TechDis website, <http://www.techdis.ac.uk>).

However, the remainder of this paper will focus on assessment in its more common usage, measuring student attainment and progression.

Academic Assessment

Much has been written about the theory, practice and validity of different methods of academic assessment. The aim here is not to re-iterate that work, but to demonstrate how best they can be applied to assessment of disabled students. For more detailed explanation of the assessment methods outlined below you may choose to visit other briefings in this series.

In modern higher education curricula the diet of unseen end-of-programme written essays has been replaced by a variety of assessment approaches. There has been a shift towards more continuous assessment, focusing on the acquisition of skills and these have been explored in more imaginative and innovative ways. When devising strategies for assessing student progress and achievement, staff are constantly reminded about "fitness for purpose". What is this assessment testing; a good memory and an ability to retain and reproduce facts? The ability to select and interpret first hand sources? It is important to ensure that the techniques of assessment are appropriate to what is being assessed, and this is supported by the need to identify clear, anticipated learning outcomes and to devise programme specifications. Subject benchmarking and the subject review visits undertaken by the QAA have also served to reinforce this.

Flexible Practice

There is a need to consider different types of assessment and identify where there is scope to be flexible, with regard to assessing disabled students (see Earle et al 1999 for a survey of different assessment practices for students with disabilities). Early consideration of all aspects of learning and teaching, including assessment is crucial here. Arguably the best person to discuss and take advice from is the student her/himself since they are more than likely to have had (successful?) experience of academic assessment prior to entering higher education. Further contribution to the discussion can be made by the specialist advisory staff who should be familiar with a range of equipment and strategies which could be used. Where flexibility is limited by external demands or institutional processes, starting negotiations early can potentially produce positive outcomes which had not been envisaged originally, especially when combined with an understanding of the relevant anti-discrimination legislation.

Some assessment strategies present challenges to students with disabilities irrespective of the nature of their impairment. Firstly, if students are assessed in a practical setting such as a laboratory, the specific needs of students with disabilities will have to be addressed, and it is in this type of situation that communication with students can be most useful, as many students have already developed mechanisms for working in an out of classroom environment. The work of Chris Hopkins and Alan Jones (Hopkins and Jones 1998) is especially helpful in providing valuable ideas for overcoming challenges faced by students pursuing science courses.

In the case of written assessments, the use of continuous assessment based around the regular submission of written assignments is common today. Included here too are strategies such as the compilation of a learning log or course journal and the submission of portfolios of evidence of competencies. Whilst they can be used to assess a range of skills, many students find written end-of-programme assessments more stressful, and if there is no constructive feedback their purpose might be questioned. It is worth remembering too that all students have different learning styles, and that it is still necessary to try to assess disabled students in a manner which best suits their learning style, rather than forcing students to fit into an 'accessible' mode of assessment.

Good pedagogic practice tends to be inclusive practice.

Case Study: Teachability

In Scotland impetus has been provided to departments participating in the "Teachability" project. The project is funded by the Scottish Higher Education Funding Council (SHEFC), and was devised and co-ordinated by staff from the University of Strathclyde. It aims to encourage teaching staff to think about whether their teaching and their courses are exclusive, and how they could be altered to include students with a range of impairments. A fundamental question that is posed to academics is to ask what they consider to be the core requirements of their courses/programmes. It then becomes possible to look at this separately and suggest how it might be assessed appropriately. It also indicates whether there are barriers against including students with disabilities that would be almost impossible to overcome and whether there is scope for negotiation and flexibility.

Whilst prompting academic staff to review what they consider to be the core requirements that students must complete to qualify in their courses, academic staff are also asked to reflect on five further questions:

1. How accessible is the curriculum for students with a range of impairments?
2. How might the curriculum be made more accessible for students with a range of impairments?
3. What steps would need to be taken to implement the ways identified to enhance the curriculum?
4. What barriers are there to achieving the changes identified and what can be done about them?
5. How can the ways in which the curriculum is particularly accessible or inaccessible be made known to potential students with a range of impairments?

Note that "curriculum" is used in a broad sense and does include assessments as well as learning and teaching.

You can find more information on the Teachability website (<http://www.ispn.gcal.ac.uk/teachability>).

Assessment: Meeting the needs of Disabled Students

Assessment strategies that benefit disabled students also benefit their non-disabled peers

Precept 13 of the QAA Code of Practice on Students with Disabilities and Learning Difficulties states:

“Assessment and examination policies, practices and procedures should provide disabled students with the same opportunity as their peers to demonstrate the achievement of learning outcomes”.

