

SEMESTER ONE ACADEMIC YEAR 2008-2009

Effective Learning Programme (AADLU)

The Effective Learning Programme is a series of six (6) sessions workshop run by the Disability Unit.

Log in for a session using the links below.

The following sessions are available within the programme:

- **Study Skills** - to become more effective in planning your work; time-management and to develop an independent learning approach.
- **Note Taking** - to develop skills in producing notes both within lectures and tutorials; and learn how to integrate these notes into an effective revision programmed.
- **Reading** - to become a more effective and discerning reader; looking at reading strategies such as speed reading and SQ3R.
- **Writing Assignments** - to explore the reasons why assignments are used at University; to uncover the mystery of questions and to effectively plan and write a good quality assignment.
- **Preparing for your exams** - to effectively plan revision periods and to explore current exam techniques, before and during exams. (This session becomes available in early December).
- **Overview of Assistive Software available on-campus** - to introduce you to the assistive software for planning, reading and writing, available on campus. This overview may help you to identify which software you think could be most useful to you in your studies, and will inform you of where the computer labs are and equip you to get started using the assistive software.

Registration: Contact Academic Advising Disabilities/Liaison Unit (AADLU) for Time, Venue of Presentation.

Contact- 662 2002 Ext. 3866, 3921, 3923 or 4254

Email- AADLU.office@sta.uwi.edu

Teaching the Student Who Is Blind or Partially Sighted

Introduction

Blind Students has successfully completed Degree programmes at The University of the West Indies. Totally blind students elsewhere have successfully studied subjects which many people might initially regard as impossible for blind students, such as Chemistry. With some thought, and appropriate provision, students who are blind or partially sighted can achieve their educational potential.

The following notes are intended to help you to think about the possible needs of students who are blind or partially sighted, and are not intended as a substitute for discussing with individual students what their needs are, and how their requirements can best be met in an academic context. To know that a particular student is either blind or partially sighted is actually to know very little about what they are able/not able to see or to do.

Reading these notes is also not a substitute for thinking about how teaching can be made more accessible to disabled students. For further advice please contact **AADLU**.

Background

People who are regarded as blind or partially sighted have visual impairments which cannot be corrected by glasses or contact lenses.

However, to know that someone is blind or partially sighted is to know relatively little about their degree of sight loss, or how their sight is affected. A very small percentage of people who are blind have no vision at all, and are unable to distinguish light from dark. Others have blurred vision, restricted visual field, or patchy vision. And others might have difficulty in distinguishing between objects of similar shape and colour, or problems with gauging distance or speed. Some people who have reduced peripheral vision but good central vision may require assistance in getting about, and yet be able to read small print without much difficulty.

For some people, a visual impairment may be associated with or be in addition to impairment. Some people's loss of vision fluctuates, while for others the loss is gradual and developing.

Possible effects on students

Most people use sight to access and to produce written text, and to help them get around.

Students need to do all these things. They are likely to have developed alternative, preferred ways of doing them, depending on the nature and extent of their loss of vision, and the training and technology which have been made available to them. For students who are experiencing changes in vision, there may be a need to adjust techniques during their course of study. They may also commence study without being fully aware of how their impairment will impact on the requirements of study, since, like all students, they will be unfamiliar with the range of study settings in which visual data is presented, and

will be experiencing the qualitative aspects of presentations for the first time. For example, font size and distance from overheads, lighting and colour contrast are a few of the variables affecting students' access to text presented on overheads.

Getting about

- Students who are blind may use a long cane. There are different types of white cane. The cane may simply indicate that the person is blind, but some canes are designed to be used as mobility devices. These are known as long canes or guide canes, and are swung from side to side, as the person moves forward, to locate any hazards or obstacles. Some blind or partially sighted students may be accompanied by a sighted guide. Many people who are blind or partially sighted, and who have good peripheral vision, require no additional aids for mobility, especially where the environment is well lit, and where colour contrast has been used well to highlight potential hazards, such as edges of stairs.

