

DYSLEXIA AND THE UNIVERSITY



Louise Brazeau-Ward

FOREWORD

This booklet is written in simple English, to make it easier to read for students with dyslexia as well as busy university lecturers, student services personnel, administrators and others who work with people who have dyslexia. It provides a starting point for people wishing to understand this syndrome that is often referred to as a 'hidden' disability. As such, it is neither prescriptive nor exhaustive. An extensive bibliography is included to satisfy the inquisitive mind.

This book is not only based on research on the neuro-physiological basis of dyslexia, but all examples are based on true-life experiences.

It provides an overview of what we know about dyslexia, the difficulties experienced by university students with dyslexia and appropriate accommodations and modifications to assist them to achieve success.

There are examples of courses of study and examinations papers that were found to be effective with dyslexic students. There are also examples that are considered unsuitable for dyslexic students.

Much research has been conducted in the past on learning disabilities. However, in recent years, the National Institutes of Mental Health have undertaken extensive research on dyslexia.

Dyslexia is the most common learning disability. It accounts for 85% of all learning disabilities. It is not surprising therefore, that dyslexia will be the learning disability that is more apparent at the university level. Most other learning disabilities on the other hand, do not affect reading after the student reaches the grade 5 level.

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Louise Brazeau-Ward

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DEFINITIONS

Many definitions exist to describe dyslexia. Some may even appear to be contradictory. This can be best explained by the fact that some people look at it from a medical point of view and others from an educational point a view.

From the educational point of view, there are also different manifestations of the difficulties depending on the age, the grade level or the work environment of dyslexic persons. It is not surprising that the lay public is often confused by all the definitions. However, all the definitions really reveal different aspects of dyslexia. While dyslexia results from a biological difference in the brain, its outward manifestations, or symptoms, can be different depending on the type of dyslexia and/or tasks at hand.

The following are the most common definitions:

From The International Dyslexia Association (IDA).

Dyslexia is one of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems reading, a conspicuous problem with acquiring proficiency in writing and spelling.

DEFINITIONS *continued*

From The British Dyslexia Association

Dyslexia is best described as a combination of abilities and difficulties which affect the learning process in one or more of reading, spelling, writing and sometimes numeracy/language. Accompanying weaknesses may be identified in areas of speed of processing, short-term memory, sequencing, auditory and/or visual perception, spoken language and motor skills. Some dyslexics have outstanding creative skills. Others have strong oral skills. Whilst others have no outstanding talents, they all have strengths. Dyslexia occurs despite normal intellectual ability and conventional teaching. It is independent of socio-economic or language background.

The Canadian Dyslexia Association definition:

Dyslexia results from a different brain organization, which may cause a problem with reading, writing, spelling and/or speaking, despite average or superior intelligence, traditional reading instruction and socio-cultural opportunity. It is genetically inherited and its cause is biological.

Often, a person with dyslexia will also have special abilities and talents associated with superior visual-spatial skills. These abilities, contrasted with deficits in basic skills, make dyslexia very confusing for teachers and parents. There are also many famous people who have or had dyslexia – for example: Albert Einstein, John Lennon, Walt Disney, Alexander Graham Bell and Steven Spielberg are just a few of these.

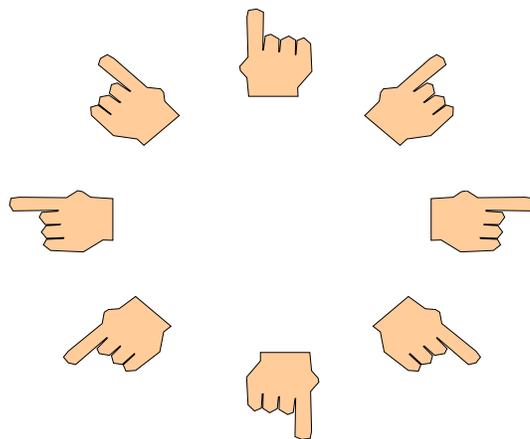
DEFINITIONS *continued*

There are three main types of dyslexia:

- Dysnemkinesia/dysgraphia (motor)
- Dysphonesia (auditory)
- Dyseidesia (visual)

Dyslexia can vary in its severity. A person may also have a combination of these three types of dyslexia. Some dyslexic students may also have a sensitivity to light (scotopic sensitivity, Irlen syndrome, magnocellular defect.)

