inclusive practices

for university students with disabilities

a guide for academic staff



FUNDED BY THE DEPARTMENT OF EDUCATION, TRAINING AND YOUTH AFFAIRS A UNIVERSITIES DISABILITIES COOPERATIVE PROJECT (NSW)

This work is copyrighted. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without written permission.

© University of New South Wales 2000

First published in 1993 as Reasonable Accommodations: Strategies for Teaching University Students with Disabilities. This is a second edition.

Other formats Inclusive Practices is also available in Braille, on audiocassette and disc.

ISBN

Acknowledgments Writer: Anne E. Lawrence Co-writers and Consultants: Laurie Alsop, Disability Officer, The University of New South Wales Marie Flood, Disability Officer, University of Technology, Sydney Gai Wibberley, Liaison Officer, Macquarie University Cartoon: Rowan Cassidy Design by: Publications Unit, UNSW Printed by:

contents

part

- What the law says
 Disability Discrimination Act 1992 (DDA)
 Some definitions
 A national Code of Practice for Australian tertiary institutions
- 4 Dispelling the myths
- 5 The language of disability
- 6 Assistance for students and academic staff Disability Officers Practical support services Other support staff

part

- 8 Teaching and assessing students with disabilities: an overview
 Every student is different
 Identifying students with a disability
 Taking a proactive approach
 Confidentiality and duty of care
 Assessing each students' requirement
 Flexibility and understanding
- II General teaching strategies Pre semester
 - During semester
- **13** Alternative assessment strategies

Types of disability and related alternative assessment

Possible forms of assessment variation may relate to modifications to assessment Key principles in modifying assessment

part

Adjustments for students with disabilities

- 17 Students who are deaf or have a hearing impairment
- 21 Students with a vision impairment
- 25 Students with a mobility impairment
- 28 Students with a speech impairment
- 29 Students with a mental illness
- 33 Students with a learning disability

part

- 38 Glossary of disabilities and medical conditions
 Acquired brain injury
 AIDS (aquired immune deficiency syndrome)
 Allergies
 Arthritis
 Asthma
 Attention deficit/hyperactivity disorder
 (AD/HD)
 Cancer
 Cerebral palsy
 Chronic fatigue syndrome (CFS)
 Crohn's disease
 Diabetes
 Epilepsy and related disorder
 - Lupus
 - Multiple sclerosis
 - Muscular dystrophy
 - Narcolepsy
 - Occupational overuse syndrome
- 42 Some useful websites
- 43 References

This book is dedicated to...

Elizabeth Hastings 1949–1998

Elizabeth Hastings was a wonderful advocate and ambassador for people with disabilities in Australia. She worked tirelessly to ensure that their rights were upheld and as a founding member of a number of major disability organisations in the country, she was one of the earliest advocates in Australia for people with disabilities. She was also a leading academic writer on disability issues

Born in London, Elizabeth migrated to Australia with her family in 1957. She gained an Arts Degree with Honours at the University of Melbourne and began work as a psychologist in 1972 at the Victorian Department of Employment and Industrial Relations. She held that position until December 1992.

Elizabeth's work in the discrimination area commenced at an official level in 1981 when she became a Commissioner with the original Commonwealth Human Rights Commission– a post she held until 1986.

Elizabeth also travelled extensively overseas including trips to India and Nepal where she went camel trekking as well as trekking. She is believed to have been one of the first people in the world to have made such trips in a wheelchair. Elizabeth took up her appointment with the Human Rights and Equal Opportunity Commission as Australia's first Disability Discrimination Commissioner in February 1993. In this capacity, she was responsible for developing the Commission's role as a place in which people with disabilities could seek justice using the Disability Discrimination Act (Commonwealth).

There is no doubt that Elizabeth Hastings played an important role in assisting people with disabilities in their quest to have their rights as equal citizens in our community recognised and upheld. She was a great advocate and wonderful role model, given her own disability, and contributed to the betterment of conditions for people with disabilities in general and students with disabilities in tertiary education in particular.

Written by Gai Wibberley, Disability Officer at Macquarie University

introduction

Although 19% of the Australian population has disabilities or impairments with longterm consequences, it is estimated that presently no more than 2-3% of the student population has a disability. This small but significant group is growing steadily as educators, students and the community become more aware of the options available to people with disabilities and their right to the same educational opportunities as the rest of the student population.

Under both state and federal laws, students with disabilities are entitled to protection against discrimination in education and the provision of educational services. The laws that govern NSW universities are the NSW Anti-Discrimination Act 1977 and the federal Disability Discrimination Act 1992 (DDA).

More recently, in 1998, the commitment of Australian governments to ensuring access of students with disabilities to educational opportunities within tertiary institutions has been clearly stated in a National Code of Practice, which is described in Students with Disabilities: Code of Practice for Australian Tertiary Institutions.

how to use this book

"Inclusive Practices" is a resource for assisting academics to enable students with disabilities to attain their highest potential in a university learning environment. Its objective is to empower and inform academics about the many kinds of disabilities students may have and the strategies they can consider when meeting the learning needs of those students.

Part A examines the legal obligations of universities to make reasonable adjustments in order to meet the specific needs of students with disabilities and ensure that barriers to learning are minimised. It dispels some myths about students with disabilities, and addresses the issue of appropriate language when referring to or communicating with people with disabilities. Part A provides information about support and assistance for academics within tertiary institutions to help them to teach and assess students with various abilities effectively and fairly.

Part B provides an overview of the teaching and assessment needs of students with disabilities generally. It includes general teaching strategies, hints on effective communication and alternative assessment strategies.

Part C describes types of impairment and the kinds of assistance with regard to teaching and assessment that students might require. Also included in Part C are case studies by students with disabilities, illustrating the adjustments that have enabled them to complete their degrees successfully.

Part D is a glossary of medical conditions that can result in a range of disabilities.

Readers may choose to read the book initially from cover to cover or, by using the Contents pages as a guide, to just dip into those sections that immediately concern them. All readers are advised to read Part B, the overview section on teaching and assessment, which includes tips on communicating effectively with students with disabilities.

part

- What the law says
 Disability Discrimination Act 1992 (DDA)
 Some definitions
 A national Code of Practice for Australian
 tertiary institutions
- 4 Dispelling the myths
- 5 The language of disability
- 6 Assistance for students and academic staff
 - Disability Officers Practical support services Other support staff

Disability discrimination occurs when a person discriminates against another person on the grounds of a disability by treating or proposing to treat that person less favourably than they would treat a person without a disability in 'circumstances that are the same or are not materially different'. SUSAN HOWARD FACULTY OF SCIENCE UNSW

case study

В

what the law says

The Disability Discrimination Act 1992 (DDA), requires the accommodation of students with disabilities in education and indicates what does and does not constitute discrimination in education. Following on from the DDA, after extensive consultations throughout Australia in 1996, the Australian government developed principles and guidelines for planning and delivery of services and recommended national minimum standards of service and support for students with disabilities. In 1998, Students with Disabilities: Code of Practice in Australian Tertiary Institutions, acknowledged and documented the real efforts that have been made in Australian universities to date.

Disability discrimination occurs when a

person discriminates against another

person on the grounds of a disability by

treating or proposing to treat that person

less favourably than they would treat a

person without a disability in

'circumstances that are the same or are

not materially different'.

Disability Discrimination Act 1992 (DDA)

The DDA came into effect in 1993. It had three aims.

To eliminate, as far as possible, discrimination against persons on the grounds of disability in the areas of work, accommodation, education, access to premises, clubs and sport; in the provision of goods, facilities, services and land; in existing laws; and in the administration of Commonwealth laws and programs. \mathbf{V} To ensure, by means of legislation, that people with disabilities have the same rights to equality before the law as the rest of the community.

To promote recognition and acceptance of the principle that people with disabilities have the same fundamental rights as the rest of the community.

The Act defines 'disability' in relation to a person and makes a distinction between direct and indirect disability discrimination. It acknowledges that 'different accommodation or services may be required by the person with a disability'.

The Act is available online. See page 42.

Some definitions

Disability

As defined by the DDA, 'disability' in relation to a person means:

total or partial loss of the person's bodily or mental functions; or

total or partial loss of a part of the body; or

the presence in the body of organisms causing disease or illness; or

the malfunction, malformation or disfigurement of a part of the person's body; or

a disorder or malfunction that results in the person learning differently from a person without the disorder or malfunction; or

■ a disorder, illness or disease that affects a person's thought processes, perception of reality, emotions or judgment or that results in disturbed behaviour.

It includes a disability that:

- presently exists; or
- previously existed but no longer exists; or
- may exist in the future; or
- is imputed to a person.

Discrimination

Disability discrimination occurs when a person discriminates against another person on the grounds of a disability by treating or proposing to treat that person less favourably than they would treat a person without a disability in 'circumstances that are the same or are not materially different'. Discrimination also occurs where a person is treated less favourably because of:

a palliative or therapeutic device;

an auxiliary aid;

being accompanied by an interpreter, reader, assistant or carer who provides services to the person with a disability;

being accompanied by a guide dog or any animal trained to assist the person with a disability.

Indirect discrimination

Indirect disability discrimination is where the person with a disability is required to comply with a requirement or condition:

with which a substantially higher proportion of persons without the disability comply or are able to comply; and

which is not reasonable having regard to the circumstances of the case; and

with which the aggrieved person does not or is not able to comply.

Discrimination and education

The DDA states that it is unlawful for an educational authority to discriminate against a person on the grounds of the person's disability or a disability of any of the other person's associates by:

refusing or failing to accept the person's application for admission as a student; or

in the terms or conditions on which it is prepared to admit the person as a student.



It is also unlawful for an educational authority to discriminate against a student on the grounds of the student's disability or a disability of any of the student's associates:

■ by denying the student access, or limiting the student's access, to any benefit provided by the education authority; or

by expelling the student or by subjecting the student to any other detriment.

Disability Action Plans

Where an institution prepares and implements an action plan, the Act outlines the provisions that must be included in such a plan:

policies and programs to achieve the objects of the Act;

communication of these policies and programs to persons within the service provider;

review of practices within the service provider with a view to identification of any discriminatory practices;

setting of goals and targets to measure the success of the plan in achieving the objects of the Act;

the appointment of persons within the service provider to implement the above.

Disability Action Plans may also be lodged with the Human Rights and Equal Opportunity Commission (HREOC). HREOC website, see page 42.

Reasonable accommodation or adjustment

The Human Rights and Equal Opportunity Commission Act 1986 has scheduled to it a United Nations Declaration on the Rights of Disabled Persons (1978) which recognises that disabled persons are entitled to 'the right to any necessary treatment, rehabilitation, education, training and other services to develop their skills and capacities to the maximum'.

The concept of reasonable adjustment or accommodation covers:

Campus design and physical access;

admissions procedures and recruitment practices;

- If the provision of equipment and access;
- study course design;

teaching methods and strategies;

provision of learning and communication aids as required;

assessment;

graduation; and, when necessary,

other considerations in relation to conditions and rules in degree programs.

These accommodations should be made wherever they are reasonable and do not cause undue or unjustifiable hardship to the university. They require creativity and flexibility by both academic and administrative staff in dealing with the specific needs of the student who has a disability.

Unjustifiable hardship

It is not discrimination where the institution is able to prove that to provide services and facilities that are not required by students who do not have a disability would cause 'unjustifiable hardship' to the institution.

In determining whether unjustifiable hardship was a defence, the Commission (HREOC) would take into account:

the nature or the benefit or detriment likely to be accrued or suffered;

■ the effect of the disability on the person concerned;

the financial circumstances and estimated amount of expenditure required to be made;

the institution's Disability Action Plan.

Within this legal framework and under the national Code of Practice (see below), all prospective or current students with disabilities are eligible to have their needs assessed in order to remove any barriers to success that currently exist in the university environment.

Equity and social justice in tertiary education

Universities have a responsibility to provide services and facilities that ensure an equitable educational context for students with disabilities while maintaining privacy and confidentiality, respect and dignity, and the highest standards of equity and social justice. This involves ensuring that:

students participate in deciding policies, procedures and services that are designed to meet their individual and collective needs;

parity with other students is maintained in relation to choosing an institution, courses, subjects and modes of study; as well as

anticipating and meeting the requirements of students who have a disability and who identify their disability to the institution.