Accessing text

- It is important to remember that many blind or partially sighted students have access technology for their personal use at home, such as scanners and screen reading software, and other methods of rendering inaccessible text accessible, such as having texts read on to tape. The use of such equipment, and such methods, require work before the student can even begin to study. This underlines how essential it is for the student to have reading lists and other texts as far as possible in advance. A range of techniques can be used to access text. Some partially sighted students use methods which enlarge text, such as portable, hand-held, illuminating magnifiers, or closed circuit television (CCTV), many of which are not portable. CCTVs can both enlarge print and allow adjustments to background and print colour on the page. Increasingly, students use computers with scanners and screen reading software in order to access text. When information is held in digital format, it can be read from the screen, or reproduced in Braille, or enlarged on the screen. Some students make use of the RNIB facility for having materials read onto audio tape.
- Some blind students can access even complex diagrammatic material if this has been prepared in tactile format, perhaps with Braille markings. The National centre for Tactile Diagrams can help with this. Diagrams are more likely to be accessible if they are clear and simple, using strong contrasting colour. For some students, enlarged or heavy, black diagrams, or diagrams using colour contrasts, will be accessible.
- Significant technological developments mean that students may have sophisticated personal equipment for personal use off campus. However, such equipment is often not portable. It is therefore important to remember that visual material, such as texts, or OHP screens used in teaching will be inaccessible to some blind or partially sighted students without assistance from teaching staff.

Producing text

- Blind and partially sighted students use a range of ways of producing written work. With appropriate access technology, most will be able to do so independently. Some students work with amanuenses (or 'scribes'), and others handwrite conventionally, perhaps with the assistance of magnifiers, or strong, focused lighting, or on heavily lined, yellow paper.
- The access technology used by many blind or partially sighted students for producing written text may not be portable, and therefore consideration must be given to enabling students to produce written text in classes. Accessing texts is a usual preliminary to producing texts, and this underlines, once again, how crucial it is for students who are blind or partially sighted to have written materials well in advance.

Working With A Scribe In Examinations.

Guidelines

Ideally, an amanuensis (or 'scribe') should be regarded as an efficient writing machine, responsive to instructions and free from the mechanical complexities of keyboards or tape-recorders.

The amanuensis should be literate in the subject he/she is scribing. This is particularly true of subjects with terminology and symbols, which would be unfamiliar to most people. While some students are well used to working with an amanuensis, for others this might be the first time, and if the student has not practiced sitting exams this way, it can be really difficult. The fact that the amanuensis must be literate in the subject means that the student may feel a little embarrassed about dictating answers to someone he/she knows has a sound grasp of the material. It is really important that the amanuensis should be calm, quiet, reassuring, and, above all, patient: some students will ask their amanuensis to score out the last page(s) they have written, and the amanuensis must at least appear not to mind!

The reason a student needs an amanuensis in exams affects the arrangements for the exam. This is because some students - those who have a manual impairment, permanent or temporary - are able to read over the scribed work after it has been recorded, whereas other students - those who have a visual impairment or severe dyslexia - are unable to do this. The students in the latter group will also have to have the exam paper, and individual questions, read to them.

Just before the exam...

For All Students

Whatever the reason for scribing, certain negotiations have to be made between student and amanuensis before the exam can begin.

1. How are notes to be made? By the amanuensis on the script, or, where a limited amount of writing is possible, by the student on a separate sheet of paper?
2. Punctuation and spelling? Does the student want to give only the main punctuation breaks, leaving the rest to the amanuensis, or would they rather dictate every punctuation mark?
3. What if the amanuensis can't grasp a word? Do they ask the student to repeat there and then, or come back to it later?

Students Who Have a Specific Learning Difficulty, or Dyslexia

Background Information

A significant number of students studying at our University of and recorded as having special needs have what is called dyslexia.