Dyslexia can cause a lifelong disability in reading, writing, spelling and/or speaking. Some of these basic skills will always be more difficult for people with dyslexia than for others. However, with appropriate and timely intervention people with dyslexia do make progress.



CAUSES OF DYSLEXIA

Dyslexia is genetically inherited, and its cause is biological. According to Albert M. Galaburda, Associate Professor of Neurology at the Harvard Medical School, sufficient scientific evidence accumulated in the last decade confirms that dyslexia stems from neurological causes. Proof has been obtained from both anatomical observations of autopsy specimens and imaging studies in living subjects.”

As Galaburda notes, “Anatomical evidence suggests there are differences in the symmetry of brains of dyslexics, in the specific areas dealing with language. This form of symmetry indicates that the language areas of dyslexics are organized differently and that they probably process linguistic information differently as well.”

For most people the left side of the brain is usually larger than the right side. In the brain of persons with dyslexia, the right side is as large as the left side. It is not that there are fewer connections but rather, more. Neurons are found in places where they do not usually belong. Due to this different brain organization, persons with dyslexia will process language in a different way.

Dr. Sally Shaywitz, from Yale University, has found that persons with dyslexia learn language by using parts of the brain not usually used to process language.

CAUSES OF DYSLEXIA

Dr. John Stein, from Oxford University has done extensive research in the visual processing systems of persons with dyslexia. He believes that unstable eye-movement can cause “*letters and words appear to move around, jump over each other, blur and reverse themselves*”.

“My overall conclusion will be that reading difficulties are neither specific to reading nor exclusively linguistically based, but a consequence of mildly impaired development of a particular kind of neuron in the brain, magnocellular neurons, so that dyslexia has widespread manifestations which are not at all confined to reading. However they are best thought of as individual differences between people rather than a consequence of neurological ‘disease’”. J. Stein (2000): The neurobiology of reading difficulties. *Prostaglandins, Leukotrienes and Essential Fatty Acids* Vol. 63, No. 1/2m July/August. Pp. 109-116

CHARACTERISTICS OF DYSLEXIA

People with dyslexia do not all have the *same* symptoms but the following ones are the most likely to affect the learning abilities of students at the university level.

Reading difficulties:

- extremely slow rate of reading
- blurring and distortion of words

concluding paragraph. Essential for structuring and writing an essay is, of course, deciding what to say, how to go about assessing a particular argument for the purpose of constructing an interpretation of it.

Th is co urse wil lst riv etoeq pst ud ent swi th bas ic
crit ical t hinking an d es sa ywri ting sk il ls.

- misreading of words which are visually similar

was-saw, speak-break

- misreading multisyllabic words

philosophical, inheritance, interference

- omitting connecting words

at, is, where, who, over, under etc.

- understanding complex sentences, (especially in testing situation)

I will meet you for lunch unless you call to cancel.

It would be easier to say:

I will meet you for lunch. Call if you need to cancel.

CHARACTERISTICS OF DYSLEXIA

- understanding negative sentences

Which one was not there?

What aspect cannot be inherited?

- understanding long sentences

Students will be introduced to a common essay-writing template which includes the introductory paragraph with thesis statement, three supporting paragraphs with topic sentences, and a concluding paragraph. Essential for structuring and writing an essay is, of course, deciding what to say, how to go about assessing a particular argument for the purpose of constructing an interpretation of it.

The same information can be presented in the following way:

Students will learn to write an essay that has:

- an **introductory** paragraph with a **thesis statement**
- **three** supporting paragraphs that have topic sentences
- a **concluding** paragraph

- reading small print below 12 to 13 point font
- reading poor quality photocopies
- reading on white paper
- confusion with math symbols

CHARACTERISTICS OF DYSLEXIA

- reading a professor's writing if not written very clearly.

½ may look like y₂,

“A^t” may look like A⁺

Spelling difficulties:

- misspelling visually similar words that are not picked up by a spellchecker

importance-impotence, brown-drown,

cursing-cruising, cake-bake

- writes the same words differently in the same passage

letergy, leiturgy, leatergy, letourgy, leitorgy

- numerous erasures and/or cross-outs which make written work very messy
- may take up to 2000X more to remember how to spell a word, compared to the maximum of 14 times needed by a non-dyslexic. Many famous writers never mastered spelling.

‘William Butler Yeats couldn’t spell worth a pin and probably couldn’t read aloud either.’