Complaints

A person wishing to make a complaint of discrimination and/or harassment under the DDA notifies the Commission (HREOC) which will then attempt to reach a settlement by conciliation. If unsuccessful, the issue may be taken to the federal court. Possible outcomes include: payment of damages, reinstatement or promotion, apology, and/or changes in policy or practices.

A national Code of Practice for Australian tertiary institutions

A recent publication, Students with Disabilities: Code of Practice for Australian Tertiary Institutions was published in 1998. It is available online. See page 42.

The Code of Practice has three goals:

I.To establish principles and guidelines for planning and delivery of services to students with disabilities across the tertiary education sector2. To recommend national minimum standards of service and support

3. To identify and document examples of good practice in institutional responses to students with disabilities.

dispelling the myths

If not confronted, myths can form powerful barriers to students with disabilities when they enter university.

Myth Equal opportunity means everyone should be treated the same.

Reality Equal opportunity does not mean that everyone should be treated the same. Rather, it recognises that different people may experience disadvantage for a range of reasons and need support to enable them to achieve their potential. Students with disabilities who have the ability to achieve at university may experience significant disadvantage due to their disability—for example they may have greater difficulty than other students in moving around the campus, reading and processing information, conducting library research, preparing assignments and photocopying.

The provision of support services in the form of equipment, scribes, interpreters, computer access and tailoring of assessment tasks can ensure that equal opportunity is not merely a token gesture.

Myth Students with disabilities are more likely to drop out of courses than other students, even when given support.



Reality Students with disabilities may withdraw from study for the same range of reasons as other students, but they are not more likely to do so, as is indicated by recently published retention rates.

Myth Students with disabilities are too timeconsuming and their needs are too difficult to cater for in a university environment.

Reality Many students with disabilities are highly motivated to attend university and do well when provided with appropriate support. They are usually very well organised and, while a problem may seem daunting to staff, it is quite likely the student has faced something similar before and can readily identify either a solution or an alternative.

Myth Science, medical, technological, business, and applied science courses are not suitable for students with disabilities.

Reality Students with disabilities have the same rights as other students to aim for careers consistent with their goals, interests and abilities.

In some courses reasonable adjustments can be made to ensure students with disabilities are able to meet the academic requirements. In only a small number of courses is it likely that the disability itself would prevent the person from being able to study that discipline, and this would be different for different types of disability. It is not the institution's responsibility to decide whether a student will reach employment based on the course of study.

Myth Students with disabilities create substantial costs through the need to provide extra equipment and additional staff time.

Reality It is impossible to generalise. Some students with disabilities require special equipment or additional learning support staff, others require none. Adaptations may be one-off and low cost. For example:

■ A paraplegic student used a window-washer's belt hooked to the chemistry work bench to allow her to stand with both hands free.

A lecturer with short-term memory impairment due to a medical condition uses a cassette player to remind her of tasks she has to do.

Students in other faculties may often welcome the challenge of designing or manufacturing modifications to equipment or furniture.

Campuses that are accessible for students with

mobility problems may be safer environments for other students and staff.

Students and staff may sustain injuries that result in temporary or permanent disabilities and will benefit from greater consideration for the individual needs of people with disabilities.

Myth People with disabilities are less likely to get jobs because employers won't want to employ them.

Reality Research studies suggest that people with disabilities value their work role, have fewer injuries, are more efficient, and lose fewer work days than people working with them who do not have a disability.

For example:

■ Du Pont Corporation: of 1452 workers at all organisational levels with a wide range of disabilities, 90% were average or above in job performance and safety. This exceeded the percentage for employees without disabilities.

■ GMH, Melbourne, 1981: the 3% of the workforce that had disabilities had marked superiority in attendance, productivity and work practices.

Myth Students with disabilities would be better off studying through external or distance-learning courses.

Reality There are advantages and disadvantages to external study. Many students with disabilities prefer on-campus study so they can enjoy the stimulating social and intellectual interaction with other students and staff. Others prefer distance learning or a mix of distance learning and oncampus study. This is a personal choice and people with disabilities should be free to make that choice for themselves based on their own circumstances, personality and preferences.

Flexible learning may suit some students with disabilities, as it would for any student.

the language of disability

Avoid:

using 'the' with an adjective to describe people with a disability; for example, 'the deaf';

terms that are no longer acceptable such as 'able bodied', 'physically challenged', 'differently abled', 'handicapped';

terms that imply people are powerless victims or are to be pitied, such as 'AIDS sufferer', 'polio victim';

describing people as more heroic, courageous, patient or special or using the word 'normal' in contrast. At best this can seem patronising, at worst it gives the person the status of an outsider;
 terms that define the disability as a limitation, such as 'confined to a wheelchair' or 'wheelchairbound'. Say instead 'uses a wheelchair' or a 'wheelchair user'. The wheelchair may provide new opportunities for the person, rather than confine them.

Putting the person first

The term 'people with disabilities' stresses the essential humanity of the individual by putting the person first, and the disability second.

That means, for example, referring to: People who: are blind, have a vision impairment, a hearing impairment, are deaf, have an intellectual disability, a speech impairment.

People with or who have: cerebral palsy, Down's syndrome, mental illness, paraplegia, quadriplegia, epilepsy, a learning disability, a speech impairment, aquired brain injury.

assistance for students and staff

Disability Officers

Advisers and support staff to students with disabilities may have different titles depending on the university: Disability Officer, Special Needs Coordinator, Disability Services Co-ordinator, Disability Liaison Officer, Equity Officer (Disability).

Disability Officers provide a communication link between university staff and outside agencies (such as government departments, schools and disability organisations), between staff and students, and between the university and the community. They also have extensive contacts with support services groups, both inside and outside the university; for example, the Deaf Society of NSW.

As well as being an advocate for students with disabilities when required, Disability Officers can offer advice to academic staff and faculties about appropriate teaching and assessment strategies, and help locate and assess assistive technology, furniture and equipment to help students with study. If necessary, they can arrange interpreters, appropriately formatted study materials, note takers, scribes and other relevant support.

Assistive technology refers to equipment that can be used by students with disabilities - for example, audio-visual equipment, braillers, text scanners, talking book machines, voice synthesisers and computer software. Availability varies from university to university.

Practical support services

- These include:
- notetakers
- scribes (amanuenses)
- interpreters for deaf and hearing impaired students
- readers' schemes
- tutoring schemes
- computer access
- examination support
- alternative assessment arrangements
- library resource systems
- loop systems for sound magnification
- FM systems
- parking
- support groups
- counselling services
- study skills
- typing, photocopying
- ergonomically designed desks and chairs
- assistance to find accessible accommodation
- loans
- advocacy
- bus services

Other support staff

These vary from campus to campus:

- Faculty and Academic Disability Liaison Officers
- Disability Liaison Librarian
- Disability Employment Officer, Careers

and Services

- Student Services Staff
- Health, welfare and counselling staff
- Examination Officers
- Administrative and clerical staff within faculties.

part

8 Teaching and assessing students with disabilities: an overview Every student is different Identifying students with a disability Taking a proactive approach Confidentiality and duty of care Assessing each student's requirements Flexibility and understanding

- II General teaching strategies Pre semester During semester
- Alternative assessment strategies
 Types of disability and related alternative
 assessment

 Possible forms of assessment variation
 Key principles in modifying assessment

Disability discrimination occurs when a person discriminates against another person on the grounds of a disability by treating or proposing to treat that person less favourably than they would treat a person without a disability in 'circumstances that are the same or are not materially different'. SUSAN HOWARD FACULTY OF SCIENCE UNSW 7

teaching and assessing students with disabilities: an overview

The first step in teaching students with disabilities seems obvious: treat them, simply, as students

Students with disabilities are not a homogeneous group and each student should be recognised for his or her individuality, particular strengths and weaknesses, aspirations and needs. It is vital, therefore, that students are given the opportunity to discuss their particular needs, to identify problem areas in teaching and/or assessment andto be actively involved in generating solutions.

Collaboration between academic staff, the students with disabilities and the Disability Officer will be essential to consider possible



barriers the students may face and to devise strategies to help overcome them. The aim is to ensure, as far as practicable, that students have the necessary support to complete the requirements of the course.

Every student is different

Students may or may not have an obvious disability. Hearing, vision and learning impairments may not be immediately evident. Medical conditions such as epilepsy, cancer, depression and mental illness, arthritis, kidney disease and diabetes may not be visible. Other conditions such as cerebral palsy, muscular dystrophy and multiple sclerosis may be associated with impairments that change in severity either episodically or over time.

A disability may have few symptoms for a time and then flare up again. Acute disabling symptoms may be episodic in nature and cause students to experience constant pain, tiredness and low energy. They may have periods when they need to withdraw from study for a time, or have periodic stays in hospitals or clinics to undergo surgery or to have their condition stabilised.

Some medications can also have side effects that are severely debilitating.

It is not the disability itself, but the effect of the disability on the student's ability to access, learn and demonstrate knowledge and skills that is relevant. During the year the effect of a student's disability may change and their need for reasonable adjustments may vary. Students with the same disability may have very different needs.

Identifying students with a disability

Intending students with disabilities are encouraged to identify themselves to the university prior to enrolment so that any necessary support—such as modifications to the physical environment, the provision of course materials in a suitable format, or the booking of interpreters or notetakers can be arranged with minimum delay. This is usually done through the Disability Officer.

Where appropriate, students will also be encouraged to discuss with academic staff the possible impact of the disability on learning and their ability to comply with the course requirements.

Taking a proactive approach

Course advisers who are approached by a student with a disability may wish to encourage the student to contact the Disability Officer if they haven't already done so.

Hartmann and Redden (1985) also suggest that academic staff make a statement at the first class or session of the semester to encourage students to identify their needs early.

This statement, at the beginning of the session, will encourage students to feel that the university is serious about considering their needs. It can be reinforced on the course outline at the beginning of each course and the Disability Officer may be able to assist with the appropriate wording.

For example:

I would appreciate hearing from anyone

in the class who has a disability which

may require some special arrangements

during the semester. The university

offers a range of services and supports

for students with disabilities, but it is important that these be negotiated

early in the semester. If students

require special arrangements such as

seating, testing or other provisions,

please see me after class, or

contact the Disability Officer.

Confidentiality and duty of care

Although support for students with disabilities is an integral part of the responsibility of academic staff, students may not wish to disclose that they have a disability; or, having disclosed to the Disability Officer or a staff member, they may not wish anyone else to know.

If this seems inappropriate, unwise or unsafe, staff may wish to ask the student to reconsider, or to discuss the matter with the Disability Officer. Staff members have a duty of care to all their students.

Where students are thought to have a disability or to be in some need of assistance it is appropriate to take them to one side and ask quietly whether they do. Both parties will feel more comfortable in such situations if privacy and confidentiality are assured.

Establishing a good rapport with the students

Ask open questions and take the time to listen properly, without interrupting or finishing their sentences. For example, ask what interested them in taking the course.

Don't rush. Hurrying things can be counterproductive, especially when there are communication problems.

Be sure your body language indicates that the student has your full attention.

Focus on the student's abilities, interests and strengths rather than the disability.

Encourage the student to be open about concerns or problems

Ask about any concerns the student may have about studying at university.

Recognise that students may still be feeling their way at university and ask them to let you know if they encounter any problems.

Ask them to tell you which parts of the course they may be likely to have problems with as a result of their disability.

Ask them for suggestions for overcoming any identified obstacles.

Respect the fact that the students are in control of their lives and must make their own decisions

When discussing aspects of the course that may present problems, ask students if they can suggest ways to get around them. For example, use of visual materials such as graphs and diagrams in a course being attended by a person with a vision impairment, or the use of audiovisual materials for a student who is deaf or hearing impaired.

Find out whether they have met with the Disability Officer to discuss any special needs they have or support they require.

Assessing each student's requirements

While there may be students who appear to have the same disability, or do in fact have the same disability, their individual needs may be vastly different.