While this literally means "difficulty with words", some people have a similar difficulty with numbers. The extent and precise nature of such difficulties vary considerably from person to person. A diagnostic assessment carried out by a chartered psychologist would document the difficulties, and many dyslexic students have already been assessed at school or college. Others, perhaps increasingly disadvantaged by the volume and pace of university work, seek assessment once they have become a student. Such assessment can be very helpful to the student, by confirming the nature of the learning problems and by offering strategies for improving learning, which might include recommendations about equipment, such as computers with supportive software. Assessments would also often make recommendations about special examination arrangements.

Effects on the Student

There is no one set of characteristics which define dyslexia, and there is great variation among students in the difficulties they have.

Some students have a major difficulty in accessing written text, and work by employing readers to put text on to cassette. Some students are unable to produce written work without the aid of equipment, such as a computer with speech synthesis. Other students may have relatively minor difficulties. What follows are possible and common areas of difficulty. Not all students assessed as dyslexic will have difficulties in all of these areas, while some students will have considerable difficulty in some of these areas.

The Deaf or Hard of Hearing Students in the Classroom

Introduction

Conventions govern the use of language used to describe hearing loss. Deaf, with a capital 'D' is used to denote people who are profoundly deaf, and who belong to a cultural and linguistic minority. 'Deaf' with lower case 'd' refers to people who may also be profoundly deaf, but who speak and lip-read. Those who experience severe hearing loss after maturity might be referred to as 'deafened.' The terms 'partially deaf' and 'hard of hearing' overlap, in that both may describe a moderate hearing loss, although 'partially deaf' usually denotes a greater hearing loss than that denoted by the expression, 'hard of hearing'.

Deaf (capital D) students and deaf (d) students have successfully studied many courses at our University, such as Electrical Engineering and Medicine. With some thought, and appropriate provision, students who are Deaf, deaf or hard of hearing (hereafter's/Deaf') can fulfill their educational potential.

Background

There is a great range of causes of hearing loss, and a great range in degrees and nature of hearing loss, as variations in language used to describe hearing loss suggests. Some students will have been born deaf; others may have lost hearing, gradually or suddenly. Of many people who have some hearing difficulty, only a very small proportion of people have no hearing at all.

There is a significant difference between people who are pre-lingually deaf, i.e. who became deaf before learning to speak and read and those who are post-lingually deaf, i.e. who became deaf before learning to speak and read and those who are post-lingually deaf, and i.e. who became deaf after learning to speak. There are additional complexities for pre-lingually deaf people learning spoken and written language, since hearing the spoken word is so important in learning to speak and write. Some people who use "Sign Language" may write in 'Deaf English', i.e. be influenced in writing by the word order of sign language.

The following notes are intended to help you to think about the possible needs of students who are d/Deaf. Reading these notes is not intended to be a substitute for discussing with individual students what their needs are, and how their requirements can best be met in an academic context. To know that a particular student is d/Deaf is actually to have very little information about the student's precise needs within your course's teaching context.

Reading these notes is also not a substitute for thinking about how teaching can be made more accessible to disabled students.

Possible effects on students

Different students who are d/Deaf will have different methods of communicating, and it is important to find out whether the student uses speech, lip-reading, sign, or equipment, such as a radio aid system.

Many students who are deaf lip-read. This means that they watch the lips of the person who is speaking, and try to work out what is being said. This is obviously easier if the person has some hearing. It is also significantly easier if the student has some contextual clues about the subject matter. Lip-reading can be more difficult where the accent of the speaker is new and unfamiliar. Some students use a trained lip-speaker to repeat what is being said, using clear lip patterns.

Many Deaf students use either Sign Supported English or British Sign Language. If this is the student's main method of communication, then an interpreter will be needed both to add a 'voice over' to the Deaf student's signing, and to interpret the speech of the lecturer or other speaker for the Deaf student.

Some deaf students use a hearing aid. While this amplifies sound, there can also be difficulties from background noise where these are also amplified. Students whose hearing aid has a 'T' switch can often benefit from an individual induction loop, or room loop, both of which use radio signals to transmit sounds via a microphone to the user's hearing aid. The individual induction loop, or radio aid, requires the speaker to wear a microphone. This is not so useful when there are several speakers, unless they remember to pass the microphone from speaker to speaker.