The following sentence is composed of a sample of the astonishing misspellings that pepper the letters of W.B. Yeats. They astonish because, as a poet, Yeats was fastidious, correcting and revising his work with consummate caution.

‘The subtle and gorgeous originality of these vigerus Keltic letters shows such schlorship as to leave the reader fealing decideldy exhausted’. (West, Thomas)

CHARACTERISTICS OF DYSLEXIA

- mixes up and/or omits letters or words

Note-taking difficulties:

- inability to read own writing
- taking notes while listening
- writing legible notes
- writing fast enough to copy from the board

Writing difficulties:

- expressing ideas clearly in writing
- immature writing
- poor sentence structure
- inadequate or missing punctuation
- mixing up sounds in multisyllabic words
- reversal of letters and/or numbers



CHARACTERISTICS OF DYSLEXIA

Speaking:

While most persons with dyslexia are articulate, some may have speech difficulties.

- expressing ideas clearly orally
- fast and sometimes cluttered speech
- speaking clearly during interviews or oral examinations

“But Jean-Marie did not understand the words. In his nervousness it was as if all the Latin Monsieur Balley had pounded into his head had simply poured out of it.”
(Lomask, Milton: The Curé of Ars, P.102)

- speaking on a specific subject within a time limit or interview

In his mind’s eye he could see the white sheets of paper on which he had written his sermon. Then suddenly the thing happened--the terrible thing he had feared. The words disappeared! In panic he searched his mind only to find it blank - the rest of the sermon – the words he had tried so hard to memorize - was gone, gone!
(Lomask, Milton: The Curé of Ars, P.102)

- omitting words (believed to have been said)
- repeating sentences (believed not to have been said)
- difficulties with the pronunciation of multisyllabic words (aluminum, visualisation etc.)
- finding the right word when speaking
- substituting words

CHARACTERISTICS OF DYSLEXIA

Listening difficulties:

- while lecturer has his/her back to students
- in a noisy room
- when lecturer uses unfamiliar words without visual support
- misunderstanding instructions
- misunderstanding long complex sentences
- screening out important information

Math difficulties:

- memorizing multiplication tables
- reversing numbers
- losing place in long division

Organization skills:

- forgetting assignments and/or appointments
- forgetting books at home or at school
- losing papers
- miscalculating time needed for tasks
- getting lost in an unfamiliar building (sometimes in a familiar building as well)

CHARACTERISTICS OF DYSLEXIA

- getting mixed up between left-right, west-east, up-down
- telling the time (clock with hands)

Common physical problems often seen in dyslexic persons and affecting school/work environment:

- migraine headache caused by fluorescent lighting or weather
- allergies affecting listening and ability to concentrate
- inability to concentrate under particular weather conditions
- extreme stress during testing situations
- unexplained days of total fatigue
- a feeling of being overwhelmed when a large amount of writing is required
- motion sickness affecting the ability to use elevators, escalators, driving etc.
- motion sickness caused by vertical/horizontal blinds in a room
- visual disturbance caused by strong contrast (a lecturer in a checkered/striped shirt)
- sensitivity to perfumes, strong deodorant or chemicals
- physical pain in wrist and hands in producing written work
- auditory problems in the presence of background noise (someone tapping a pencil on the desk, or a noise from an adjacent room etc.)

CHARACTERISTICS OF DYSLEXIA

- sensitivity to some sounds, such as: speaker's phone, hand clapping in a theater etc)

Performance of dyslexic students during examinations

Students with dyslexia are greatly disadvantaged in the examination process and may show the following symptoms:

- discrepancy between knowledge of subject matter and performance on tests
- slow reading rate increased by blurring of words (words may jump all over the page or totally disappear)
- stress affecting memory for simple known words (e.g.: forgetting what the word 'division' or 'multiply' means)
- inability to produce written work on the spot
- writing in the right column of the multiple choice questions (the columns can switch back and forth and then the student writes the wrong answer)
- inability to write in a room with fluorescent lighting (causes words on the page to move)
- slow reading makes understanding 'trick' questions next to impossible.
- does not "see" non-image words such as: at, after, last, etc.

THE DYSLEXIC WAY OF LEARNING

Dyslexics aren't slow learners. They simply learn differently. Their I.Q. ranges from the average to the gifted range.

For people without dyslexia, the two brain hemispheres are usually asymmetrical: the left side is larger than the right. For people with dyslexia, the two hemispheres are symmetrical. Because the left side of the brain is the seat of sequential, linear thinking prevalent in reading and writing, dyslexics tend to have problems in these areas. However, because the right side of the brain is the seat of intuitive, creative, and visual thinking, dyslexics tend to be favored in this domain.