Students who have recently acquired a disability may still be coming to terms with the effects of the disability, which may be temporary or permanent. Either way, they may still be finding out what learning strategies are most appropriate.

A student who has returned to university before their condition has stabilised may be experiencing difficulty adjusting to their situation, either emotionally or physically.

Not all disabilities are obvious-for example, hearing impairment, some kinds of vision impairment and learning disabilities. Some medical conditions may at times be particularly disabling without being visible. These include cancer, diabetes, kidney disease, epilepsy and mental illness.

See Parts C and D.

Some students have multiple disabilities. Depending on the nature and progression of the illness or injury, conditions such as diabetes, muscular

Adjusting to the student's communication style

If the communication seems awkward because you have had little experience with that student's particular disability before, acknowledge that you are on a learning curve.

If the student communicates through an interpreter, make sure you address and make eye contact with the student directly rather than with the interpreter.

If the person has a carer, introduce yourself to the student who then may introduce their carer or interpreter.

Address your remarks to the student; avoid speaking to the carer or interpreter about the student in the third person.

See also Part C for specific information about communicating with students with particular disabilities.

dystrophy, cerebral palsy, acquired brain injury or multiple sclerosis may be accompanied by secondary impairments - in mobility, vision, speech or coordination.

Flexibility and understanding

Students with disabilities may have many barriers to deal with. Understanding the reasons for late or irregular attendance, or particular habits, and being flexible in applying attendance rules will be helpful to many students with disabilities.

Inaccessible building or room

If a lecture or tutorial room is not wheelchair accessible, it may be necessary to relocate the lecture so that students in wheelchairs or with other mobility impairments can attend.

Understanding lateness

Students using a wheelchair or other equipment may have difficulties getting to lectures on time. If they rely on public transport to get to and from university there may often be delays, even when taxis have been booked in advance. If they have to cross the campus it may simply take them longer, and there may be obstacles to access along the way.

Irregular attendance

This may be due to the erratic nature of the disability or problems with medication, or the need for hospitalisation. Some disabilities such as muscular dystrophy, arthritis, multiple sclerosis and some mental illnesses may have symptoms that come and go. In their acute phase the symptoms may be particularly disabling.

Understanding special needs

Some medical conditions, and some medications, can cause:

- chronic weakness and fatigue
- impairments to memory
- restlessness
- tiredness
- sleepiness
- incontinence
- chronic pain
- anxiety.

Depending on the condition, some students may require:

- special chairs and tables in lectures or tutorials
- regular drinking or eating in classes
- frequent toileting
- frequent breaks
- permission to come and go from the room

special arrangements in order to hear or see, for example, reserved seating or access to a hearing loop.

Some medical treatments can also have severe and unpredictable side effects that absorb most or a lot of the student's energy and time for a period.

general teaching strategies

Specific suggestions for teaching students with disabilities are offered in the sections devoted to each disability. Here are some general considerations when dealing with the education needs of students with disabilities.

Pre semester

Meeting the student for the first time

This is an opportunity to discuss with the student any particular needs they may have, for example, a particular position in the lecture hall may provide greatest access to the lecture, or having the interpreter in a particular position.

Check that they have already been to meet the Disability Officer to discuss any necessary services.

What the Disability Officer can do

Arrange resources, services, suggestions for provision of flexible teaching strategies and assessment practices.

Help the student to gain access to appropriate assistive technology such as scanners, voice synthesisers, braille embossers and voice activated computers.

Act as a mediator/advocate for the student.



Study materials in accessible formats

Some audiovisual resources and printed study materials need to be made available early so there is ample time for their conversion to accessible formats; for example:

- captioning of videos
- J brailling and/or audiotaping of texts
- Transcriptions of audiotapes
- I enlarging print material
- ✓ tactile drawings of diagrams
- Conversion to plain English

Planning field trips

Some aspects of the course, such as field trips and visits to industry sites, may require adjustments and planning in advance.

Some thought may need to be given to ensure that field/industry placements are appropriate. This can be discussed with the student and, perhaps, also, the Disability Officer.

Academic Liaison Officers

Some universities have appointed specially trained faculty staff, known as Academic Liaison Officers, who provide a contact for students with disabilities. Their role is to discuss with students the impact of a disability on their learning and assessment, to consult with lecturers and, where appropriate, to authorise alternative assess-ments.

During semester

Provide an outline at the beginning of each class or lecture of what is to be covered, and summarise what has been covered at the end.
 Write key points on the board, or provide handouts.

Read aloud material that is written on the board or that is given in handouts or transparencies.

Vary teaching methods and styles of presentation that take account of students with different disabilities.

Use plain English and avoid unnecessary jargon.

When introducing new terms provide clear definitions.

Arrange seating thoughtfully and face the class when speaking.

Access to technology

This may be essential for a student, for example, library catalogue, CD ROM, Internet.
 Providing students with an e-mail address enables them to contact lecturers, tutors and the Disability Officer easily when they are having difficulties or questions.

Some students may find it useful to tape lectures, or to have access to a lecturer's notes and/or overheads.

Early access to reading lists

Make reading lists available so students can begin reading early. Having extra time to read material is often important.

Provide students with chapter outlines or study guides that cue them to key points in their reading.

Stay on the topic; demonstrate; provide concrete examples.

Rephrase information if the student does not understand.

■ If appropriate, allow flexibility with assignment deadlines, give extra reading time and vary assessment tasks.

Without drawing particular attention to the student, do model to other students an appropriate consideration of the student's needs; for example, if a student has difficulty getting to the class on time, schedule the start of the class to coincide with their arrival.

Be aware that a variety of learning situations may require different approaches, for example, large lecture hall vs. small-group interactive learning situation.

At the end of each class describe what will be covered in the next class.

Evaluate with students and perhaps their attendants as well, whether innovations and strategies are working well or whether they can be improved upon. Let the students know that you are committed to enhancing your communication and teaching skills to meet their needs more effectively.

Ensure there is a place in lecture theatres assigned for students with disabilities who use wheelchairs, scooters or crutches during emergency drills.

Laboratory and field work

■ If laboratory work is provided, walk the student through the laboratory while providing an individual orientation to the equipment. This will reduce student anxiety and allow any access problems to be resolved.

Labelling of equipment, tools and materials may be helpful.

Discuss health and safety issues, and check that emergency drills are appropriate.

Making websites accessible

The Human Rights Commission states 'Provision of information and other material through the Web is a service covered by the DDA. Equal access for people with a disability in this area is required by the DDA where it can reasonably be provided.'

There is an American based website, which is provided by the Centre for Applied Special Technology will give detailed feedback on any website's accessibility to people with disabilities including problems, errors and possible solutions.

http://www.cast.org/bobby/

alternative assessment strategies

Types of disability and related alternative assessment

Some broad types of disabilities are associated with functional difficulties that make an alternative assessment strategy desirable. For example:

CFS-chronic fatigue syndrome

- (or ME myalgic encephalomyelitis)
- chronic pain
- deaf or hearing impairment
- learning disability
- medical condition
- overuse injury
- physical disability
- mental illness
- speech impairment
- vision impairment (blind and low vision).

Possible forms of assessment variation

Method of assessment. For example, assignments instead of examinations; short answer examination instead of multiple choice examination; different styles of assessment with question and response modalities in the form of audiotaped or videotaped material instead of written answers.

'Alternative assessment' refers to any alteration to the standard form of assessment in order to accommodate a student's disability; for example, alterations to the

example, alterations to the form of examinations and assignments, or to the conditions relating to exams and assignments. The objective is to accommodate the student's learning differences, while maintaining academic requirements and standards.





Procedures for conducting the assessment. For example, additional time in exams or extension of deadlines for assignments; use of a separate venue or alternative date or time of examination.

There is no formula or set of hard and fast rules that can be applied when determining what is 'reasonable'. Students are individuals and the nature of their disabilities will be different. These will need to be weighed up against the range of skill competencies required in the course in order to find solutions that are acceptable to both students and academics.

Associated functional difficulties for these disabilities might include:

- impaired concentration;
- lower endurance for writing and/or reduced writing speed;
- inability to maintain writing posture during the period of the examination;
- inability to access information delivered orally;
- restricted auditory input;
- problems accessing information that is in written/print form;
- unable to express knowledge in written form;
- difficulties with numbers and numerical concepts;
- inability to write using a pen;
- involuntary head movements interfering with ability to read standard size printing;
- unable to manipulate immediate environment (e.g. turn page, insert computer disks);
- extreme examination-related stress;
- inability to communicate orally;
- reduced speech speed, or stuttering, or speech that is hard to understand;
- inability to see own handwriting when answering questions.

Key principles in modifying assessment

Modifications should:

I. Be negotiated by the student and academic staff

Some universities have Faculty or Academic Liaison Officers who are the chief point of contact with the student. (see p.00). Disability Officers can also assist and will ensure the student's point of view is heard.

In the same way that assessment can be structured differently, learning by students with a disability can also be measured in a variety of ways, and all staff are encouraged to consider alternatives in the light of whatever assessment practices currently exist within their own courses.

2. Consider the individual student's needs

Questions that may need to be answered are:

What is the nature of the disability?

■ If recent, what was the student's experience before onset of the disability?

In what way is the student's functioning limited by the disability?

How can these limitations be eliminated or minimised?

What specific equipment or personnel assistance generally is used by the student to facilitate study and minimise disadvantage resulting from the disability?

What adjustments are reasonable in relation to the validity, reliability and practicality of alternative assessment strategies?

What adjustments are fair in relation to maintaining the integrity of academic standards?

Every effort must be made to respect the student's dignity and privacy while considering these issues. The student with the disability is the 'expert' about their disability and how it affects them in

a learning situation.

3. Maintain the integrity of academic standards

While the student's preference for a particular adjustment should be considered, a suitable alternative may be negotiated.

Examples of alternative assessment strategies have been trialled by universities throughout Australia and overseas. They have been included under specific disabilities in 'Adjustments for Students with Disabilities' in part C.

What if the student fails the alternative assessment?

It is possible that despite adjustments being made, the student with a disability may not pass an examination or assignment. Like any other student, this student may not have mastered the course material to the necessary standard, and this would mean that a fail grade was appropriate.

The search for best practice is ongoing.

part

Adjustments for students with disabilities

- 17 Students who are deaf or have a hearing impairment
- 21 Students with a vision impairment
- 25 Students with a mobility impairment
- 28 Students with a speech impairment
- 29 Students with a mental illness
- 33 Students with a learning disability

Disability discrimination occurs when

- a person discriminates against
- another person on the grounds of a
- disability by treating or proposing to
- treat that person less favourably than
- they would treat a person without a
- disability in 'circumstances that are
- the same or are not materially different'.
- SUSAN HOWARD

case study

g

FACULTY OF SCIENCE UNSW

16

Students who are deaf or have a hearing impairment

Student profile

Carol-lee

I became deaf when I was four years old. At present I am working full-time and my university studies fit in perfectly with my job, working for the Australian Association of the Deaf. I would like to continue working in the field of policy making, advocacy and research with political organisations for the deaf.

I use a full-time interpreter at uni and this has been funded by the university, which has been a huge help for me.

I find it valuable to approach each lecturer before class and make sure they understand my requirements and my use of an interpreter...In tutorials I make sure the tutor and fellow students understand how I work with an interpreter.

CAROL-LEE, GRADUATE, BACHELOR OF ARTS (SOCIAL SCIENCE) NOW GENERAL SECRETARY, WORLD FEDERATION OF THE DEAF STOCKHOLM, SWEDEN.

It is estimated that one in ten Australians are deaf or have some form of hearing loss. Illness, prenatal impairment, workplace noise and accidents are the major causes of deafness and hearing loss. The effects of deafness and hearing loss on communication depend on the extent, type and time of onset of the disability. The extent may range from mild to profound, and may involve the loss of some or many frequencies of sound. It is often possible for people to hear certain sounds (usually of low frequency, such as vowels) but not others. Some sounds may be distorted or grossly amplified. Also, hearing levels may fluctuate and a student who hears quite well one day may have considerable difficulty the next. A 'mild' loss may still make it impossible for the student to understand a lecturer's voice eight metres away, even when a hearing aid assists at closer distances.