The guidelines which follow focus on good practice in making modifications to standard assessment arrangements and expands upon the twelve points of guidance in this section of the Code.

Planning: Information about assessment tasks and methods

Many tutors recognise the value of providing students with accurate information on the assessment regime for their courses at the earliest opportunity - what will be assessed and how it will be assessed. Whilst it might not be possible for tutors to be precise about the exact focus of an assignment, at least students know that they will have to submit two 2000 word assignments and undertake a three hour unseen examination. Once tutors begin to be more specific, *all* students benefit from being informed of the criteria against which their work will be judged and the distribution/weighting of marks/grades against the various criteria. Stating assessment criteria in advance applies to other approaches to assessment too.

There is another benefit to providing specific information to all students. At the start of courses or modules, tutors usually provide a list of relevant texts and distribute further reading lists during the course. When faced with a lengthy list of sources, tutors must consider how students with different kinds of impairments can try to meet the requirements. Non-disabled students may visit the library, wander amongst the stock of books and journals, check the content and index of books, and select what they consider to be appropriate. Those who use wheelchairs, assuming that entrance to libraries is not difficult, are unlikely to be able to move within the narrow confines of library shelves or to see what is available on the shelves beyond eyelevel. Students who are blind will find it less easy to scan or speed-read text to judge its appropriateness. These problems can be alleviated if a tutor can identify key sources relevant to the specific assessment task. However, it must be acknowledged that some programmes do require students to show initiative in tracing and using a range of relevant source materials. Additionally it is difficult to provide advance information for courses that rely on the use of very up-to-date materials that cannot be transferred into accessible formats quickly because of their dynamic nature and the time taken to adapt. An example of this is where learning and teaching makes use of current newspapers and magazines since they contain comment on the issues being studied. Blind students may have difficulties when required to work with learning and teaching material presented as charts, diagrams and tables. The challenges posed are not impossible to overcome but advance planning, time and flexibility are necessary.

Same Assessment, Different Process

Physical considerations

It is clear that assessment of disabled students must test the same core levels of achievement as assessment of other students. In exploring possible ways in which assessment and examination arrangements can be modified, perhaps the first and most obvious practical matter is that the venue being used has to be fully accessible to all users whether the assessment strategy uses unseen examinations or other approaches. The needs of wheelchair users are perhaps most obvious here - can the person get into the room to write his examination paper or can she get to the room where the oral test is being held? This does seem a relatively simple matter but there are many examples of wheelchair users being unable to take formal assessment alongside their peers simply because nobody had thought to check the accessibility of the chosen venue. One should also not overlook other human needs. Formal assessments of many kinds induce a higher state of nervous tension in many people, who can find it comforting to have easy access to a lavatory. Is this also the case for those using wheelchairs? Physical access can also be an important concern for blind people, especially if the assessment is being held in a venue not normally used. If this involves a different journey, it could prompt anxiety in the students and impact upon performance in the assessment tasks. If the blind person is accompanied by a dog to aid their mobility and independence, the needs of the dog also need to be considered.

Within the venue, there is a need to be sensitive to the immediate environment. Wheelchair users might find it difficult to position their chair at a comfortable position for working, and the furniture distribution throughout the room could create obstacles to easy and independent movement. Partially-sighted people may prefer lighting of different kinds - and sometimes brightening the light is exactly opposite of what is required. If there are people who are hard-of hearing and who use lip reading, it would be most unhelpful if the central point of attention, be it invigilators giving directions about a written examination, or examiners speaking at a viva/oral test, is directly in front of a brightly lit window, thus creating a *contre jour* image and making it impossible to discern lip movements.

Format

Tutors might consider whether the same knowledge, skills etc. might be assessed using the same criteria but with different approaches. An easy example is the possibility of a viva voce examination acting as an alternative to written tasks. The “Teachability” Handbook suggests that possible modifications can be considered under three headings:

Alternative Implementation

The first focus here is on telling students what they have to do. For example deaf students who use British Sign Language (BSL) as their first language (which has a different structure and word order to standard English) may understand signed questions more easily than text. If text is used, it is preferable to ask someone with experience of working with deaf students to moderate the language. Students with impaired vision may prefer tasks to be described orally or put into other formats: Braille, pre-recorded cassettes, enlarged print. Some students with specific learning difficulties might also benefit from the use of enlarged print or from a different layout of the presentation of the written tasks.

