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## Case Studies: Unit 20 ICT Solutions for People with Individual Needs

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The following case studies are based on real individuals but personal details have been changed considerably to protect their identities.

Students may use alternative case studies but they should be careful to protect the identities and feelings of individuals.

Students should pick a selection of case studies that reflects a diversity of needs.

Page	Case Study Name	Disability or Impairment
2	Alex	Aspergers
3	Annette	Hearing Impaired
4	Christina	Cerebral Palsy
5	Helen	Profoundly Deaf
6	Imran	Multiple Disabilities
7	Janine	Mobility
8	John	Profoundly Deaf
9	Mandy	Mobility
10	Mark	Totally Blind
11	Natalie	Partially Sighted
12	Pat	Learning Difficulties
13	Patrick	Profoundly Deaf
14	Penny	Totally Blind
15	Philip	Cerebral Palsy
16	Sandie	Downs Syndrome
17	Suzy	Dyslexia
18	Tammy	Blindness
19	William	Impaired Vision

## CASE STUDY 1

<b>Name</b>	Alex
<b>Gender</b>	Male
<b>Age</b>	27
<b>Occupation</b>	Volunteer at a day centre for people with disabilities, Alex helps with teaching basic IT skills.
<b>Disability</b>	Aspergers syndrome – a form of Autism.
<b>Aspirations</b>	Typical of people with Aspergers, Alex has chosen subjects that he focuses on, sometimes to the point of obsession. Alex is passionately interested in computers and technology, also astronomy. Alex has a fantastic memory for information relating to his interests, continually wants to gain more knowledge about those subjects and would like to teach on a professional basis (getting paid for his work).
<b>Other information</b>	<p>Because Aspergers and Autism were not properly recognised or supported when Alex was at school he did not achieve academic qualifications. He knows that he needs to study but easily gets side-tracked to his favourite interests.</p> <p>There is limited funding available to purchase equipment and software that would motivate him and help him achieve his ambitions.</p>

## CASE STUDY 2

<b>Name</b>	Annette
<b>Gender</b>	Female
<b>Age</b>	47
<b>Occupation</b>	Administrative assistant.
<b>Disability</b>	Severe hearing loss to right ear, partial loss of hearing to left ear. This is a long term disability. A recently supplied hearing aid has helped to provide balanced sound and the aid has a 'T' setting for use with loop induction.
<b>Aspirations</b>	<p>Annette would like to take on more interesting and better paid work but all the jobs that interest her require audio typing or telephonist skills. Headphones don't work very well with hearing aids!</p> <p>Annette seeks a technology solution to make these types of work possible.</p>
<b>Other information</b>	Annette would also welcome other ways to keep in touch with her friends besides the telephone, which is sometimes difficult for her to use.

### CASE STUDY 3

<b>Name</b>	Christina
<b>Gender</b>	Female
<b>Age</b>	5 years
<b>Occupation</b>	Attends local primary school
<b>Disability</b>	Christina has Cerebral Palsy caused by problems at birth. Christina is dependent on her battery-powered wheelchair that she has learned to control with precision. Christina has an active and lively mind, just like any other five-year-old but she has a great deal of difficulty in controlling movement of her head and limbs. Christina's speech is difficult but is understandable.
<b>Aspirations</b>	Christina wants to stay at her school where her friends are but she will need some extra help. She wants to do things herself: learn to read and write, make pictures, play games
<b>Other information</b>	<p>Christina's parents have three older children (all without disability) and both parents are currently unemployed, living in a depressed area of the UK.</p> <p>A charity is willing to fund special equipment but will have to raise the money for this. Value for money is important but fundraising may be easier if an imaginative solution is proposed.</p>

## CASE STUDY 4

<b>Name</b>	Helen
<b>Gender</b>	Female
<b>Age</b>	39
<b>Occupation</b>	Not employed – does voluntary work for hearing impaired group locally.
<b>Disability</b>	Profoundly deaf – can lip-read.
<b>Aspirations</b>	Helen wants to live life to the full and have involvement with people who are not deaf (there is a strong tendency for people with sensory disabilities to make friends from those with the same disability). A range of communication options is required.
<b>Other information</b>	<p>Helen's family cope well with her deafness. She requires solutions that will allow her to be in contact with hearing people, to gain friends, make purchases and generally get on with life as normally as possible.</p> <p>Cost of equipment is not a key issue as her husband is a senior consultant at a London hospital.</p>

## CASE STUDY 5

<b>Name</b>	Imran
<b>Gender</b>	Male
<b>Age</b>	31
<b>Occupation</b>	Not employed
<b>Disability</b>	Multiple disabilities – Imran is totally blind, has no speech and is dependent on a wheelchair.
<b>Aspirations</b>	To gain greater independence.
<b>Other information</b>	Imran lost his sight, speech and mobility in an accident. Prior to the accident, Imran had considerable IT skills. He currently uses a portable typewriter keyboard to spell out messages and hold conversations. He is aware of a number of IT solutions but needs a specific list of equipment and software, with prices, so that he can apply for financial aid. Imran has keyboard skills, can read and write Braille, has good hearing and what is frequently described as a wicked sense of humour.