Students who have been deaf from birth, or prelingually, may have varying degrees of speech. For those who choose to speak, feedback is limited, so vocal control, volume and articulation may be affected. This can result in the student's voice sounding different.

Depending on the nature of the impairment, students may use a combination of lip reading, sign language interpreters and specialised equipment to augment their hearing loss.

Auslan

Members of the Deaf Community may use Australian Sign Language or Auslan. This is a recognised community language with its own syntax and structure. For these students a sign language interpreter is likely to be necessary in most teaching situations.

Auslan may be the student's first language, with English as their second language. Auslan uses signs for words combined with body language to communicate tone and emphasis. There are many words in the English language that do not have corresponding signs. These words may be finger spelt or, if they are used frequently in a course, the interpreter and student may devise a sign for them to speed up the translation process.

Role of the interpreter

For some students, the interpreter functions as the student's ears and voice. The student hears and understands, and speaks through the interpreter. Generally, it works best for the student if the interpreter sits or stands next to the lecturer or tutor so the student has a clear view of them both.

Lip reading

Lip reading or, more correctly, speech reading is generally used together with the sound patterns provided by a hearing aid. Some individuals lip read or speech read extremely well, while others scarcely do so at all.

With lip reading, only 30 to 40 per cent of spoken English is comprehensible, even for those who are highly skilled.

Identifying students who are deaf or have a hearing impairment

Indications:

- wears a hearing aid
- has an interpreter and/or notetaker
- strains to hear
- may use loud or distorted speech

The level of adjustment will vary with each student so it is important to find out what each student's particular needs are.

Teaching strategies for students who are deaf or have a hearing impairment

Working with interpreters

Most signing Deaf students rely on the interpreter to sign all spoken communication, and then voice their responses, although a few are able to speak their own responses.

Address the student directly (not the interpreter).

Arrange a briefing with Disability Officer.

Discuss with the student the best position for the interpreter so that the student can see both lecturer and interpreter.

Allow time for the process of interpreting, particularly when technical terms are being used.

Be prepared to make course material available ahead of time for familiarisation by the interpreter.
 Supply interpreters with lists of specific terms/relevant jargon before lectures.

Provide rest breaks for the interpreter-this is very important for their health and safety as a university employee. Translation between the English used in university courses and Auslan can

Points to remember when addressing a student who lip reads include:

Always face the student.

Don't turn sideways in a lecture hall.

Don't place your hand over or around your mouth.

Beards can be a problem, when they obscure the mouth.

Be aware that books and microphones can obscure vision of the mouth.

Lip reading may be easier if the student's hearing loss occurred after English was acquired.

Hearing aids or amplification systems

Hearing aids may be of limited use in a lecture room because of distance, background noise and acoustics. Technological equipment that may be useful for some students includes:

FM transmitter/receiver systems with a clip-on microphone for the lecturer/ speaker;

permanent or in-built induction/audio loop system in which the lecturer speaks into a microphone and the student is able to hear by using a special switch on their hearing aid;

temporary audio loop systems set in place prior to the lecture.

Unfortunately, amplification can pick up other extraneous or 'dirty' sounds that people who hear may not find annoying; for example, air conditioners, florescent lights and computers. For this reason the quieter the learning environment the 'cleaner' the information being amplified

be mentally exhausting. Interpreters have a high incidence of occupational overuse injuries and their professional association recommends they be given a ten minute break after every hour of translation. If this is difficult for you to comply with speak with the interpreter and contact the Disability Officer.

Large groups (lectures)

Most students could benefit from:

Front-row seating, I to 3 m from lecturer.

Well lit, unobstructed view of lecturer's whole face.

 Use of visual cues whenever possible, to enhance understanding and memory, explain new concepts, note unusual or foreign terms or names:
 Write or draw on whiteboard, butchers paper, overheads

- Pictures, slides, posters, diagrams, overheads

- Acting, gesturing, body language

- Topic headings, lecture plan, labelled equipment

Advance notice of the use of alternative formats such as audiovisual material.

Written copies of course outlines, lecture notes, technical terms and, if available, printed transcripts of audio and audiovisual material, e.g. video or film.

Captioning of all audiovisual material such as videos.

Handouts or writing on the whiteboard about important course information such as changes in assignments, scheduling, deadlines, room changes, excursions.

Having questions or remarks from students repeated before the lecturer responds.

Some students could also benefit from:

Authorisation to use a tape recorder for staff lectures and guest lectures.

Services of a note-taker.

Use of microphone-necessary for students using an in-built or portable loop system to hear. Access to the system may need to be booked in advance.

Prior knowledge of alternative formats to be used such as audiovisual material.

Small groups (tutorials and experiential group work)

Most students could benefit from:

Well-lit circular grouping with seating at seminars, to 3 metres, with student not facing the light .

Sitting near group leader/main speaker if others are directing comments to that person.

Directing the student's attention to the person who is speaking, perhaps repeating what they have said if the person has missed it.

Making sure only one person is speaking at a time.

Encouraging others to face the student when speaking, to speak a little more slowly, and to avoid covering the mouth when speaking.

When an interpreter is used:

Discuss with the student the best place for the student and interpreter to sit.

Model to students a way of always speaking directly to the student, not to the interpreter. For example: 'What do you think about...?' (addressed to the student) and not 'Ask her what she thinks about...' (addressed to the interpreter).

Some students could benefit from:

Each speaker in the group using a microphone

Use of a multidirectional mike

Summaries/notes of discussion from other students

Convening a smaller tutorial group with students willing to adopt communication strategies to accommodate the student who is deaf or has a hearing impairment.

General tips

Access by email may be useful

Normal delivery in clear and natural tone; slow down a little if you normally speak fast. Avoid shouting - this only distorts sound.

Use short simple sentences.

Allow a clear view of the speaker's face at all times when speaking.

Write new terms or concepts on the board.

Make eye contact with student before beginning.

If amplification is required, make sure lecture/tutorial/seminar rooms can accommodate this.

Reduce background noise as far as possible. If necessary, engage the cooperation of other students.

Laboratory and field work

Most students could benefit from:

The suggestions above for large groups and small groups.

An individual tour of the lab with a discussion of how best to handle safety issues.

Relevant information and instructions presented in written form at each lab session.

Clear written instructions and warnings on equipment.

Discussion of ground rules to ensure health and safety standards are met; thought given to particular 'What if...' scenarios (e.g. evacuation plans, what to do in an emergency, such as using a 'buddy system')

Ensure audible alarm systems have visual cues such as flashing lights.

If possible, on/off status of equipment should have indicator lights.

Finding alternative methods of communicating over a long distance during field work.

Distance education

Use of TTY phone (telephone typewriter)

to allow communication by phone.

Use of fax, email where possible.

Caption videos and other audiovisual materials and/or provide a full script.

Signed video recordings of interpreter in lectures.

Access to printed or interactive materials on CD-ROM

Flexible delivery

See also 'Distance education' above. Some students would benefit from flexible learning situations.

Alternative assessment strategies for students with hearing impairment

Adjustment of assessment tasks will depend on the individual and the course requirements. Usually, this will be negotiated by the student with the help of the Disability Officer.

It is possible that students might have experienced considerable disadvantage in education and

allowances may be necessary with regard to spelling, grammar and written expression.

See also the Part B on Assessment on page 8.

Assignments

Students may require more time to complete assignments.

Options may include giving a verbal presentation in sign language with an interpreter, or a computer assisted presentation

Tutorials

Allow more time for presentation, particularly when an interpreter is being used.

Student may prepare written paper for interpreter or other student to read, with questions asked and answered via the interpreter.

Tutor ensures that time taken to interpret does not disadvantage the student's assessment with regard to participation in discussion and debate in the group.

One-on-one discussion with the tutor may be preferable for assessment purposes, because of a student's difficulty in following spontaneous group discussion.

Exams

Any exam question errors will need to be notified in writing by the exam supervisor.

May require extra time to complete exam papers.

Written instructions replace information usually read aloud by the examiner.

Interpreter may need to be present to translate oral instructions and information.

Oral examinations or a one-on-one presentation may be preferable.

A separate exam room may be necessary if the student is using assistive technology, or requires extra time.

Students may request a video recorded 'signed' examination, answering the exam questions using sign language which is video recorded for transcription to text.

Some students may need to use a personal computer with spelling and grammar checkers, dictionary and thesaurus.

Students with a vision impairment

STUDENT PROFILE

Gai

I chose a career path that would enable me to enter the disability field in a professional capacity given my feelings of disillusionment about the quality of advice and support being provided to people with vision impairment. A goal of this kind was, at the time, considered quite radical - especially for a blind woman.

While at university I needed course texts, handouts, class tests and examination papers in an accessible format (preferably braille) to accommodate my vision disability. Services I received included: access to lecture tapes for independent use at home; provision of examination papers in braille; permission to use a braille writing machine to record answers to exam questions; additional time for completion of exams; assignment extensions as needed; and some basic equipment in the Library to assist with study. Some of my lecturers also loaned me copies of reference materials so that I did not have to compete with other students in accessing scarce resources from the University which would have lengthened delays I already experienced in gaining access to written information. I also received course texts on audio cassette from the Royal Blind Society of NSW, and assistance from volunteer readers in gaining access to journal articles and other references



needed for completion of class readings and preparation of assignments.

It is important for students with vision impairment and teaching staff to view completion of university studies as a positive challenge. While assistive technology such as computers with braille and speech output has become more advanced and in some areas more available than was the case in my student days, its existence and use does not eliminate the need for an ongoing and co-operative attitude from university staff and the community in general.

With student and teacher both contributing to the learning process together with an appropriate level of support from other members of the community and, of course suitable assistive technology, students with vision impairment can succeed at university and take their place in society as valued and effective members of its work force. For all concerned, the outcome can be worth the effort.

GAI, GRADUATE DIPLOMA IN REHABILITATION COUNCILLING AND BACHELOR OF ARTS (PSYCHOLOGY) NOW A UNIVERSITY DISABILITY SERVICES CO-ORDINATOR

About 1% of Australians has significant loss of sight. The causes of sight loss are diverse and include diabetes, glaucoma, stroke, brain injury, eye infections, viruses, accidents and congenital conditions.

The extent of the impact of the disability on a person's life is influenced by the degree of impairment, the age at which the impairment occurred and the person's range of experiences in early life. People who are blind from a young age may have only partial knowledge of many objects and ideas that people with normal vision take for granted.

Reading and writing are often much slower processes for people with vision disabilities. Extra time may be needed to use the necessary aids such as magnifiers and scanners.

Glare can be a problem and some people will see better on some days than others. Some people have very low vision in dark areas or at night.

Students with vision disabilities are usually able to hear perfectly well. They may have received listening skills training prior to attending university, but should not be assumed to have superior listening skills. They will be able to participate in lectures and tutorials, discussion and group work. To record notes, some students may wish to use tape recorders, laptop computers with braille, speech or large-print output. They may face limitations in laboratory classes and field trips, for example, but with planning and adaptive equipment their difficulties can be minimised.

Most universities will have library services that are designed to assist students with vision disabilities. The Disability Officer will be able to advise students about assistive technology available on campus.

Students may require texts in braille, on audio tape, in large print or electronic format. Given the lead time required to produce course text, and other material in one or more formats suitable for a student's needs, reading lists should be made available to the Disability Officer as soon as possible, preferably well before the start of semester.

Wherever possible, teaching staff should provide unit outlines and other course-related material in machine-readable format to facilitate its production in braille or direct access by students using computers with a large print, speech or braille output device.

Guide dogs

It is unlawful to refuse guide dogs entry to buildings and classrooms.

Teaching strategies for students with vision impairment

Pre-semester

Ensure reading lists and course outlines are up to date. Provide them in advance to allow time for production of course texts and other reading material in accessible formats.

Liaise with the Disability Officer to assist the student to find readers, note-takers or tutors, as necessary, or pair the student with a sighted classmate or laboratory assistant.

Discuss appropriate seating in classes with the student. If a guide dog is used, it will be highly disciplined and require little space.