Responding to the assessment tasks in different ways whilst still demonstrating knowledge and skills might also be considered. Some deaf students might prefer to have their response signed and then translated by an interpreter. This requires the services of a skilled interpreter, preferably one who has some familiarity with the subject content. Students with dexterity difficulties may be offered the opportunity to use an amanuensis who will transcribe dictated responses. (As an example of language as a barrier to effective communication, perhaps using the term “scribe” may be preferable to “amanuensis”). Prior knowledge and experience of the subject is helpful particularly when dealing with the specialist language and technical terminology of the subject. Sometimes students using scribes will have worked with notetakers during their courses but it should not be assumed that this provides good preparation for working with a scribe in a formal assessment setting. If this strategy is new to the students, some practice beforehand is useful. It is also necessary to discuss how matters such as punctuation and spelling are to be handled.

To demonstrate their attainment some students might use assistive technology. A common example of this is using a personal computer; this leads into a consideration of other obvious issues. Checks must be made on the equipment to ensure that it is in full working order and that no attempts have been made to pre-load information relevant to the assessment task. If equipment such as a computer or a braille is to be used, they could prove distracting for other students. It might be necessary to undertake the assessment in a different location from the rest of the cohort. This means finding a suitable location, allocating invigilators, and ensuring that procedures are in place in case of equipment failure.

Some of the alternative strategies described above may conflict with important assessment related policies and procedures. For example, there might be a policy of anonymous marking of written work. Clearly, if the work is produced by students in a format different from the others in the cohort, it is difficult to maintain anonymity. This is to some extent moderated by the fact that today, only a small minority still submit hand-written items and it has become less easy to identify authorship based on the appearance and presentation of the text itself. Where anonymous marking is intended to counter possible bias, there are other strategies available to check on the marking - for example by ensuring work is assessed by more than one person or by involving external examiners. A further instance of policies operating in contradictory fashion involves students with dyslexia. In many institutions, students who have been identified as having dyslexia are issued with small adhesive labels to attach to their written assignments to indicate that tutors might take this into account when reading and assessing work. Adopting this strategy is helpful to both students and tutors but it can also work against anonymous marking.

Alternative Timing

There are a number of points to highlight when considering timing of assessments. As stated earlier, the change to more continuous assessment and to the introduction of more varied approaches has been helpful overall for disabled students. However, for those courses where more traditional end-of-programme written assessment remains, it is important to ensure that disabled students are not disadvantaged. When taking traditional timed, unseen written assessments, some students may need additional time to read and understand the questions. The policy in many institutions is to allow all students a period of time prior to the formal start of the assessment to read the questions. For some disabled students this might be sufficient and it means that they are being assessed in exactly the same situation as their non-disabled peers. Some students may also need extra time to complete the assessment tasks. The reasons for this could stem from having to use assistive technology or an amanuensis, which is slower than the more conventional means of responding. Some impairments might affect the writing speed of students, others the stamina.

We should ask though, what the allocation of additional time should be. Many institutions will have developed a policy on this already, but it is worth considering alternatives, such as asking students to work within the time allowed to all students but to complete fewer items, if it is felt that this provides sufficient evidence on which to base judgements of academic progress and attainment.

Purpose

The format of the assessment is linked to the knowledge and skills which can be assessed. For example in an oral examination, it would complicate exchanges if attempts were made to check on grammar, punctuation and spelling. However, where assessments are in written format, these dimensions can be checked and indeed errors might have a deleterious effect on the overall marks awarded. The situation might become more complicated if students are using assistive technology where, for example, spell checks are available. There are parallel concerns regarding aspects of oral assessment. For example where deaf students are communicating through an interpreter, aspects of tone of voice and inflection could be significant. The key point to note about these matters is that it is essential for students and tutors to make clear what it is that is being assessed.

Computer Assisted Assessment (CAA)

Computer Assisted Assessment is used for both formative and summative assessment in higher education, the benefits are well documented and can apply to both students and staff. However, in order to use this particular medium of assessment it is important to follow good practice guidelines laid down for all online learning environments, such as the World Wide Web Consortium (W3C) web accessibility guidelines (Phipps and McCarthy, 2001). The golden rule in CAA design is 'good design for accessibility is often just good design for all' mirroring the statement on good pedagogic practice.

Additionally CAA can benefit some disabled students as well as providing a rigorous examination process. It is possible to design questions to assess different levels of students understanding according to Blooms taxonomy (Heard *et al*, 1997 and Paul and Boyle, 1998). A student unable to sit a long examination and write or type an exam paper may be able to fully participate in the assessment process. For example, a student who is unable to hold a pen or use a conventional keyboard may be able, through limited mobility, to operate a switch to indicate correct answers.