Where a student has any reduction in hearing, even if the effects are reduced by a hearing aid or other equipment, accessing information through lectures is likely to be more difficult, and tiring, than it is for most students. It is important to note that students cannot lip-read, or watch a signer, while simultaneously taking notes. For this reason, some students require a note-taker at lectures, and students using a signer are likely to require a note-taker as well. Seeing lips is critical for lip-reading. Moustaches, beards and unfamiliar accents can make lip-reading more difficult. Lip-reading is easier when the speaker's face is in good light, and not silhouetted against a background light source. Where there is a group discussion, as in tutorials, a student who is lip-reading must face the speaker, whoever that is.

Many d/Deaf students are able to use the telephone, some of which have a device for enhancing hearing where a hearing aid is worn. People who are d/Deaf may use a text phone, where the d/Deaf person types the message to another person with similar equipment, and incoming and outgoing messages are displayed on screen. Typetalk enables text phone users to make calls to and from hearing people. Calls are made through an operator who types the hearing person's reply which appears on the text phone. E mail and text messaging are obviously useful alternatives to the phone.

How You Can Help?

Many students who are assessed as dyslexic have already learned effective coping strategies.

Some support in many cases is already, being offered by university staff. The following is a summary of ways in which teaching staff may be able to help. As always, individual students will be the best source of information about what is likely to be helpful.

Lectures

- You can allow students who have difficulty in taking notes in lectures, practicals and tutorials to tape these. Alternatively, paper or disk copies of lecture notes and overhead projector transparencies would often be greatly appreciated, sometimes in enlarged print, and sometimes on coloured paper.
- New terminology could be written as well as spoken.

Assignments

- Advice and assistance with ways of organising thoughts for assignments can be useful.
- Spelling and punctuation corrections on assignments are often not helpful. Sympathetic consideration might be given, in consultation with the Adviser of Studies and the lecturer concerned, to students who take longer than most to complete written work.

Tutorials and Practical

- Students who have difficulty in reading aloud may be embarrassed when asked to do this in tutorials, and you can help by avoiding putting students who have dyslexia in the situation where they would have to do this.

Examinations

- If you are writing exam questions, it is helpful if these are phrased in a simple, straightforward way. Some students need to have exam questions read to them, or to have the question paper read on to cassette.
- Many students will require additional examination time, for reading the question paper, and for recording answers. Some students may require using a scribe, or a computer. These requirements would be intimated to departments prior to the exam diets by AADLU, and they would be justified by a dyslexia assessment or report from school.
- Where handwriting is impossibly difficult to read, students could be invited to read out exam answers to markers.

Placements

- If you are responsible for placement arrangements for your student, then discussions with the student and the placement supervisor should ideally take demands on a student which are rather different from the more usual demands of study. These might include the need to produce high quality written work at speed

or to read and digest written information quickly, and both of these demands may prove difficult for a student who is dyslexic.

For Students with a Visual Impairment

There are additional points to be ironed out before the exam.

1. Does the student wish to be reminded about the time? Throughout, or only towards the end of the exam?
2. If you have to draw diagrams, how can you check with the student that what you have drawn is an accurate reflection of what was wanted?

Most students with a severe visual impairment will be well used to working with an amanuensis, and will be well able to say what is required.

While these issues are negotiable between amanuensis and students, there are obviously some things, which are clearly not negotiable.

- The amanuensis should under no circumstances indicate by any word or action that he/she thinks the student has made a mistake.
- The amanuensis should under no circumstances prompt the student with regard to the content of the exam answer.

It is a good idea for the amanuensis to speak only when spoken to, leaving the student in charge of asking to have text read back or to have the exam questions read out again. However, this rule of silence will sometimes have to be broken, if, for example, the amanuensis cannot keep up with the speed of dictation.