Ensure that students with vision impairments

are notified in an appropriate way of organisational changes, for example, change of teaching venue.

During the semester

■ Work with the student and Disability Officer to ensure that details for important events and all recurrent information is provided in accessible formats-for example, large print or braille. Try to establish rapport early in the course.

Approach students regularly to find out how they are going and if they are having any problems; remember to identify yourself as they may not be able to see you.

■ If you are planning to use a video or film, tell the student and discuss alternative ways of providing any information they miss.

Use plain English and speak in a normal voice, not loudly, slowly or with exaggeration.

Stand or sit where glare from behind is minimised.

Keep doors closed or open, not partly open and ensure that objects are not moved from their usual places without letting the student know.

Keep corridors clear.

Notetakers and readers may be available on a student's request.

Libraries may have assistive technology to help students to study, and provide access to free photocopying.

Be alert to the person's needs, but ask first if assistance is required.

Small groups

(Tutorials, seminars, experiential group work)

Model appropriate communication for students in the group.

■ Identify yourself by name, in case the person does not recognise your voice.

Indicate verbally when you are entering or leaving the person's presence.

Provide printed material containing tutorial exercises to the student ahead of time to allow for its production in an accessible format, thereby making it usable during the class in question.

Large groups (Lectures)

Face the class when speaking.

Read aloud information written on the blackboard or shown on overheads.

If demonstrating, describe what you are doing.

If information is presented diagrammatically or in tabular form, it is essential that it be described clearly to allow a student with a vision impairment to gain an understanding of what is being depicted in a visual way to other students.

Copies of overheads in large print or braille or read onto audio-tape may be useful, and should be provided in advance of the lecture in which they are to be used to enable the student timely access to the information they contain in a suitable format.

Some students may seek permission to tape lectures, and this should be granted if this is the most appropriate method of accessing information presented in class.

Laboratory and field work

Provide the student with an individual orientation.

Careful planning of fieldwork may be necessary.

Discuss with the student, perhaps also the Disability

Officer, any possible problems they or you envisage, and ways to overcome them, particularly in relation to health and safety issues.

Pairing the student with a sighted classmate or laboratory assistant may be useful.

Assistive technology may be available.

Distance education

Course materials will need to be in an appropriate format.

CD-ROMS will require a voice synthesiser.

Use of email as a means of providing written information is strongly encouraged.

Flexible delivery

As with all modes of study, suitability of course design will depend on the individual student's needs, and where possible and appropriate, the curriculum should be modified to accommodate such needs.

Alternative assessment strategies for students with vision impairments

Discussion of assessment strategies with the student and Disability Officer should take place early in the semester. One student with vision impairment may work best with brailled materials, while another with a similar level of vision impairment may work best with audio taped or scanned material. Other issues such as the length of time the student has had the disability, the type and nature of high or low-tech equipment at their



disposal and their level of competency in tasks such as word processing may affect their preferences for certain work methods.

Reading braille and large print takes longer than reading a standard typed page. Listening to a tape, or dictating an answer, also takes longer than writing answers in longhand. Additional time for completion of tasks is therefore frequently necessary.

Appropriate supports and arrangements will need to be made well in advance to ensure necessary facilities are available and to allow the student to practise using them prior to any examination.

See Part B on Assessment on page 8.

Assignments

Be prepared to negotiate early with the student about their individual needs. Discuss whether the usual assignments will present any problems, due to the student's disability, and adapt assignment tasks where required.

Getting information from the library and having it produced in a suitable format may take time making it necessary for staff to be flexible with assignment deadlines.

Monitor a student's progress-it may be possible to do this by email or telephone.

Tutorials

Students should be able to participate in tutorial discussion although they may require a reader.

Encourage participation while being sensitive to the fact that they may not be able to pick up



Examinations

Extra time, with rest breaks, may be necessary, particularly when using assistive technology.

■ Use of assistive technology–for example, optical character recognition equipment such as the Kurzweil Personal Reader to gain spoken access to printed material, computerized notetaking devices with braille or speech output, a braille embosser or closed circuit television for print magnification may be needed.

Should a student with vision impairment require the use of assistive technology in an examination situation, a separate room with extra power points and adequate space to accommodate cumbersome equipment may be needed.

■ If exam questions need to be on audio tape, individually read, or produced in large print or braille format, this will take time to organise, so it should be discussed early in the term with the Disability Officer.

Dictation to audio tape of a student's responses to exam questions, for transcription later, should be considered.

Students may dictate answers to a scribe who writes the essay or fills in the answer sheets as appropriate.

■ If spelling and punctuation are related to the course objectives, discussion with the student will be necessary to determine how this is to be evaluated.

Open-book exams can pose a major problem for students with vision impairment. If you are planning to use this method, discuss with the student and/or the Disability Officer whether an alternative is required.

■ Use of complex multiple choice questions or items requiring students to respond to a question matching one of several statements to each item can be problematic for students with little or no vision. This is due to difficulties experienced by these students in scanning/ reading and memorising written material for prolonged periods. Before setting exam quest-ions using these formats, the Disability Officer should be consulted for advice regarding a format most suitable to the needs of students with vision impairment. ■ Use of questions requiring students to draw diagrams or provide responses based on an interpretation of visual information, such as cartoons and graphs should be avoided. Where an exam contains such questions, these should be substituted with items requiring students with vision impairment to formulate answers based on interpretation of written text which may involve, for example, providing an explanation of a theoretical concept in plain English.

Students with a mobility impairment

Student profile

Rosemary

I received my injuries when I was 22, and started university at age 25, after taking three years to come to grips with my disability. I am paralysed from the neck down as a result of a spinal cord injury in a car accident.

I would like to work in policy analysis in the community sector, probably in the disability field. I am also considering teaching, and maybe a PhD. University work is physically very demanding and very stressful on the body. You have to realise that you can't give 20 hours a day, seven days a week.

Now, as an upper level student, I find access to the university a lot easier–I'm able to get to seminar rooms more easily than big lecture theatres. I have a very good rapport with the lecturers and schools, and I'm able to communicate my needs to them. They understand about things like pressure sores and urinary tract infections, which make life difficult for me.

I have negotiated extensions for assignments with each of my schools. My exams are either taken orally with lecturers, or I am allowed take-home exams, where I dictate answers to my scribe. For me it has been vital to have a really good scribe. She has been with me since the beginning of uni. I couldn't do without her—she helps me with note-taking, eating and drinking; all my physical needs.

ROSEMARY, GRADUATE, HONOURS THESIS, BACHELOR OF ARTS, (SOCIAL SCIENCE AND POLITICAL SCIENCE)

CURRENTLY A LECTURER IN A UNIVERSITY IN NEW SOUTH WALES

The Australian Bureau of Statistics (ABS) estimates that at least 6% of Australians over the age of 5 years have mobility disabilities.

Mobility disabilities can stem from a wide range of causes and be permanent, intermittent or temporary. Among the most common permanent disorders are partial or total paralysis, amputation or severe spinal injury, types of arthritis, muscular dystrophy, multiple sclerosis, head injury and cerebral palsy.

Additionally, some respiratory and cardiac diseases may affect mobility. Any of these conditions may also impair the strength, speed, endurance, coordination and dexterity necessary for proper hand function.

The effects of mobility disabilities may be visible or invisible. They include inability to walk and/or use the arms, hands or fingers, often resulting in the use of aids such as wheelchairs, callipers, crutches or walking sticks. Attendants may be needed for personal care and the student may rely on others for transport, photocopying, study notes and library assistance.

In some conditions—such as cerebral palsy, multiple sclerosis, after a stroke or trauma from accidents, there may be associated impairments, (e.g., to speech, sight or learning). If so, see other sections such as 'Students with a speech impairment' (p.28), 'Students with a vision impairment' (p.21), and 'Students with a learning disability' (p.33).

Less obvious may be effects on fine motor control, balance and orientation, and fatigue.

Depending on the degree of disability, students may have difficulty getting to or from lectures, writing, participating in tutorials, and managing assignments and examinations. All mobility impairments increase the time and effort students must expend. Using facilities which others take for granted such as toilets, canteens, libraries and lecture rooms may be a major undertaking.

Physical access to university buildings is a key concern and those who use wheelchairs, callipers, crutches, canes or prostheses, or who tire easily find it difficult moving about, especially within the time constraints imposed by lecture timetables.

Absence or lateness may be caused by transportation problems, inclement weather, waiting for lifts, lift or wheelchair breakdown. Getting out of lecture rooms may pose problems as well, especially in emergencies.

Teaching strategies for students with mobility impairment

Pre-semester

Consult with the student about possible barriers and problems they may have, and consider their suggestions for solutions— the Disability Officer will be able to provide assistance.

Plan allocation of lecture and tutorial rooms that are accessible.

Support requests for access issues to be dealt with - for example, ergonomic chairs, room temperature and lighting.

Facilitate a barrier-free environment.

Laboratory

Negotiate early with the student and Disability Officer to ensure access.

Arrange an individual orientation of the



During semester

Maintain communication with student on a regular basis and invite feedback.

Stand or sit clear of a wheelchair as it is often considered a part of the person's body space. Where possible put yourself in a position to maintain level eye contact, that is, sit down and talk.

Ask if assistance is required rather than assuming it is-for example, holding doors open, carrying objects, providing photocopies, assisting with phone calls, ensuring clear passageways and removing library books from high shelves.

Copies of lecture notes and overheads may be helpful to some students.

Students may seek permission to tape record lectures.

Notetakers for some students will be recruited by the Disability Officer

Students requiring personal assistance should contact the Disability Officer.

If lecture rooms are being relocated, advise the student and the Disability Officer.

laboratory to look at possible adjustment of facilities and equipment.

Students may find additional time is helpful for carrying out laboratory work.

Check that safety and emergency procedures are in place and all key parties are informed about their roles.

Distance education

Formats will need to take account of individual abilities and preferences

Flexible delivery

Suitability will depend on individual students needs.

Alternative assessment strategies for students with a mobility impairment

Discussions about assessment should be held early with the student and the Disability Officer. Much will depend on the nature and onset of disability, the type of assessment being undertaken and the student's usual work methods. Some students may have multiple disabilities, which may require a variety of services.

Students who have had a disability from birth may be adept at identifying and using alternative strategies. Other students may have recently acquired a disability or may have to adjust continually to intermittent conditions, such as with some forms of arthritis and other medical conditions.

Some types of assessment may cause more problems than others. For example, a student with cerebral palsy may be able to manage well in a multiple choice exam with additional time, but might require significantly more additional time for an essay type exam because of the amount of writing required. Other students may require the presence of a personal assistant during exams and/or a scribe.

Assignments

Discuss the requirements of the course with the student to identify possible problems and solutions.

Students may experience great difficulty searching for and obtaining information from the library.

Be prepared to vary the assessment task.

Monitor their progress.

Be flexible with deadlines and allow more time if necessary.

Tutorials

Ensure tutorials are held in rooms that can accommodate a wheelchair and extra personnel, and have accessible toileting facilities.

Fluctuating and recently acquired disabilities may cause the student to be absent from class.

Take into account the fact that students may be late attending classes due to mobility and access problems.

Students may have scribes and personal assistants.

Allow in-class written assignments to be completed out of class with the use of a writer,or provide extra time following the examination.

Examinations

Ensure building and room for the exam are accessible and that accessible toilets are available.

Ergonomic furniture may be required-for example, high desks, suitably designed chairs. Some students may have difficulty sitting at a conventional desk.

A separate room may be necessary.

Students in a wheelchair will need clear space around them to enable them to move around freely without disrupting others.

Additional time and rest breaks may be necessary.

Fatigue may be a problem, particularly if a student experiences chronic pain or has back problems–a couch or bed might be necessary.

Students who are unable to write or type, or have pain when writing, may also need a scribe, or a rest break during an examination.

Students who have difficulty writing or typing for a long period of time may also need a scribe.

Scribes need to have a good working knowledge of the subject matter being examined.

Readers may be required for reading the exam paper and reading back student's answers if required.

Consider alternative methods of recording answers such as typing or taping.

Students with spinal problems may need a high desk or board so they can stand while doing the exam.