Institutional Responsibility

Information about Requesting Modifications

Even with the potential benefits outlined above, some disabled students might consider themselves to be disadvantaged and must know that the institution does have a policy for requesting modifications to assessment and examinations.

This policy must be widely publicised, available in a range of formats (e.g. Braille, large print, pre-recorded cassette) and easy for students to follow. The system must operate with minimum delay. Many institutions have adopted a semester based structure and formal assessment can occur more frequently than in the past. Students and staff need to act promptly to ensure that modified arrangements are made in good time to meet deadlines. One should not forget that disabled students are as likely as other students to fail to reach a satisfactory standard and so the procedures must work equally as efficiently with regard to re-assessments, leading us to note that academic rigour and comparability must be safeguarded. This is a matter of concern to many academics and sometimes acts as a discriminatory barrier, encountered frequently with reference to arrangements made to meet the needs of students with specific learning difficulties, most obviously dyslexia. The QAA Code of Practice also draws attention to the need to apply the policy for modifying assessment and examinations consistently across an institution. The introduction of modular-based credit-accumulation structures in which courses are created using modules drawn from different departments and faculties may complicate this. Sharp and Earle have published an interesting discussion of questions associated with “compensation” in the assessment of students with disabilities (Sharp and Earle, 2001)

Allocation of responsibility

As can be seen from the discussion above, making alternative arrangements to enable disabled students to demonstrate their progress should not present an insurmountable challenge. The system does often break down, though, in the identification and allocation of responsibilities. Perhaps there are two common models of allocation in Higher Education at present. The first is found in institutions where there is a full time Disabled Students Adviser/Officer who is well-known and felt to be competent and efficient. It seems appropriate here to suggest that everything associated with disabled students - including academic assessment arrangements - falls within their responsibilities. This has a certain appeal, most notably in terms of consistency, experience, and knowledge of different strategies (though it does not provide the support that an individual would require from academic and administrative specialists). Given the workload that this might entail with growing numbers of students and formal assessments at the end of each semester, plus opportunities for reassessment, the Adviser could spend their entire year on this task alone.

The second strategy is linked to a “whole institution” approach to working with disabled students. Here the responsibility for implementing policy and procedures for disabled students lies with those who undertake the task for all students. If there is an examinations section and it is their responsibility to arrange timetables, rooms, and invigilation they should, as part of their routine duties, ensure that whatever is done meets the requirements of disabled students. Clearly it would be short-sighted to do this without consulting the specialist Adviser/Officer, the academics and the students. However the practical arrangements should be put in place by those responsible for all students. This is not easy to achieve as not everyone in Higher Education is looking to acquire new responsibilities. Nonetheless this is the direction in which policy and provision should move if high quality policy and provision for disabled students is to be seen not as an optional extra for which student welfare services are responsible, but as something which is a routine part of the core business of learning and teaching.

Illustrative Examples of Good Practice

This section serves to provide a brief illustration of the theories outlined above. The illustrations are limited in scope, as they deal with individual cases in particular circumstances. There is also a significant amount of overlap in the planning and procedures adopted; accessible practice is often accessible for all students. It is also worth re-iterating the fact that flexibility is key; what works for one student may not work for another, even if they have the 'same' disability. Remember that the aim of modifying the assessment strategy and/or adopting alternatives is to allow students to demonstrate their performance and attainment to the best of their intellectual ability, irrespective of their disability. Disabled students should gain no unfair advantage from the modifications; the concern is presenting them with an equal opportunity to demonstrate progress. In assessing the outcomes, the same requirements and standards should be applied.

Academic Assessment of a Visually Impaired Student

Context: a lecturer has on his course a visually impaired female student, who requires a screen enlarger to read text and view images, and who uses voice recognition software to 'type' essays.

Action: In consultation with the student, available institutional support and institutional guidelines, the following may represent an acceptable outcome:

It is decided that the voice recognition software can be used for the assessment, but that the student must be isolated from the rest of the class as the noise would be a distraction. The possibility of using an oral exam is considered, but as the assessment requires only short answers it is decided that this is unnecessary, and that the student will sit the exam in the same format as other students, using the maximum extra time that she is eligible for. The student says that a copy of the paper in large print will be acceptable (Braille or electronic copies could also be made available).

