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Academic Assessment and Students with Disabilities

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Abstract

Assessment and the need to record academic achievement are an integral part of the higher education experience for all students. For disabled students it is essential that they are assessed in such a way so as not to disadvantage them, and equally, in a way that does not give them an advantage over other students. This paper highlights some of the issues that academic staff should consider and indicates the resources that are available to help them. This paper looks at the planning of assessment, physical environments in which assessments take place, alternative formats and timings and discusses how technology can be both an opportunity and a barrier for students to participate in assessments.

Introduction

The Special Educational Needs and Disability Act 2001 (SENDA) is covered extensively in this Planet special edition. Although the legislation makes no specific reference to academic assessment, the phrases 'less favourable treatment' and 'reasonable adjustment' should be taken to refer to this area as well as any other part of the educational experience. Additionally, the QAA Code of Practice on students with disabilities, (2000), although not compulsory, presents a framework within which legislative duties could be worked toward.

Much of the information contained in this paper summarises 'A Briefing on Assessing Disabled Students' (McCarthy and Hurst, 2001), one of a series of guides on Academic Assessment in Higher Education. Further information about this is available from both LTSN subject centres and the LTSN Generic Centre (http://www.ltsn.ac.uk/genericcentre). For those wishing to explore the issues surrounding assessment and disability in more detail, this is a key text. One of the main messages is the importance of being flexible and negotiating forms of assessment which are sensitive to individual needs while maintaining academic rigour.

Planning and Information

A well planned assessment process, as part of a detailed course information pack, helps students with disabilities to identify any problems they may have well in advance. For example, a student unable to sit in the same position for longer than an hour or so will need to make alternative arrangements in order to take a two-hour examination. More generally, for students who need to have learning texts converted into alternative formats (Braille, spoken word), providing a reading list well before the course starts is essential.

Physical Environment

In formal examinations thought should be given to the immediate physical environment. For example, in a *viva voce*, a deaf student who lip reads will find it impossible to do so if the examiners are sitting in front of a window, lighting them from behind. Rooms that are being used for exams may need to be made accessible for wheelchair users, and additional time may be required for the student to get into the room and prepare for the exam.

Alternative Format

British Sign Language (BSL) has a different structure and word order to English. Thus students may have difficulty understanding written questions and may wish to have their questions and responses translated by an interpreter. It is also important to bear in mind that the interpreter may need to be familiar with the subject matter involved.

Alternative Timing

Thought should be given to the length of time a student with disabilities needs to complete an examination. For example, longer periods of time may be required if the student is using technology aids, or short rest breaks may be needed for Repetitive Strain Injury (RSI) sufferers.

Technology and Assessment

The use of learning technologies such as virtual learning environments, virtual fieldwork, remote laboratories and computer-aided assessment is widespread in the Geography, Earth and Environmental Science (GEES) disciplines. Care must be taken to ensure students with disabilities are not disadvantaged, when these modes of assessment are deployed.

Computer Assisted Assessment

Computer Assisted Assessment (CAA) is being implemented in higher education for a variety of reasons, including improved course management and enhancing the learning experience (Charman and Elmes, 1998). The latter can be achieved in a variety of ways, for example in the provision of formative testing to aid revision, and in providing immediate feedback (Brown *et al*, 1999). Brown *et al* also identified other benefits of using CAA, including reduced load on teaching staff when marking or giving feedback and bringing the assessment culture experienced by students closer to their (computer-based) learning environments.

Accessibility guidelines (those guidelines that pertain to fonts, colours and frames etc.) are well established for online materials. They are available at a very technical level covering aspects of HTML (HyperText Mark-up Language), XML (eXtensible Mark-up Language), CSS (Cascading Style Sheets) and a plethora of other issues (http://www.w3c.org/WAI). Help is at hand from two projects (Fisher and Jeffels, 2000; Sams and Yates-Mercer, 2000) who have interpreted these guidelines to provide simple but effective checklists for good practice. These include the provision of text equivalents for images and video, providing transcripts of sound recordings and ensuring that information conveyed by the use of colour is available to those with colour-deficient vision. It is often learning technologists or educational developers who can aid in implementing these guidelines during the planning stages of any move to use CAA or any online learning environment. (Also see the article by Laxton in this special edition of Planet).

Accessing Assessment through Technology

A variety of software and hardware is available to help students with disabilities gain greater access to learning and teaching activities. The use of screen readers (converting on screen text to speech), Voice Recognition Software (recognising speech from a user and translating it into text) and magnifiers (enlarging areas of a computer screen) are tools commonly used by students. It is important to understand that although a student can use these tools to access learning and teaching, some modifications may be required if they are used in an examination situation. For example, it would be distracting to other students to have someone using a screen reader in a computer-based assessment.

Examples of modifications

These and other examples of good practice can be found in McCarthy and Hurst (2001).

Academic Assessment of a Student with Impaired Mobility

Context: A student who uses a wheelchair, and who has slow keyboarding skills, uses assistive technology (e.g. 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 (e.g. 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 Co-ordinator, 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 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 for which she is eligible. 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.

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