Students who require assistance in personal and/or practical ways may need a personal assistant to carry out manual tasks – for example, turning pages, inserting a disk in a computer, removing the student's cardigan, assisting with toilet and eating breaks.

Personal computers and word processors may be used in exams for formulating and producing answers and for spelling and grammar checks, subject to exam guidelines.

Permission to eat, drink and take medication during exams may be necessary for some students.

Students with a speech impairment

The Australian Bureau of Statistics estimates that about 2% of Australians have a speech disability. These include difficulties in pronunciation of sounds, in projection and fluency problems. Speech impairments may range from problems with articulation or voice strength to complete voicelessness, chronic hoarseness, stuttering or stammering.

Speech difficulties can also be associated with cerebral palsy, hearing impairment and brain injury. People with speech disabilities may be difficult to understand and have difficulty expressing ideas. These problems may be aggravated by anxiety when trying to communicate in a group. Some people may use a speech synthesiser connected to a small computer to voice for them.

Teaching strategies for students with a speech impairment

Small groups/large groups

Address students naturally-don't assume that they cannot hear or comprehend.



Allow students time to express themselves, without interrupting or trying to finish their sentences.

Ask the student to repeat a statement if you don't understand it.

Demonstrate appropriate communication methods by encouraging students to speak clearly and one at a time.

Provide opportunities for—but do not compel -the student to speak in a group situation.

The student may use an interpreter.

Patience is the most effective

strategy in teaching students with

speech impairments.

Alternative assessment strategies for students with a speech impairment

Students with speech impairments may have other disabilities that also need to be taken into account such as deafness or hearing impairment, learning disabilities, mobility disabilities.

Consultation with the student and perhaps also the Disability Officer will be essential to ensure assessment strategies are effective.

Assignments

Discuss the requirements of the course early with the student to identify problems and solutions regarding assessments.

Oral presentations may be replaced with written assignments.

Tutorials

■ Participation in tutorials may be difficult. If this is being assessed it will need to be discussed and an alternative assessment may be necessary.

Students may use an auxiliary aid such as a speech synthesiser or interpreter for participation.
 Another student or interpreter may present the paper for an oral presentation.

One-to-one discussion may be possible.

Examinations

Written examinations may need to replace oral examinations.

Students with a mental illness

"The line between mental health and illness is blurred; much is to be learned from one another across that line. Our understanding of the human condition is enhanced in an educational environment that values diversity of experience and expression and fosters, through support policy and practice, the intellectual and personal growth of all who work and study."

(Hoffman & Mastrianni, 1989)

Student profile

Meg

Bipolar Affective Disorder is a psychiatric condition that is characterised by episodes of severe depression and mood swings. It has a genetic, biochemical cause.

I experienced my first depression episode during my first year at university, when I was in my late teens. Then I was at a country university, where there was no psychiatric help. In the past, I have had to use major tranquillisers to help control this condition. They cause side-effects like a 'hangover' feeling in the morning, tremors, muscle stiffness and weight gain, which others often mistake for 'looking odd.' There is a perception in the general community that if you have had a breakdown you are a 'fruitcake,' so this sort of attitude can put you off telling anyone about your disorder. I found when I was studying that there was lack of awareness about serious psychiatric conditions amongst student counsellors and academic staff. This meant it was harder to negotiate extensions of time and leave of absence for long illnesses.

Go ahead and ignore any negative feedback you might get. At university you may feel like a small fish in a big pond and you'll have to shout to get noticed. Don't be afraid to tell people about your disability. The more people who succeed and are open about having experienced episodes of mental illness, the easier it's going to be for all of us.

MEG, GRADUATE WITH A PHD IN BEHAVIOURAL SCIENCES, NOW A UNIVERSITY LECTURER

Mental illness often develops between the late teens and early twenties. Tertiary students, therefore, can be a particularly susceptible group. The impact of mental illness can disrupt educational plans causing students to withdraw from their course or take a part time subject load.

Mental illness can affect the student's ability to think and relate to other people and can be characterised by feelings of despondency, anxiety and fear. These feelings may be so overwhelming that coping with everyday activities becomes difficult. The student may at times be unable to differentiate between reality and fantasy and may have difficulties with organising their thoughts.

Definition

The Disability Discrimination Act (1992) defines mental illness as "any condition which affects a person's thought processes, understanding of reality, emotions or judgement or which results in disturbed behaviour, for example, a person with a mental illness, neurosis or personality disorder".

Mental illness can include

mood-related disorders (depression, bi-polar)

anxiety- related disorders (phobias, panic, posttraumatic stress, obsessive compulsive behaviour patterns)

psychoses (schizophrenia)

personality disorders (borderline personality disorder and anti-social personality disorder)
 eating disorders (bulimia, anorexia nervosa)

29

Under the Mental Health Act NSW (1990), psychiatric disability is referred to as:

A condition which seriously impairs, either temporarily or permanently, the mental functioning of a person and is characterised by the presence of one or more of the following symptoms:

- delusions
- hallucinations
- serious disturbance of mood

sustained or repeated irrational behaviour indicating the symptoms mentioned above.

Due to the episodic nature of many mental illnesses, students may function very well for long periods and then suddenly encounter difficulties.

Some students may have a long history of mental illness, have experienced hospitalisation, be taking medication and/or undergoing psychotherapy. These students will often require ongoing assistance whilst studying such as examination accommodations, extensions of assignment deadlines, copies of lecture notes to cover periods of absence and a quiet area in which to rest.

Other students may experience their first episode of mental illness whilst at university. Similar accommodations, such as additional examination time, increased flexibility about assignment deadlines or notetaking assistance in case of absence, will help at this time but may not need to be an ongoing service.



Often medications prescribed for the above conditions have side effects that negatively impact on study, eg difficulties with concentration, blurred vision, impact on short term memory, and/or induce physical symptoms like dry mouth, nausea, tremors and insomnia.

Myths about mental illness

students with mental illness are dangerous
 students with mental illness are likely to use more services than other disability groups

students with mental illness are more likely to be disruptive

mental illness = intellectual disability

providing services to students with mental illness compromises academic integrity

Realities

few students with mental illness are dangerous to themselves or others

 students with mental illness do not use more services than students from other disability groups
 most students with mental illness are not disruptive in lecture or tutorial situations

■ limitations are NOT intellectual, although the illness can interfere with cognitive functions and the learning process

services assisting students with mental illness provide them with the opportunity to continue studying on an equitable basis

mental illness manifests uniquely to each person
 low self-esteem as well as fear of a recurrence

- of illness are common
- self doubt or fluctuating levels of confidence

one in four people will undergo some form of mental illness during their lives

Impact of mental illness on learning

Common difficulties associated with mental illness can include:

decreased concentration, confusion and disordered thinking

difficulties with self-perception and perception of others

mood highs and/or lows

sensations of pain, torment or loss of sense of reality

fluctuations in motivation

reacting to all of the above in ways that others don't understand embarrassment, low self esteem and experiences of isolation

side effects of medication prescribed to manage symptoms

There is an increasing range of services now provided to students with mental illness at tertiary institutions. These services assist students to manage their illness and continue with their studies.

Disclosure and confidentiality

Within the tertiary education sector, unlike the primary and secondary system, self-advocacy and disclosure are ultimately the responsibility of the student with a disability, and the institution cannot force a student to disclose.

Many students with mental illness are unwilling to self identify, as they are apprehensive about being stigmatised and discriminated against. Fear of breach of confidentiality also acts as a deterrent to identifying.

The institution's role, therefore, is to develop policies that promote an atmosphere of acceptance and trust, and ensure that services are provided in a confidential manner.

University staff members should not expect to obtain information about any student from a counselling unit. Confidentiality between Counsellors and the users of these services requires a formal permission to release information to a third party signed by the client. Confidentiality can only be breached in the following circumstances:

■ if direction is given by the client to disclose information to a third party or parties. This direction must in the form of a signed statement by the client.

■ if it is a legal requirement eg a response to a legal subpoena for documents to be produced or for the counsellor to appear before a State or Federal Court. Other circumstances would include an over-riding legal requirement to breach the understanding of confidentiality. These circumstances would normally involve statutory obligations, illegal or criminal activities or the prevention of harm to others. ■ if there is an issue of duty of care. This occurs when the counsellor and/or their direct supervisor consider the client's behaviour to be a danger to themselves or others.

Recognising a student with a mental illness

Behaviours that may be indicative of various mental health problems are:

- withdrawal from activities
- impaired concentration
- fluctuating attention
- irritable behaviour
- weight loss
- persistent sadness and tearfulness
- worry and agitation
- aggressive behaviour
- lack of interest in life

inappropriate behaviour including disruptive or anti-social

- delusions (false beliefs)
- grandiose behaviour
- extreme euphoria

The above behaviours may indicate a mental illness. However, a diagnosis can only be arrived at through an intensive interview process with a therapist or medical practitioner.

Disruptive or Aggressive Behaviour

When a student exhibits difficult behaviour, academic staff may not initially consider that this behaviour could be symptoms of a mental illness. These situations can be associated with highly disruptive behaviour in lectures, sometimes including threats of violence or perception of imminent danger. However, this type of behaviour is uncommon.

Disruptive behaviour will prevent other class members' ability to concentrate and participate in the lecture or tutorial, and staff and students may often feel powerless to act. However, any student behaving in a disruptive manner should be asked to leave the lecture or tutorial and the lecturer should speak to them privately at a later time.

At that time, the staff member could suggest to the student that they go to the Counselling Unit and/or make a referral to the Unit if the student agrees. If the behaviour is aggressive and threatening, or poses a danger to themselves or others, campus security may need to be notified.

It should be noted that students without a mental illness might also display aggressive or disruptive behaviour.

Students at Risk

A student who appears depressed, expresses feelings of hopelessness and helplessness, whose behaviour seems to have changed significantly or talks or hints at committing suicide should be taken seriously. Staff should consult the university counselling unit to find out effective ways of dealing with the situation (which could include actively encouraging the student to see the counselling unit).

Whilst the above behaviours can indicate that a student may have a mental illness, many students with mental health problems will show few outward signs.

Unfortunately, a student with severe mental illness is more likely to express their difficulty through absence from class and/or gradual withdrawal from university life. It is important that the student be referred to Counsellors by academic or general staff if an opportunity arises.

Teaching strategies with a mental illness

Academic staff have found the following strategies useful when working with students with mental illness:

Large groups

A student may have difficulties coping in a large lecture situation, and may have difficulties attending. In this case, tapes, copies of lecturer's notes or a notetaker can assist.

Tapes and notetaking may also be useful if a student has a period of absence from their course.
 Changing the weighting on examinations and class participation.

Small groups/tutorials

A student may have difficulties participating in tutorials because of withdrawal or communication difficulties. Strategies include:

adjusting attendance requirements, eg. tutorial attendance

asking the student if they require clarification of any points as the illness or medication can cause difficulties with concentration

allowing the student to substitute tutorial presentations with written work

■ if the student will have difficulty in contributing and participating because of their disability this could be managed through the student consulting with the Disability Officer or Counsellor to obtain a recommendation to lecturers on how best to assist the student

Distance learning

Where university courses are offered through distance learning, it may be possible to offer the student this mode of study on a temporary or permanent basis.

Laboratory and/or field work

Anti-depressant medications can cause drowsiness or affect ability to concentrate. This create difficulties for the student in handling chemicals, equipment or machinery or undertaking fieldwork, therefore alternative assessment could be granted, where possible, or the student be allowed to do the work at a more suitable time.

If you are aware that the student is taking medication that may affect their ability to operate machinery speak with the student privately and ensure that all relevant staff are informed.

Alternative assessment strategies for students with a mental illness

Students who may have difficulties doing written examinations could be offered alternatives, eg verbal examinations, audiotape presentations or additional assignments could substitute for examinations.

Students choosing to do examinations can if required be offered additional time for writing or rest breaks and a separate room in which to do the examination.

Assignments

Extension of deadlines for assignments and essays can also help students with mental illness by alleviating stress.