Clearly, an exam in which an amanuensis is used takes longer, and as a guideline, 50% extra time should be given. If at all possible, there should be some time prior to the exam for the student and amanuensis to negotiate points above.

A COPY OF THESE NOTES WILL BE GIVEN TO EACH AMANUENSIS, TO SIGHTED AND PARTIALLY SIGHTED STUDENTS ABLE TO READ TEXT, AND THE CONTENT SHOULD BE DISCUSSED WITH STUDENTS UNABLE TO READ THESE NOTES, PREFERABLY WELL BEFORE THE EXAM.

A first year student experience with dyslexia:

"My initial problem was related to identifying myself to staff that were faced with a large number of new students. Perhaps specific meetings with disabled students and lecturers and tutors could be arranged prior to the first day of a new term. This would allow the student to explain to the staff member the exact nature of

their needs and hopefully enable the staff member to become familiar with the student, particularly if the disability is not one which is visible and apparent.

Being human, lecturers tend to wander off during their presentation, making taping difficult. A table beside the lectern would give students a place to leave tape recorders. Another useful aid that some lecturers do give out is copies of lecture notes in bigger fonts. Perhaps when ordering print runs, a number of copies in larger fonts could be included as a matter of course. It is difficult to obtain this type of aid after a lecture.

It would be really useful if core texts were available in the library on tape. I did get the basic psychology text book on tape, but had to approach the Scottish society for the blind....

Overall the university provided an atmosphere which was supportive and enlightened, and this ensured that my first year of university was both enjoyable and productive.

How you can help?

While there is little you can do to alter the facts of a student's visual impairment, you can provide an accessible environment for study.

- **In Lectures and Seminars**, students who are blind or partially sighted may have difficulty in taking notes, reading overheads, watching videos, demonstrations, or accessing other intrinsically visual material. Following consultation with the student, or discussion with the Disability Service, you might consider:
 - providing your student with a disk copy of your teaching materials, handouts or overheads, before the lecture, so that the student has access to the material at the same time as other students.
 - providing enlarged print copies of materials used.
 - ensuring that overheads are uncluttered and that font size is maximise
 - ensuring that you read out the text of overheads, and do not assume that all students are able to see it. Describing materials which are visual, (such as some video material) or asking the student whether tactile materials would be useful.
 - assisting a student who is taping a lecture by helping with positioning of the recording equipment.
 - requesting a change of room for one with better lighting or improved acoustics for recording. Avoiding last minute room changes where a student would have difficulty in finding a different room.

In Practical Classes or Laboratories, you should consider:

- identifying with the student well in advance the sorts of tasks they might have difficulty with, and the sort of solutions there may be, such as tactile materials, instruments which offer a sound alternative to visual data, or enlargement of

- visual images. Learning how to verbalise visual information. At a most basic level, explicit indications, such as 'beside the door' might be more meaningful than 'over there'.
- ensuring that staff would be able to assist students to benefit from computing technology used, e.g. by being able to adjust font size, cursor size, screen colour, etc. When you convey Information to students, you should think about whether students who are blind or partially sighted will receive it. You might consider: using e mail or telephone rather than notice boards or posters.
 - ensuring that your web pages conform to web accessibility guidelines.

Students who are Deaf may write English in a way which reflects the word order and grammatical conventions of the Sign Language which they are familiar with.

How you can help

As always, you must check with the individual student about what will be most helpful to him or her. It is important to do this discreetly, since students can experience embarrassment when undue attention is drawn to them in classes.

In all teaching contexts, you should remember that a person who is d/Deaf may be unable to hear a fire alarm. You should refer this issue to your Head of Department whose role it is to discuss procedures for the safe evacuation of the student with the Safety Office.