## CASE STUDY 6

<b>Name</b>	Janine
<b>Gender</b>	Female
<b>Age</b>	29
<b>Occupation</b>	Voluntary worker at Day Centre
<b>Disability</b>	<p>Janine has Charcot Marie Tooth Disease. This is a rare disability and you may need to research it.</p> <p>Janine is dependent on a wheelchair and has very little hand movement and no finger movement.</p>
<b>Aspirations</b>	Janine would like to work in an office. She has the will to learn office skills and is enthusiastic.
<b>Other information</b>	An employer is willing to offer Janine a receptionist job where she would have to answer the telephone, take messages, make appointments, type (or word-process) letters, send and receive fax and email messages. The employer would be willing to spend about £1,000 on special equipment or adaptations.

## CASE STUDY 7

<b>Name</b>	John
<b>Gender</b>	Male
<b>Age</b>	52
<b>Occupation</b>	Part-time teacher of sign language.
<b>Disability</b>	Profoundly deaf from birth.
<b>Aspirations</b>	John wants to expand his teaching, aiming to go to businesses, schools and anywhere there are people who would like to learn British Sign Language. To achieve this, John needs to be able to communicate with people, take and send messages and generally be in touch with the world around him. He also has problems knowing when visitors are at his door.
<b>Other information</b>	<p>John has no experience of technology. He has an old television but doesn't use it much because it is difficult to follow images without hearing.</p> <p>Because John has never heard, his speech is difficult to understand. Can technology also help John to speak more clearly?</p>



## CASE STUDY 8

<b>Name</b>	Mandy
<b>Gender</b>	Female
<b>Age</b>	49
<b>Occupation</b>	Social worker
<b>Disability</b>	Mandy had a stroke recently, which left her unable to use her right hand in any way. Mandy is right-handed.
<b>Aspirations</b>	Mandy needs to be able to make notes during visits and to type up case notes in her office. She has keyboard skills.
<b>Other information</b>	Mandy's employer, a local government department, will spend some money on adaptations and special equipment if there is clear evidence that this will be beneficial to her work.

## CASE STUDY 9

<b>Name</b>	Mark
<b>Gender</b>	Male
<b>Age</b>	35
<b>Occupation</b>	Barrister
<b>Disability</b>	Mark is totally blind.
<b>Aspirations</b>	Mark has worked hard to become successful in the legal profession despite his blindness. His only regret is that he is dependent on a reader and scribe – a person who reads incoming documents and types up outgoing ones for him. Mark seeks to become more self-sufficient in his work, especially as he frequently needs to carry out research for new legal cases.
<b>Other information</b>	<p>Because Mark is successful in his profession he can afford to buy equipment and would be willing to do so providing it will really be of use to him.</p> <p>Mark can read Braille but all his written communications need to be in visible (normal) text.</p> <p>Mark also has the assistance of a big black Labrador guide-dog.</p>

## CASE STUDY 10

<b>Name</b>	Natalie
<b>Gender</b>	Female
<b>Age</b>	22
<b>Occupation</b>	Office Assistant
<b>Disability</b>	Partially Sighted
<b>Aspirations</b>	To gain greater independence and be able to take on more aspects of office work, hoping to get promotion to more interesting (and better paid) employment.
<b>Other information</b>	<p>Natalie can read large text, her preference is Arial Black 18 Point. She uses a high contrast setting for the computer screen but still finds it very difficult to use the computer. Natalie prints draft copies of work in her preferred font and point size, reducing it to normal before making a final printout.</p> <p>Her employer is willing to sponsor a reasonable amount of special equipment, subject to a clear advantage being shown.</p>

## CASE STUDY 11

<b>Name</b>	Pat
<b>Gender</b>	Female
<b>Age</b>	31
<b>Occupation</b>	Attends sheltered workshop
<b>Disability</b>	Severe learning difficulties
<b>Aspirations</b>	Pat can write her own name but cannot manage much more than that with writing. Her arithmetic skills are also poor. Pat is keen to learn but somehow all attempts at formal learning have failed her. Pat has tried using a computer and, with a little guidance, she can create colourful patterns or play simple computer games.
<b>Other information</b>	Pat's social worker, Matthew, asks whether technology could be used to help Pat to learn basic skills and, if so, what would be needed.