Examinations

additional time for examinations

separate room in which to sit the examination
 permission to have rest breaks during the examination

permission to sit examination outside of the usual examination period

permission to replace examinations with other forms of assessment

Other Strategies

suggest to the student a part time subject load may be appropriate if they are falling behind or failing

where possible, staff making time to see students in need without a prior appointment

extra tuition

help with organising administrative details, such as deferring, withdrawing without failure or adjusting subject load

flexibility with timetabling where possible, as students taking medication often find attending morning lectures very difficult

a quiet safe area for the student to go to when stressed

staff training to increase understanding and awareness of mental illness

assistance with arranging peer support/peer mentoring

Self-Help Strategies

Suggest to the student that they might consider: seeking assistance from the Disability Officer on campus

learning stress management/relaxation techniques

seeking help with study skills, eg from the Learning Centre on campus

establishing a small student study group

establishing a supportive relationship with a university counsellor

Students with a learning disability

Student profile

Glen

I have always been below average at spelling, reading and writing and this has led to feelings of low self-esteem. I have never told anyone about my dyslexia and, 20 years ago, there seemed no help available to those with learning disabilities.

My school marks reflected my disability, but I was never given any help. During my first session at university, I struggled and told no one of my dyslexia. Luckily, friends at uni encouraged me to go and see the Disability Officer and find out how she could help.

The Disability Officer organised for me to have an examination by a psychologist who prepared a formal report for the university about the extent of my disability. Then, I was given a great boost-a pair of glasses with tinted lenses now help me to read and write more easily. These were funded by the university.

I have also been offered remedial classes to help catch up on basics I missed out on at school. As well, I can have extended time in exams, if I need it.

GLEN, GRADUATE, BACHELOR OF ARTS (PSYCHOLOGY)



Although it is estimated that I to 3% of undergraduates have a learning disability the condition has only recently been identified and still often goes undiagnosed.

The marked discrepancy between intellectual capacity, achievement and output (expressing information and responding) is what characterises a learning disability.

It is a disabling condition that is intrinsic to the individual and is not the result of situational factors such as a disadvantaged background, absence from school, ill health, emotional disturbance or socioeconomic disadvantage.

Identifying a student with a learning disability

Categorisation or definition of people with learning disabilities is not and never has been simple. When the disability is undiagnosed, a student may not even be aware that this is the cause of difficulties experienced with certain tasks. Identification of learning disabilities is necessary in order to provide adjustments that are reasonable for that student. Some indicators are:

Academic achievement, as revealed by tests, does not correspond to ability.

Student may show consistent success in some subjects, while doing poorly in another, despite comparable effort.

Auditory processing

Some students may experience difficulty integrating information presented orally. This can contribute to difficulties in following the sequence and organisation of a lecture.

The student may not hear instructions or words accurately and might attempt to guess the meaning from the context. Blaming the student or accusing them of 'not listening' could be construed as harassment.

Notetaking

Some students with learning disabilities cannot write effectively or assimilate, remember and organise material while listening to a lecture.

Learning Disabilities

A learning disability is any one of a diverse group of conditions that cause significant difficulties in perceiving and/or processing auditory, visual or spatial information.

"Learning disabilities can fall within the full range of intellectual ability, including average to superior intelligence." They involve one or more of the basic processes used in understanding or using spoken or written language. Of presumed neurological origin, they cover disorders that impair such functions as reading (dyslexia), writing (dysgraphia) and mathematical calculation (dyscalculia). They vary widely within each category in the patterns they exhibit. See also 'Acquired Brain Injury', page 38.

Reading difficulties

Accuracy, comprehension and speed in reading are all affected in students with any type of reading disability. The reading may be slow and laboured and comprehension may be impaired, particularly when dealing with large quantities of material.

Students may not realise their errors; for example, when answering a question in an exam that differs from the one asked.

Those with a reading disability due in part or wholly to visual perceptual dysfunction may experience headaches and visual stress.

Writing difficulties

Legibility, writing speed and spelling may be severely hampered under the pressure of time constraints in a formal exam.

Memory or sequencing may impede execution of complex instructions.

Participation

It is helpful to determine the student's ability to participate in class activities. While many students with learning disabilities are highly articulate, some may find it difficult talking, responding or reading in front of groups.

Specialised limitations

Some students with learning disabilities may have poor coordination or find it difficult to judge distances or differentiate between left and right.

Organising difficulties

Problems with sequencing and organising may be reflected in poor study habits. Some students may seem to go off at a tangent in conversation and appear personally disorganised. Some may not perceive or discriminate patterns and arrangements as others do.

■ The science laboratory can be especially overwhelming for students with learning disabilities. New equipment, exact measurement and multistep procedures may demand precisely those skills which are hardest for them to acquire.

Behaviour

Because of perceptual deficiencies, some students with learning disabilities are slow to grasp social cues and respond appropriately, they may lack social skills, or they may have difficulty sustaining focused attention.

General tips

Pre semester

Refer to the Disability Officer about current assessments of students with learning disabilities.

Consult with the Disability Officer about converting texts to a suitable format, such as tape or disk.

Students may benefit from having extra time for reading.

Provide students with chapter outlines or study guides that cue them to key points in their reading.

During the semester

Maintain contact with the student.

Communicate in the student's preferred mode/s; for example, a taped recording of a discussion may be more useful than written materials.

Ensure you keep the student's attention and make the environment as distraction-free as possible.

Use Plain English, short sentences, clear speech.

Stay on the topic.

Be prepared to repeat and rephrase information if necessary.

Revise work covered previously.

Provide summary to put lectures in context

Students may need assistance with note-taking

 \mathbb{Z} Some students may find it useful to tape lectures.

Teaching strategies for students with a learning disability

Some students with a learning disability may have experienced educational barriers prior to attending university. Once a student has been properly identified as having a learning disability by appropriately qualified personnel, and the nature of the disability is known, then strategies can be devised to help that student, usually in consultation with the student and the Disability Officer.

Large groups

Read aloud material that is written on the board or that is given in handouts or transparencies.

Copies of overheads and lecture notes might be useful.

Small groups

Be aware that students may find it difficult to participate in small group discussions, or give presentations.

Laboratory and field work

An individual orientation to the laboratory and equipment can minimise student anxiety, and provide an opportunity to talk about safety issues, and any specific needs the student may have.
 Label equipment, tools and materials clearly.

Flexible learning

Flexible learning may suit some students.

Distance learning

Reliance on reading and writing may pose difficulties for some students with a learning disability.

Others may find the option of working at their own pace and in a familiar environment an advantage, especially where learning materials are in a suitable format.

Alternative assessment strategies for students with a learning disability

Some students with a learning disability or head injury, who can access auditory information better than visual information, may find a reader helpful when being assessed. If they present information better in oral form than in written form they may require a scribe.

Assignments

Allow extra time, particularly when an assignment involves significant demands on reading and writing skills.

Provide assistance with essay writing or study skills from Learning Skills Counsellor.

Practical task-driven course assessment may not present a problem.

Provide alternative or supplementary assignments for evaluation purposes such as taped interviews, slide presentations, photographic essays or hand-made models.

Make allowance for poor grammar or spelling.

Tutorials

Students may need encouragement to participate in tutorials

Examinations

Special arrangements for exams can be worked out with the student and the Disability Officer.

Possible adjustments

Sitting exams in a separate, quiet room with natural lighting. Fluorescent lighting can cause visual disturbances in some students (e.g. strobing effects) that make reading slow and difficult.

Extra time.

Use of simple language in exam questions.

Allowing plenty of time for students to assimilate new knowledge before testing.

Aids such as dictionaries, computer spell checks, a proofreader; in mathematics and science, a calculator, and access to mathematical or scientific tables.

Changes to the physical environment

Some students with a learning disability are better able to concentrate and learn if changes are made to the learning environments. For example,

replacing fluorescent lighting;

using of coloured paper and blue transparencies;

- providing access to a photocopier;
- modifying print;

using standard font to size 14 and A3 paper instead of A4

avoiding the use of italics;

using thick paper so the reverse side does not bleed through;

taking care with layout;

reducing extraneous noise levels in classes.

■ In mathematics, a student with a learning disability may understand the concept, but may make errors by misaligning numbers or confusing arithmetical facts.

Arrangements to use a reader, writer (scribe), word processor, tape recorder or typewriter, specific software package.

Consider alternative exam design formats. For example, some students may find essay formats difficult.

Consider alternative or supplementary assignments that may serve evaluation purposes, such as taped interviews, slide presentations, photographic essays or hand-made models.

Be aware that misreading of a key word is much more likely for students with a learning disability. For example, if an answer is well framed but seemingly not relevant to the set question, a flexible attitude to assessment may be necessary.

Poor handwriting or spelling may not necessarily indicate an immature or uninformed exam answer.

Exam papers may sometimes need to be printed on soft contrast paper to avoid visual difficulties according to individual colour preferences and/or by modifying print sized type.

Students may prefer to dictate their exam answers to a scribe who has a good working knowledge of the subject.

part

38 Glossary of disabilities and medical conditions

Acquired brain injury AIDS (aquired immune deficiency syndrome) Allergies Arthritis Asthma Attention deficit/hyperactivity disorder (AD/HD) Cancer Cerebral palsy Chronic fatigue syndrome (CFS) Crohn's disease Diabetes Epilepsy and related disorder Lupus Multiple sclerosis Muscular dystrophy Narcolepsy Occupational overuse syndrome

42 Some useful websites 43 References

Disability discrimination occurs when a person discriminates against another person on the grounds of a disability by treating or proposing to treat that person less favourably than they would treat a person without a disability in 'circumstances that are the same or are not materially different'. SUSAN HOWARD FACULTY OF SCIENCE UNSW

Glossary of disabilities and medical conditions

There are a number of disabilities and medical conditions that may interfere with a student's academic work, their ability to attend lectures, concentrate, complete assignments or complete exams. Some of these symptoms, like limited mobility or impaired vision, and the types of intervention required, may resemble those covered elsewhere in this guide.

The same general principles outlined in the Part B (page 8) apply to teaching and assessing all students with disabilities, particularly the need to identify the disability and to discuss with the student both its effects and the necessary considerations. To assist that process here are brief descriptions of some of the more prevalent disabilities among students.

More detailed information may be obtained from the Disability Officer or the relevant self-help organisation for that disability.

Acquired brain injury

Acquired brain injury or head injury can occur as a result of accident or illness such as stroke. Students with acquired brain injury may have difficulty with mobility or use of upper limbs, communication problems, particularly in their speech (e.g. distorted or slurred speech, difficulty finding words) and cognitive deficits including short-term memory problems, difficulty in planning and organising thoughts and actions, poor insight and low attention span.

There may also be personality problems such as impulsiveness, low frustration tolerance, inappropriate social behaviour (e.g. offensive language), mood swings and a general inability to control emotions, particularly aggression and anxiety. For teaching and assessment strategies, refer to Part B (page 8) and sections on learning disabilities, speech disabilities and mobility disabilities.

AIDS (acquired immune deficiency syndrome)

AIDS is caused by a virus (HIV) that destroys the body's immune system. This condition leaves the person vulnerable to infections and cancers that the immune system normally protects against. Although a student may have tested positive to the HIV virus, this may not affect their learning ability.

Manifestations of AIDS are varied and may lead to hospitalisation for periods of time, depending on the particular infections or diseases the individual develops. Extreme fatigue is a common symptom.

Students with AIDS may be reluctant to reveal their condition because of the social stigma, fear and misunderstanding that still surround this illness. It is important that confidentiality be observed. In addition, if the issue should arise in class, academic staff will need to deal openly and non-judgmentally with it and foster an atmosphere of understanding.

For general teaching and assessment strategies, refer to Part B (page 8) section and any other appropriate section.

Allergies

Hypersensitivity to inhaled substances (allergens) can result in reactions such as runny nose, nasal congestion, eye inflammation, sneezing. Allergies can be seasonal like hayfever, or year-round and vary in intensity. Treatments such as antihistamines can cause sedation, dry mouth, nausea, dizziness, blurred vision and nervousness.

An acute allergic reaction (anaphylaxis) can be caused by medications, chemicals, foods and venom and result in low blood pressure, shock, irregular heartbeat, respiratory symptoms, gastrointestinal symptoms, and even death.