This visual ability also translates not only into quantity but also quality. Dyslexics can see in 3-D. When looking at an object, they can view it simultaneously from different perspectives. This is good for creativity, but bad for reading. If you look at a pencil upside-down, it is still a pencil. If you look at the letter "p", it becomes a "b" or a "d". This shifting of visual vantage points can give the impression that the letters are literally jumping. Some people will actually place their hands flat open against the printed page in an attempt to keep the letters in place long enough for them to be able to read.

THE DYSLEXIC WAY OF LEARNING

Besides affecting the visual system, dyslexia affects the auditory system and more specifically, phoneme awareness. This is the capacity to segment into phonemes or to hear the smallest units of sounds contained in any given word. For instance, the word “cat” consists of three phonemes: “kuh”, “aah”, and “tuh”. If you can’t hear the sounds of spoken language that is learned naturally and unconsciously, how do you go about consciously learning to match these sounds with the corresponding letters, particularly when different letters or groups of letters make the same sound?

Dyslexia also affects laterality and directionality. Some persons with dyslexia tend to be more awkward in gross motor movement than those without dyslexia. This in turn can translate into the loss of memory relative to the movement required to write a letter. For example: on which side of the straight line does one make a ball for a “p”?

People with dyslexia do not use the same areas of their brain when reading as other readers do. This means that they will learn to read, write, and spell in a different way than most people. This is why our conventional methods do not work for persons with dyslexia.

THE DYSLEXIC WAY OF LEARNING

It is important to open our minds to this difference to better understand dyslexia, especially since, as remarks Norman Gershwind, “It has become increasingly evident in recent years that dyslexics are prodigiously talented in a variety of areas.

This brain difference often results in significant strengths in the areas controlled by the right side of the brain, such as visual-spatial skills, problem solving skills, creative skills and mechanical abilities. The major strength of most persons with dyslexia is their intuition. They often “hear” what the other is “thinking”.

Owing to their brain difference, dyslexic persons rely more on right hemisphere functioning. Of course, they will experience weaknesses on left hemisphere functioning.

The dyslexic uses “a form of thought in which images are generated or recalled in the mind and are manipulated, overlaid, translated, associated with other similar forms. They can be rotated, increased or reduced in size, distorted, or otherwise transformed gradually from one familiar image into another.” (Thomas G. West) It is often said that dyslexic people succeed not in spite but because of dyslexia. Albert Galaburda observed that this difference in the brain, while suppressing the development of some areas, did increase the development of other areas of the brain.

THE DYSLEXIC WAY OF LEARNING

“It has become increasingly clear in recent years that dyslexics themselves are frequently endowed with high talents in many areas.” (Geschwind, Norman)

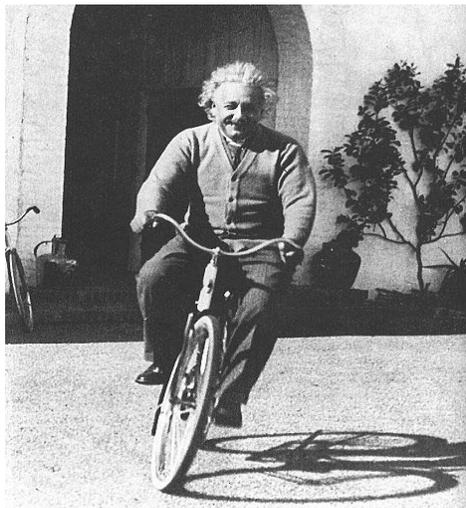
Geschwind also shocked the audience with his opening remark at an address to the Orton Dyslexia Society in 1982 when he described dyslexia as: “the pathology of superiority”.

Over 50% of NASA employees are dyslexic. They are deliberately sought after because they have superb problem-solving skills and excellent 3D and spatial awareness.

File: //A:Cases_gif.htm

“...the conventional education system may be focusing on the wrong kind of skills and on rewarding some of the wrong kinds of learning. Conventional education practices may be substantially weeding out many of those who might have the most to give.”

Thomas G. West: *In the Mind's Eye*



COURSE ACCOMMODATIONS

Depending on the form of dyslexia, it may be necessary to waive all or part of a course requirement, or allow a course substitution. For example, if a program requires English essay writing, it may be reasonable to waive that course requirement for a student with dyslexia/dysgraphia. After all, to ask a physically handicapped person to fulfill physical education requirements in order to graduate would be discriminatory.

