Course Schedule: Unit 20 ICT Solutions for People with Individual Needs

POSSIBLE COURSE SCHEDULE

Week	Session Outline
1	Introduce subject, discuss Disability, Impairment, and Handicap. Identify types of disability and their affects on the individual. Consider the **Ability**, then the **Disability**, then the **Possibility**.
2	Consider legal implications, legislation and the implications of legislation, identify specific legislation and review its affect on society.
3	Practical session on mobility. Students try to get around college using a wheelchair. Discuss problems encountered.
4	Practical session on visual impairment. Students in simulation of blindness (carefully supervised and guided) attempting to achieve simple tasks without seeing (making a peanut butter sandwich is an interesting challenge).
5	Practical Session on hearing impairment. Experiencing trying to communicate without hearing, explanation or demonstration of text phones and BSL.
6	Discussion workshop on other forms of disability, how the disability limits the individual and what the possibilities are for the individual. Consider the **Ability**, then the **Disability**, then the **Possibility**.
7	Discussion forum on technology solutions, what they can do, their limitations, what future developments could occur.
8	Introduce assignment and case studies, inviting students to pick three case studies, representing a variety of disabilities. Students to research for **ONE** case study and prepare a report that will also include the legislative aspects.
9	Students to continue with their project and submit work for review.
10	Students' work returned with appropriate feedback and guidance. Students to expand on work as necessary.
11	Students to re-submit work if needed. Start research on remaining case studies.
12	Students to work on remaining case studies, tutorial support as appropriate. *At this point students may change remaining case studies in the light of recent learning*.
13	Students to work on remaining case studies, tutorial support as appropriate.
14	Practical session, students to customise software and hardware to meet an individual's need.

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15	Student to assemble full report, index it and complete the bibliography or resource directory. Submit report for review
16	Reports returned with feedback. Students to attend to points raised, Make modified version of report to meet the access needs of any case study.
17	Final versions of reports submitted for grading.
18	Feedback on grading, review and evaluation of course.

Other possible approaches

It is strongly recommenced that legal aspects relating to disabilities are dealt with at an early stage in the course. After that, students will need to gain an overall appreciation of a variety of disabilities. This may be best achieved with the co-operation of locally based organisations that support specific disabilities. Teachers may look to local groups for the blind and deaf, wheelchair user groups and a whole variety of other groups. Local social services departments may be able to put teachers in contact with appropriate groups.

Most education authorities will have units to support learners with sensory impairments.

A disabled pupil or staff member may be willing to discuss abilities and disabilities. It is important to gain the permission of individuals who may be used for case studies and to disguise their identity if required. Particular care should be taken to avoid any situation where the individual being studied could become the victim of abuse or bullying as a result of disabilities or impairments that are being discussed.

A disabled parent or other relative may be willing to talk to the students and perhaps become a case study.

It is important that the students gain an opportunity to understand the implications and limitations of a variety of disabilities. It is often possible to simulate sensory and motor disabilities. Various organisations for the blind and for the deaf may be willing to assist with this and it is important that any experiments at simulating sight or hearing loss are carried out safely and under experienced supervision. Something as simple as letting an able-bodied student attempt to navigate the school or college building in a wheelchair can be quite enlightening.

Remember that many students will not have any experience of anyone with a disability.

A variety of disabilities must be considered and at least one of the case studies should be that of a sensory need. Deafness and hearing impairments, blindness and partial sight each brings its own specific challenges, as does the inability to speak. In each of these areas there is much that technology can do to open up communication opportunities for individuals.

When looking at technological solutions, it should be remembered that some very effective solutions can be quite simple – such as adding a key guard to help the user hit the right key or installing a trackerball instead of a mouse.

Reports should be consistently set out and in a form that can be recorded and retained for moderation. There is no specific requirement for any one media and consideration should be given to any special needs of the individual student. Reports for individual case studies, or copies of the reports, should be made in a format that can be easily accessed by the person from that case study. This may be varied where the case study is a very young child or an adult who has a severely limited understanding, when the report would obviously be addressed to a parent or carer. In such case it could reasonably be assumed that the parent or carer has no impairment. In the case of a blind case study, it can be assumed that an audiocassette copy of a report would suffice and there is no requirement to translate to Braille.

In Task C opportunities should be found to allow customisation of the operating system, an application and the hardware. An example of this could be to slow down or turn off key repeat for someone who has limited hand movement, perhaps add some auto-text phrases to save repetitive typing and exchange the mouse for a trackerball. Alternatively, for a partially sighted user the screen resolution could be changed, applications could be set to show large icons and the shift and ctrl keys could be marked with a tactile marker. Many visually impaired people use adhesive tactile material such as Velcro to identify keys.