Web-pages should be accessible to all. For more information, see the leaflet on **Learning Platforms** in this series. It contains useful tips on mechanisms to check the accessibility of web-pages (and other online learning materials), such as accessibility validators, colour-blindness simulators and text-only browsers.

Presentation materials should be provided to disabled users in paper or electronic format if requested. For example, a visually impaired person may not be able to see a PowerPoint presentation when projected onto a screen but may be able to read a paper version or view it on their own monitor.

If using **multimedia**, try to offer an alternative version, transcript or description link.

Consider adopting accessible techniques for using **electronic discussion groups, email and bulletin boards** for learner information, group work and assignment feedback. For example, cut and paste text into an email rather than using attachments, or set up an email group through JISC mail <http://www.jiscmail.ac.uk> or another provider. This will allow some disabled learners improved access to communication. A mailing list will also allow you to keep an online record of contributions which can be a useful evaluative tool to monitor learner participation.

Electronic whiteboards are a great tool for use with learners with specific learning difficulties and other disabled learners as they can be used interactively and remotely (from the back of the classroom), and external resources can be used with them. A record of what was on the board can be kept and printed out instead of notes.

For information on good teaching practice and tips for inclusive teaching, read **The Learning Experience** leaflet in this series.

References:

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To receive this leaflet in alternative formats, contact <helpdesk@techdis.ac.uk>. An electronic version can be found at <http://ferl.becta.org.uk/publications/techdisferl>.

Being Prepared: Getting Started

The Special Educational Needs and Disability Act 2001 (SENDA)* stresses the importance of

'When learners with disabilities and teachers form learning partnerships, the possibilities for academic and career success multiply. Some learners with disabilities have conditions that are invisible, some are visible. Their challenges include gaining knowledge and demonstrating knowledge. In most cases, it takes just a little creativity, patience, and common sense to make it possible for everyone to learn and contribute' (Sheryl Burgstahler, Teaching Lab Courses to Learners with Disabilities).

Analysing your curriculum and delivery method

It is important to look at the potential barriers in the curriculum which may unnecessarily exclude disabled learners. This means looking at course outlines and learning outcomes and deciding if all learners can achieve these. In this process, it may be useful to ask:

- Might there be alternative ways in which a learner can demonstrate their knowledge and skills?
- Can an alternative exercise be given?
- Does the learning outcome demand the physical execution of a task or the demonstration of knowledge and skills?

In the past, deaf learners on a hairdressing and beauty course could not pass their Reception Skills module as they could not use the telephone. This obstacle was overcome when learners began to use a text phone and a relay service. This allowed them to demonstrate their ability, and eventually the exam board accepted this alternative method.

Some areas which the college should consider examining are:

- Information and marketing,
- Enrolment and induction,
- Access to college buildings and facilities,
- Teaching situations and access to the curriculum,
- Workshops and studios,
- Field trips and work placements,
- Online and distance learning,
- Assessment and examination.

These aspects of college life are amongst the first areas you should look at when examining the accessibility of your college. A full list of things to consider and a detailed checklist can be obtained through the **Rights of Access Toolkit**. The toolkit was written by the Association of Colleges with support from the Department of Education and Skills, the Learning and Skills Council and the Disability Rights Commission. It is designed to help further education colleges meet and exceed the challenges of the new legislation. It is available from <http://www.feonline.net/feonline/display?id=5480>.

Curriculum audit

The individual needs of your learners should have been assessed prior to the commencement of the course; however you should consider auditing your curriculum and assessments as part of your course preparation and review.

Teachability

The Teachability pack is an audit tool which enables you to examine your courses for accessibility. The questionnaire can be used by practitioners, course planners and quality managers to identify barriers in teaching and learning for disabled learners. Although aimed at higher education lecturers this pack can also successfully be used by further education lecturers. Available from <http://www.ispn.gcal.ac.uk/teachability/index.html>.

'About a year ago the college set up a working party with Learner Advisers, Course Managers, Personnel, the Assistant Principal and Learning Support to review all the practices and policies of the college. For example, we reviewed our forms for accessibility, we did an access audit of the physical environment, etc. We undertook visits to other colleges in this area and did a peer review of our services. This working party is ongoing to check that we are up-to-date with what we should be doing' (Suzanne Jones, Dumfries and Galloway College).

Preparing yourself

There are a few considerations you should think about when teaching disabled learners:

- Do I have all the information about the learner's needs so that I can support them fully?
- Do I know who the college learning support specialists are, to get more information and support?
- Do I need further staff development to feel confident as an inclusive lecturer?

For more information on staff development, see the **Staff Awareness and Development** leaflet in this series.