An acceptable room is found, which is located on the second floor of a block of teaching rooms and offices. There is no lift, but the student often uses other rooms on the same floor for seminars, and she is happy to have her assessment here. There are toilet facilities nearby, and the room has a multiple power socket for the computer and any auxiliary equipment, as well as a large external window with curtains and good lighting.

IT staff are liaised with to ensure that the computer being used is compatible with the assistive technology, and that the computer does not contain any information which may otherwise assist the student in completing the assessment. IT staff also agree to make themselves available during the planned period of the assessment in case there is a problem with the equipment.

Academic Assessments and Deaf/Hard of Hearing Students

This section does not take the narrative form of the rest of the chapter, but instead takes this opportunity to reproduce some excellent advice provided to tutors in policy documents at the University of Central Lancashire (this content is reproduced with thanks to Lynn Barnes, Subject Leader - Deaf Studies).

Assessment Arrangements

Deaf students are often eligible for additional arrangements at examination/assessment time. These arrangements include:

a) Timed Examinations

- extra reading time (usually 25%)
- interpreter to sign question in BSL
- separate room to facilitate the above
- individual exam strategy designed specifically to meet the student's needs whilst maintaining standards required by the course
- moderated exam paper where the Adviser for Deaf Students or the Language Support Tutor rewrites the text in a language more appropriate to the student's needs – done in conjunction with the academic tutor

b) In-course Assessment

Each student meets regularly with a language support tutor who works with the student to improve her/his English skills to ensure that the written presentation of work is accessible for marking purposes. The aim is that the language support tutors help students with the understanding and presentation of written English - not that they do the work for them. Previously tutors have enquired about the actual level of support given by the language support tutor and have wondered if this was reflected in the grade awarded. To answer this, students have been asked to submit two pieces of work. One is the student's original draft, produced without any language support and verified that this is the case, the second is the same piece but reflects the input of language support.

c) Some Examples of Good Practice

- long essay-type examination replaced by short answer questions (may be accompanied by a viva voce exam in BSL)
- audio and aural exams replaced by written exams
- written dissertations replaced by more practical/visual projects
- oral presentation replaced by signed presentation using a BSL interpreter
- some elements of the assessment signed by the student, recorded on video and translated by a BSL interpreter.

Academic Assessment of a Student with Impaired Mobility

Context: A student who uses a wheelchair, and who has slow keyboarding skills, uses assistive technology (eg a one-handed keyboard) and is required to participate in on-line discussions via a Virtual Learning Environment as a part of the assessment, at a designated time during the week.

Action: There are several key issues here: the majority of students will use on-campus computing facilities in order to contribute to these discussions, and as such the tutor and student must be happy that these facilities are available and accessible (eg are the desk heights adjustable, are the computing rooms accessible).

If these facilities are available, then the ability to use assistive software with university networked computers must be available. Many institutions will not allow students the rights to install extra software either on the network or on individual computers, and this may prevent them using any assistive software.

If that is the case then the obvious solution is to allow the student access to the chat-room and network from a personal computer – this may be done in liaison with relevant computer services.

Having addressed the technical issues it becomes clear that there is another problem – the slow keyboarding skills of the student mean that by the time he has typed a response to a thread, the conversation has moved on, and he is unable to engage in any dialogue. The highly dynamic nature of this assessment process means that the student is being placed at an unfair disadvantage, and this becomes clear to the tutor when he looks at the results of the discussion. In consultation with the student, and possibly with the institution's Disability Coordinator, the tutor identifies several options:

- he can offer a scribe who can type out the student's responses;
- he can ask for the student's thoughts on the discussion, rather than their contribution in the discussion;
- he can remove the on-line discussion from the assessment process, returning instead to a conventional seminar format (this may discriminate against others though, if there is for instance a deaf student in the same group);
- he can alter the 'chat' function to something more akin to a notice-board, whereby thoughts and responses can be posted on a limited number of topics throughout the assessment process.

The tutor opts for the 'notice-board' option this has the advantage of being cost-effective, not altering the aims of the assessment significantly, allows the student to retain a degree of independence that would be lacking when using a scribe, and allows the student to participate in the same assessment on an equal footing with other students.

Academic Assessment of a Student with a Specific Learning Difficulty

'Specific Learning Difficulty' (SLD) is a phrase that often means little or nothing to many managers and lecturers, and is most often replaced with the word 'dyslexia', which has more meaning to many. This is because by far the most common SLD in Higher Education is dyslexia, but it is worth noting that SLD covers many other areas such as dysnomia or dyscalculia.