Arthritis

There are many kinds of arthritis, but the most common are osteoarthritis, rheumatoid arthritis and gout. Arthritis usually affects the joints, especially the hands, knees, elbows, shoulders, feet, hips and neck and can also affect the organs, including the skin, eyes, smaller arteries and veins, heart, lungs, blood and kidneys.

Symptoms and complications vary. Causes are not known and there are no specific cures. Most treatment is aimed at minimising pain and enhancing mobility.

For general teaching and assessment strategies refer to Part B and any other appropriate section (e.g. mobility disabilities).

Asthma

Many students have chronic breathing problems, the most common of which are bronchial asthma and emphysema. Respiratory problems are characterised by attacks of shortness of breath and difficulty in breathing, sometimes triggered by stress, either physical or mental. Fatigue and difficulty climbing stairs may also be problems, depending on the severity of the attacks.

Asthma is a common respiratory condition affecting about one in ten adults. At present there is no known cure for asthma but symptom control can usually be achieved using various medications. While psychological factors do not cause asthma, major stresses such as exams can trigger an attack in some people. Frequent lateness or absence from lectures may occur and hospitalisation may be required where prescribed medication fails to relieve symptoms.

For general teaching and assessment strategies refer to Part B (page 8) and any other appropriate sections.

Attention deficit/hyperactivity disorder (AD/HD)

A developmental dysfunction of the central nervous system that occurs in children and adults. A significant proportion of adults continues to experience academic and behavioural symptoms of AD/HD. AD/HD symptoms include brief attention span, short-term memory problems, speech disorders, difficulties with balance and coordination, problems of/in perception and organising. Behavioural symptoms may include impulsiveness, low frustration threshold, poor self esteem, inflexibility. Adults with AD/HD may experience difficulties with learning and social interaction, self-esteem, depression, mood swings and anxiety. Most, however, can and do develop strategies to overcome the worst features of AD/HD and lead very successful lives.

NOTE: whereas people with AD/HD may experience learning difficulties, AD/HD is not classified as a learning disability.

For general teaching and assessment strategies refer to Part B and any other appropriate section (e.g. learning disabilities and depression and mental illness).

Cancer

Cancer can occur in almost any organ system of the body and the symptoms and particular disabling effects vary greatly from one individual to another. Some individuals experience visual problems, lack of balance and coordination, joint pains, backaches, headaches, abdominal pains, drowsiness, lethargy, difficulty in breathing and swallowing, weakness, bleeding or anaemia.

The primary treatments for cancer - radiation therapy, chemotherapy and surgery - may induce additional effects. These therapies can cause violent nausea, drowsiness, fatigue and learning impairment.

Surgery can result in amputation, paralysis, sensory deficits and language and memory problems. The condition can fluctuate depending on how successful treatment is.

For general teaching and assessment strategies refer to Part B and any other appropriate section (e.g. mobility disabilities).

Cerebral palsy

Cerebral palsy is a general term for a group of disabling conditions caused by damage to the brain, which may have occurred before, during or shortly after birth. The major types of disability associated with cerebral palsy can occur in combination and are:

Spasticity–muscular contractions of the limb muscles.

Athetosis–involuntary movements of the limbs, trunk and face.

Ataxia–lack of coordination with a clumsy gait and poor balance.

Atonia–muscle weakness causing difficulty in movement.

Individuals will therefore vary widely in the effects of the disability which may include involuntary muscle contractions, rigidity, spasms, poor coordination, poor balance or poor spatial relations, visual, auditory, speech, hand-function and mobility problems.

Those severely affected may need to use a wheelchair, while those mildly affected may have no physical manifestations at all.

For general teaching and assessment strategies, refer to Part B and any other appropriate section (e.g. speech, vision and mobility disabilities).

Chronic fatigue syndrome

Chronic fatigue syndrome (CFS) - also known as myalgic encephalomyelitis (ME) is believed be caused by an abnormal response to a virus or some other 'trigger' factor.

CFS is a chronic condition lasting months or years. Students with CFS are prone to relapse if they exceed the limits of physical or mental exertion which their illness imposes.

Symptoms may vary in severity from day to day, and even from hour to hour. There may be profound physical and mental exhaustion, persistent pain in the muscles and joints, headaches varying from dull to intense, dizziness, nausea, fainting, poor concentration and memory, pallor or flushing of face, an inability to tolerate extremes of heat, light or sound and a sensitivity to various agents and chemicals.

The student will need to avoid prolonged standing, extremes of heat and cold, exposure to fumes from science laboratories and gas heating and mental or physical exertion beyond the limits imposed by their condition.

As a consequence of this illness, the student may feel a great sense of isolation and loneliness as well as a serious loss of self-confidence. For general teaching and assessment strategies refer to Part B and any other appropriate sections, e.g. mobility disabilities.

Crohn's disease

A form of inflammatory bowel disease, Crohn's disease refers to persistent and recurring inflammation in one or more parts of the intestine. It may be associated with medical problems outside the intestine and there is no known cure.

Mild symptoms include diarrhoea, abdominal pain, weight loss, fatigue and clubbing of the fingers. More acute symptoms include cramping, nausea and fever. Treatment involves easing symptoms and may include surgery, intravenous liquid and nutrients, and drugs to reduce inflammation. Stress may be an aggravating factor.

For general teaching and assessment strategies refer to Part B and any other appropriate section.

Diabetes

Diabetes is a chronic disease in which the body produces little or no insulin or resists the insulin it does produce. Insulin is needed by the body to transport glucose into the cells for use as energy and storage as glycogen.

There are two types of diabetes.Type I or insulindependent diabetes is most common in younger people, and students with Type I diabetes may be treated with insulin injections, exercise and dietary modifications.To balance the injected insulin, meals will need to be evenly spaced throughout the day with extra food taken before exercise.

It may be necessary for the student to eat in class or in examinations and a room to administer injections may need to be provided. Instability of the diabetes may mean absences or delayed assignments.

Type 2, non-insulin dependent diabetes is more common in older people. The body still produces some insulin naturally and treatment includes monitoring sugar in the blood, exercise, and special attention to diet.

Diabetes increases the risk of heart attack, stroke, kidney failure and peripheral blood vessel disease, and is a major cause of blindness in adults. Common symptoms can include fatigue, increased thirst, increased urination, shakiness, confusion and crying. Symptoms vary from person to person.

For general teaching and assessment strategies refer to Part B and any other appropriate section, e.g. vision impairment.

Epilepsy and related disorders

Epilepsy occurs in I to 2 per cent of the population. Brain injury, birth injury, brain tumours and circulatory disease in the brain are known causes of epilepsy, but there are many instances of unknown cause. In those predisposed to epilepsy, seizures may be triggered by a range of stimuli including flashing lights, stress or anxiety, fatigue, illness, excitement, inadequate food, excessive alcohol, and physical activity.

Epileptic seizures result from imbalances in the electrical activity in the brain causing loss of control of one or more aspects of bodily activity. The effects vary with the type of seizure.

People who take medication for epilepsy rarely have seizures. In some cases sedative anticonvulsant drugs may interfere with concentration. If undetected, frequent small lapses of consciousness occur; these lapses can interfere with learning.

Students with epilepsy and other seizure disorders are sometimes reluctant to divulge their conditions because they fear being misunderstood or stigmatised. Teachers can and should model positive attitudes.

In the event of a major epileptic seizure, follow this procedure:

■ Keep calm. Although the manifestations may be intense they are generally not painful to the individual.

Remove nearby objects that may injure the person during the seizure.

Help lower the person to the floor and place cushioning under his/her head.

Turn the person's head to the side so that breathing is not obstructed

Loosen tight clothing. Do not put anything in the person's mouth.

Do not try to restrain bodily movement.

Make sure someone stays with the person until she/he recovers.

If the seizure continues for more than ten minutes, get medical help or call an ambulance. For general teaching and assessment strategies refer to Part B and any other appropriate section.

Lupus

A chronic inflammatory disorder of the connective tissues which may affect the skin only or multiple organ systems as well as the skin. Treatment varies according to diversity and type.

Symptoms commonly include fever, weight loss, malaise and fatigue, rashes and pain in multiple joints, sensitivity to sun and fluorescent lights. Complications may include kidney failure, urinary tract infections, lung and circulatory problems, eye damage (as a result of treatment), damage to the central nervous system.

Often characterised by flare-ups and remissions.

For general teaching and assessment strategies refer to Part B and any other appropriate section, eg. mobility disabilities.

Multiple sclerosis

Multiple sclerosis is a progressive disease of the central nervous system, characterised by a decline of muscle control. Symptoms may include disturbances ranging from mild to severe blurred vision, blindness, tremors, weakness or numbness in limbs, to unsteady gait, paralysis, slurred speech, mood swings and attention deficits.

The course of multiple sclerosis is highly unpredictable. Periodic remissions are common and may last from a few days to several months, as the disease continues to progress. As a result, mood swings may vary from euphoria to depression and striking inconsistencies in performance are not unusual.

For general teaching and assessment strategies, refer to Part B and any other appropriate section, e.g. speech, vision and mobility disabilities.

Muscular Dystrophy

Muscular dystrophy refers to a group of hereditary progressive disorders that most often occur in young people, producing degeneration of voluntary muscles of the trunk and lower extremities. The atrophy of the muscles results in chronic weakness and fatigue and may cause respiratory or cardiac problems. Walking, if possible, may be slow and appear uncoordinated. Manipulation of materials in class may be difficult.

For general teaching and assessment strategies refer to Part B and any other appropriate section, e.g. mobility disabilities.

Narcolepsy

Recurrent uncontrollable brief episodes of sleeping.

Occupational overuse injury

Occupational overuse injury, previously known as repetitive strain injury (RSI), may include diseases such as tenosynovitis, tendonitis, synovitis, carpal tunnel syndrome or combinations of these. It can result from doing repetitive tasks such as typing, writing, or playing musical instruments and may result in long-term stiffness, pain and limited joint movement.

The symptoms are usually pain, swelling, and stiffness of the wrist, elbow or the small joints in the hand. It also commonly causes pain in the neck and shoulders. Rest and a variety of treatment approaches may improve the situation but it can recur with stress and overuse.

For general teaching and assessment strategies refer to Part B and any other appropriate section, e.g. mobility disabilities.

Some useful websites

Human Rights and Equal Opportunity Commission www.hreoc.gov.au/

Students with Disabilities Code of Practice for Australian Tertiary Institutions www.gut.edu.au/pubs/disabilities/national_code/co de.html

Disability Discrimination Act www.austlii.edu.au/au/legis/cth/consol_act/dda199 2264

Bobby - the US based website which provides detailed feedback on any websites accessibility to people with disabilites www.cast.org/bobby/

References

Legalities

Disability Discrimination Act 1992

B. O'Connor et. al. Students with Disabilities: Code of Practice for Australian Tertiary Institutions, AGPS, Canberra, 1998.

Alternative Assessment Strategies

National Board of Employment, Education and Training, Guidelines for Disability Services in Higher Education, AGPS, Canberra, 1994.

Supporting Students with Disabilities at the University of New England, UNE, Armidale.

Learning Disabilities

Opening All Options A Resource to assist students with Learning Disabilities in Tertiary Education 1990

Mental Illness

Succeeding with a psychiatric disability in the university environment - QUT and Tertiary Initiatives for People with Disabilities 1997

Towards Success in Tertiary Study with psychiatric conditions - Victorian Co-operative Projects Higher Eucation Students with Disabilities Committee 1998

Suicide Awareness Training Manual -Rose Education, Training & Consultancy 1993

A Hidden Disability: University Students with Mental Health Conditions - Patricia McLean (University of Melbourne); Murray Bardwell (Australian Catholic University); Janette Ryan (University of Ballarat); Jana Andrews (Kangan Batman TAFE) 1998

Vision impairment

Blind Citizens Australia Policy Statement: Education for People who are Blind or Vision Impaired.

Special thanks to

Jo Rudd–Editor Anna Mungovan–Regional Disability Liaison Officer Professor Ron Postle–University of New South Wales Elizabeth Dickson Liz Claridge Debi Toman