Lesson planning

A well-prepared and thought-out lesson plan is the first and most important part of preparing for inclusive teaching. Planning your lesson will allow you to think about any issues which may create barriers for your learners and will give you a

chance to think about alternative ways of presenting and executing your lesson if necessary. This will help you plan and prepare handouts and presentation materials, and sharing these with your learners will assist them greatly. Differentiation between learners is good practice and will be well regarded during college inspections.

Good Practice in Inclusion

Below is a list of practices which will assist your disabled learners:

Provide the learner with a copy of your lesson plan or an outline of your session in advance. This does not mean that you cannot digress from it or let the class take its natural flow. It does mean that learners will be able to prepare themselves for potential vocabulary, know what equipment they may need to bring and brief their support workers.

Provide the learner with a copy of any handouts, presentation materials and your notes in advance of the lesson. Giving these to the disabled learner does not make it unfair to the other learners. Even with your notes, deaf learners, for example, will still only receive a fraction of the information their hearing peers do. Your role is to impart information—as much of it as possible.

Provide the learner with any subject specific glossaries or information on where these glossaries are available. Learning new vocabulary can be problematic and time consuming for a variety of learners. Giving this information can mean that learners using augmentative communication technology can programme these words into their speech synthesisers in advance and participate more readily; deaf learners can give these word lists to interpreters to make translation more effective, which means less interruptions in the lesson. An example of a good subject-specific glossary is **Artsigns** <http://www.artsigns.ac.uk>, an illustrated online glossary for art and design in British Sign Language (BSL) and English—this can be of use to all learners, not just BSL users.

If possible, provide all the above in electronic format. This ensures that they are easier to adapt to the individual learner's needs. They can be printed out on the colour paper best suited to the learner, in the right size and font, be read out by text-to-speech software, etc. Your intranet or other learning platform may be a good vehicle for making these resources available.

Discuss with the learner and their support worker how you can effectively work as a team. The support worker may also need a copy of your teaching materials, especially if they are note-taking or acting as a communication support worker for the learner.

A series of useful teaching tips and dos and don'ts can be read in **Accessible Curricula: Good Practice for All**, by Carol Doyle and Karen Robson of the University of Wales Institute, Cardiff. This booklet is available for download from the TechDis web site at <http://www.techdis.ac.uk>.

The Enabled Classroom

There are various considerations which should be taken into account in terms of the physical access to the classroom and building – if your learners cannot get into your teaching area their learning will be severely restricted! Here are a few issues to think about:

- Teaching space layout – can learners with mobility impairments and using wheelchairs access this? If not, can an alternative room be found?
- Are the rooms well signposted?
- Is there a person available to guide a visually impaired learner to the classroom, at least for the first lesson?

- Is there enough room between furniture to move around, or will a wheelchair user be restricted to one area of the classroom only (e.g. can they take part in group work or see the whiteboard easily)?
- Are desks, computer stations and lab benches adjustable?
- Is the lighting sufficient and appropriate?
- Are there sources of noise which can hinder effective communication?
- Are there any computers with large monitors?
- Have all the software program accessibility options been enabled?
- Is there room on the desk for any assistive technology?

If any of the above pose a problem, it may be useful to speak to the person in charge of timetabling, the estates manager or the learning support adviser.

'Peter is a wheelchair user attending a Flexible IT workshop. When Peter recently changed his wheelchair, he and staff found to their dismay that it would no longer fit under the work desk! To solve this problem, leg extensions were welded onto one desk to increase its height, thus allowing the wheelchair to fit under the desk. It has since been decided that requests for a higher desk or an adjustable height desk for each IT Flexible workshop should be included within our business plan' (Alison Sellars, Tresham Institute).

For more information on designing an accessible computer room see <http://www.washington.edu/doit/Brochures/Technology/comp.access.html>.

For more information generally, see our leaflet on **Assistive Technologies** in this series.

Designing Electronic Materials

Universal Design/Design-for-All

Learners have different methods and rates of learning. Designing the curriculum to accommodate this is the first step to inclusive teaching. All learners, no matter how they access course materials, should be able to receive the same learning experience as their peers. The premise of universal design is that accommodations which are made for specific individuals can greatly benefit all.

The design principles advocated in **Access all Areas** (Phipps, Sutherland and Seale, 2002) state that design should:

- consider the needs of a diverse population,
- be easy for anyone to use,
- be accessible,
- benefit everyone, not just disabled people.

'Teaching practices which benefit learners with disabilities are likely to be those which would benefit all learners. Lecturing staff should be aware that inappropriate teaching methods may erect barriers to learning which have nothing to do with intellectual capabilities' (John Hall and Teresa Tinklin, **Disabled Learners in Higher Education**).

When preparing learning and teaching materials you should consider the following:

Online learning materials should conform to the principles of universal design as described above. Two of the great advantages of ILT are the fact that materials can be used again and again and users can access them at their own pace. Building this into the design of materials will aid all users, especially disabled learners.