Context: A student with dyslexia is on an English course that is assessed at its conclusion on the basis on a series of examined essays. The student's writing skills are slow and difficult for an assessor without personal experience of the student's work to read. Legibility and spelling/grammar are improved when the student uses a word processor, and this is the student's preferred method of written communication, as it also makes for clearer and more easily reviewed text. This method, however, is even slower than hand-writing for this student.

The assessment is intended to consist of two 4 hour exams, with the students completing one long essay question and two short essay questions in each.

Action: It is clear to both the course tutor and the institution's Disability Co-ordinator that the student would not, even with extended time, be able to fully demonstrate his clear ability and understanding, and as such the possibility of replacing the 4 hour examination with either a 7 day open paper, or with assessed coursework, is considered. This, however, is rejected in this particular case, as the tutor is aware that many students without disabilities may have learning styles that are not best suited to assessment under examination conditions, and it is felt that the dyslexic student may therefore be gaining an unfair advantage, *in these particular circumstances*.

In liaison with the examinations department, the tutor, the student and the Disability Co-ordinator decide that the most appropriate course of action to take would be to assess the student via a 2 day open paper and one 3 hour examination, in which he shall attempt the same 2 short essay questions as other students. The student is allowed to use a computer for this exam, appropriately checked by the Computing Department. The student is told that he should concentrate on the quality of his responses in the 3 hour exam – no marks will be deducted if the word limits are not quite reached.

For this student the process outlined above is appropriate; he is still assessed with other students under examination conditions, and must deal with the same stress factors involved in examinations of this type, but he will also be given the opportunity to demonstrate his intellectual ability over a longer period of time, which will vastly reduce the impact that his dyslexia may have on his work.

We should highlight again, though, the fact that this is only one solution; it may not be appropriate for other students with dyslexia. The key is flexibility and imagination – for instance, it may be that a student is allowed to work to his strengths by, for instance, submitting creative writing as part of his James Joyce course.

Much useful work has been done in this area in Australia, for example, see: www.utas.edu.au/docs/student_services/disability_service.htm . For technology issues TechDis provide a useful resource in the UK, which is growing rapidly (<http://www.techdis.ac.uk>)

Closing Comments

The shift within institutions which gives disabled students a more central role will occur for a number of reasons. The Special Educational Needs and Disability legislation passed by parliament in May 2001 will oblige all higher education institutions to be proactive in anticipating the needs of disabled people. This includes students, staff and other users of the facilities and services, to ensure that disabled students are not treated less favourably than their non-disabled peers, and to make “reasonable adjustments” to allow disabled students to participate as fully as they choose in the range of activities and opportunities available. The Disability Rights Commission has commissioned Skill : National Bureau for Students with Disabilities to produce guidance and a code of practice relating to the new law and this is likely to include examples of how the two requirements can be met. Contributions have also been made to this by other bodies, such as TechDis.

However there are other recent developments contributing to the changing context in which policy and provision is being developed. Firstly, with reference to legislation, in addition to the application of further sections of the Disability Discrimination Act 1995 regarding access to goods and services and to transport, the Human Rights Act 1998 is also significant. A similar act in New Zealand was used successfully by a group of students to challenge actions by the Victoria University of Wellington which had created barriers for disabled students. Secondly, the national funding councils have introduced strategies directed towards improving both rates of participation and the quality of the student experience. So in England for example, institutions can now secure additional core funding based on the number of disabled students they recruit. Whilst the additional premium is not “ring-fenced” for spending on provision for disabled students, it might be prudent to use it in this way since the HEFCE annual audit asks questions about how it has been used.

It is interesting to reflect on what has happened since 1990 in terms of policy and provision for students with disabilities. In those days, the concern was with under-representation and with ensuring that those who wished to study in higher education could do so. Today, there are more students indicating that they have disabilities than ever before, suggesting that efforts to increase levels of participation have been successful. Having come this far, the focus is turning now to look at the quality of the learning experience for this group of students, and ensuring that students are not disabled by policy and practice within institutions.

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Further Reading

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Further Resources

Further information may be found at the following places:

JISC Technology for Disabilities Information Service (TechDis). <http://www.techdis.ac.uk>

HEFCE/DELNI National Disability Team: <http://www.natdisteam.ac.uk>

Skill: National Bureau for Students with Disabilities: <http://www.skill.org.uk>

Higher Education Funding Council for England (HEFCE): <http://www.hefce.ac.uk> ,
email: f.reid@hefce.ac.uk

Scottish Higher Education Funding Council (SHEFC): email: p.d.brown@dundee.ac.uk

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