## CASE STUDY 12

<b>Name</b>	Patrick
<b>Gender</b>	Male
<b>Age</b>	56
<b>Occupation</b>	Freelance photographer
<b>Disability</b>	Profoundly deaf
<b>Aspirations</b>	Patrick has no computer experience but requires a method of cataloguing photographs, marketing them and being in communication with prospective clients despite his hearing loss.
<b>Other information</b>	Patrick has a progressive hearing loss that now leaves him almost totally deaf. Until now he has relied heavily on the telephone for receiving orders, checking through hand written catalogues to find stock negatives. Patrick realises that any technological solution will require a degree of data inputting but is keen to learn new skills if they enable him to continue his business.

## CASE STUDY 13

<b>Name</b>	Penny
<b>Gender</b>	Female
<b>Age</b>	Fifty-ish
<b>Occupation</b>	Proprietor of riding school and stables
<b>Disability</b>	Totally blind
<b>Aspirations</b>	Penny wishes to have autonomy in making bookings for students and general administration of the riding school. Penny rides regularly and has devised a simple but reliable method to find her way around the training ground.
<b>Other information</b>	Penny became totally blind at about the age of ten. She is a very independent and resourceful person with the determination that has enabled her to create a successful business despite her disability.

## CASE STUDY 14

<b>Name</b>	Philip
<b>Gender</b>	29
<b>Age</b>	Male
<b>Occupation</b>	Consultant – Specialist in coping with disabilities Philip has just won a contract to work with a hospital in Kenya, advising newly disabled people on how to cope with their situation and what changes they need to make.
<b>Disability</b>	Cerebral Palsy
<b>Aspirations</b>	Philip has used a desktop computer for some years but now he needs a more portable system. He needs to keep in touch with the UK. He also needs to write reports, design modifications to clients' homes and maintain some client records.
<b>Other information</b>	Philip's speech and co-ordination are severely affected by the Cerebral Palsy. He is dependent on his wheelchair and he has a helper to assist when he needs to move out of the wheelchair. Philip can use a tracker-ball but not a mouse. With his desktop computer he uses a key-guide (frame with holes corresponding to the keys). His new employer will fund any essential equipment but Philip is worried about how he can have a useable system and be able to move it around.

## CASE STUDY 15

<b>Name</b>	Sandie
<b>Gender</b>	Female
<b>Age</b>	22
<b>Occupation</b>	Not employed
<b>Disability</b>	Downs Syndrome
<b>Aspirations</b>	Sandie is trying very hard to learn reading skills and simple numeracy skills. She would like to practice her newly acquired skills and gain confidence.
<b>Other information</b>	Sandie has attended group computer sessions and enjoys making very simple posters and cards. Her social worker believes that if Sandie had a computer at home, and the right software, she may be able to learn more skills.



## CASE STUDY 16

<b>Name</b>	Suzy
<b>Gender</b>	Female
<b>Age</b>	38
<b>Occupation</b>	Carer
<b>Disability</b>	Dyslexic
<b>Aspirations</b>	Suzy finds it very difficult to express herself in writing. Because of her dyslexia she is also lacking in confidence.
<b>Other information</b>	Suzy enjoys her work but she has not applied for promotion because her dyslexia makes it very difficult for her to write letters and reports. Suzy feels very embarrassed about her poor spelling and the difficulties she has with writing. She is competent at her job and able to express herself well with spoken language.

## CASE STUDY 17

<b>Name</b>	Tammy
<b>Gender</b>	Female
<b>Age</b>	24
<b>Occupation</b>	Audio Typist
<b>Disability</b>	Tammy is totally blind, having never had sight.
<b>Aspirations</b>	Having studied at the RNIB college Tammy now finds it difficult to get employment near her home on the Isle of Wight but several large companies have offered her freelance work if she would like it. Tammy hopes to set up a typing service from her home.
<b>Other information</b>	Tammy lives with her parents, she enjoys walking and music. She would like to have more friends and to be more independent.

## CASE STUDY 18

<b>Name</b>	William
<b>Gender</b>	Male
<b>Age</b>	57
<b>Occupation</b>	Teacher – Maths & Science
<b>Disability</b>	Failing Sight
<b>Aspirations</b>	William is not ready to retire yet and still needs to prepare lessons and worksheets for students and to continue researching, particularly for science lessons where he needs to keep up-to-date with new ideas and inventions.
<b>Other information</b>	William uses board markers to write notes that he can read. He can use a computer but can only cope with text that is not less than 30 point. Reading books and newspapers is beyond his ability now