In **Lectures and Seminars**, you can help by:

First and foremost, ensuring that the student is provided with the subject context within which they have to lip-read

- ensuring your face is in good light
- speaking clearly, without shouting, and keeping hands away from your mouth
- keeping beards and moustaches trimmed
- standing still when talking
- making sure you do not continue talking when your back is turned to the lip-reader
- signaling to a student before starting to speak, so that they can start lip-reading at the right time
- using written notes and overheads to complement spoken language, especially new terminology
- providing a spotlight on the speaker's face, where the room is darkened
- providing a prepared outline of the lecture or seminar (with any new terminology) and giving this to the d/Deaf student and their signer, lip-speaker or note-taker, prior to the class, since d/Deaf students cannot lip-read or watch a signer while also note-taking
- asking speakers to indicate before they begin to speak, and reminding people of the need to face the student who is trying to lip read. (If people keep forgetting, then some object, such as a pen, can be passed around, with a rule in place that only the person holding the object is allowed to speak.)

- repeating questions or comments from the body of the class, where the layout is such that lip-reading other contributors would be impossible
- checking with the student beforehand about the best layout of seating in the room, where there is scope for flexibility in this. (A horseshoe or circular arrangement, where the d/Deaf student can see the faces of others, is usually the best.)
- helping the student to use technological aids, such as a radio aid system. (This might involve ensuring that the microphone is passed from speaker to speaker, or arranging that the person wearing the microphone repeats the comments from others in the group.)
- negotiating a change of room, where the acoustic quality or extraneous noises are creating additional problem allowing interpreters, and students following interpreters, to have short rest breaks appreciating that there will be a time lag when students use an interpreter to ask or answer questions, and making sure that allowance is made for this
- addressing the student and not the interpreter.

In Practical Classes or Laboratories, you should remember that

- the layout of the room, and possible additional background noise, might create additional difficulties. You should ensure that you discuss with the student how the worst effects of any of these aspects of the accommodation could be minimized.
- Where a student's gaze is focused on, e.g. equipment or a computer screen, lip-reading or following a signer is not possible, and any spoken instructions or information may be missed.

If there are

Placements, and Field Trips on your course, then you may:

- consult with the student and AADLU well in advance of any placement, study abroad or field trip, discussing what is required of students in these contexts and how their needs might be met.
- discuss with the student what technological or other aids and communication support workers they require, and consider how these could be used to best effect in different teaching contexts.
- consider whether any induction is required for external staff who will be working with the student.

In Examinations, other tests and assignments, you can help by:

- providing written instructions to a student who may not hear oral instructions
- using clear and simple language in tests and examination questions

- considering an alternative examination format, such as allowing a d/Deaf student to use an interpreter and note-taker for answers to be signed rather than written. (This might be justified if the student would be unduly penalised for written expression, where this is affected by the fact that British Sign Language is the student's first language.)
- ensuring that tests or examinations involving speech (the student's or examiners') are set up with checks in place to minimise misunderstandings of questions or responses
- planning tests or examinations involving d/Deaf students well in advance, and seeking advice from the Disability Service.

In Examinations and Assessments:

Students who are blind or partially sighted are likely to need text or examination papers in alternative formats.

- If the test or examination paper requires to be brailled, this must be arranged well in advance and proof read by a Braille reader.
- The paper may need to be enlarged, or reproduced in a particular font size, or in a particular colour.
- If the paper contains diagrams or graphs, thought must be given as to how these will be made accessible.
- Additional strong, focused lighting may be helpful.

Answers may need to be recorded in alternative ways.

- If the student is completing the paper in Braille, arrangements will require to be made to transcribe the answers into text which is accessible to the marker.
- Thought may have to be given to ways in which the student would record diagrams or graphs.
- If the student is using an amanuensis, they should have the opportunity to practise beforehand. (Please see Notes of Guidance on Using an Amanuensis.)
- If the test or examination is one in which students typically re-read and check what they have written, then quite a considerable amount of additional time may be required if this is to be done by an amanuensis.
- Arrangements may need to be made well in advance if the student needs to use access technology.

In all teaching contexts, you should remember that a person who is blind or partially sighted may require some assistance for safe evacuation of the building in the event of a fire or other emergency. You should refer any concerns about this issue to your Head of Department whose role it is to discuss procedures for the safe evacuation of the student with the Safety Office.