To allow the dyslexic person to successfully complete the requirements of a course, the teacher/professor should allow the following accommodations might be necessary:

- permit tape recoding or make your notes available
- do not penalize the student for failure to speak publicly in class
- give visual support to your lectures as much as possible
- underline key words such as: at, after, not, etc. on texts
- avoid asking questions which contain double negatives, if negative questions need to be asked, underline the key word eg; 'not'
- give short, precise instructions in writing as well as oral instructions
- avoid complex language

COURSE ACCOMMODATIONS

- use coloured paper and/or larger print if needed
- use a type face which is easier to read (the teacher could ask the student)
- allow note-takers and/or proof readers
- write legibly on the board or on the student's paper
- avoid fluorescent lighting
- avoid vertical and/or horizontal blinds in the viewing range of the student
- teachers should avoid clothing with black/white stripes or checks
- avoid cluttered text

TEST ACCOMODATIONS

The Canadian Human Rights requires that “reasonable accommodations” must be provided for dyslexic students. The difficulties for dyslexic students will become even more noticeable in situations such as interviews, tests or exams where the dyslexic person has to demonstrate his/her knowledge or capability within a time limit. Dyslexic students may then become so stressed that they temporarily forget everything they know.

Remember: A test is meant to measure knowledge in the subject area, not linguistic ability.

Not all accommodations are necessary for all dyslexic students but the following are the most reasonable:

- allow the student to present a draft copy of a written assignment at least 2 weeks prior to the due date to ensure that he/she is on the ‘topic’ and remember that dyslexics look at issues in a different way
- avoid trick questions in multiple choice questions
- avoid essay tests as much as possible. (it could take a dyslexic person significantly longer than a regular student)
- do not hesitate to clarify a particular exam question

TEST ACCOMODATIONS

- give an explanation of your meaning of words such as: define, clarify, identify, explain
- give extra time to complete the examination
- underline important prepositions 'little words' such as after, before, etc. (the person with dyslexia usually does not see those words)
- use fill-in-the-blank, match up type tests instead of long essays
- give an oral examination while the student has a written copy of the test questions
- accept tape recorded or dictated answers to questions
- allow a reader with good pronunciation skills
- allow a scribe/amanuensis knowledgeable on the subject matter, to read, write and/or type the examination paper
- provide a private exam room without fluorescent lights
- allow a short 'health break'
- accept poor grammar and spelling mistakes
- the teacher could have an interview with the student if needed to ensure that the student understands what is required on the examination paper.

TEST ACCOMODATIONS

The following information was reprinted with permission from the *Dyslexic Students Information Pack*, University of Oxford Disability Services

Difficulties associated with dyslexia may become pronounced during exams, and although all dyslexics will have different problem areas there are some general difficulties found during exams.

The difficulties with writing associated with dyslexia become more serious in most dyslexics with the added time pressure. For example, grammatical mistakes and word errors can occur. Misspellings and omissions may get worse as the exam goes on and the time pressure increases. All of this can make the dyslexic's paper less legible and its appearance poor.

The problems that may be found in a dyslexic's paper are summarized in a note to the examiner that should be attached to all papers, the text of which is reproduced overleaf. There are concessions available for dyslexic students and ways that you can better prepare yourself for formal exams.

This information should be attached to all scripts of
Student Number

This student is dyslexic. Problems with writing become acute when writing under time pressure. The most common indicators, in addition to poor general organization of essays, are poor sentence structure and syntax, inappropriate use of tense, of singular and plural, and of punctuation and capital letters. The student may use inappropriate word or, in the case of unstressed words such as prepositions and conjunctions, may miss them out altogether. All of these factors, and spelling errors may increase with each page of writing as fatigues sets in and can make the student's work appear disjointed, immature or careless.

The dyslexic student is not aware of these errors.

Form Code No. -----

ASK THE EXPERTS

1. Some school personnel say that they don't like to use the word "dyslexic" they prefer the word 'learning disabilities'. What is the difference?

Dyslexia falls under the category of LD. The term 'LD' should be used to establish policies and to advocate for the millions of persons with LD. However, to make proper accommodations, one must know "what to accommodate". After all, when a person is sick because of diabetes, the doctor will not write 'sick' on that patient's chart, but will indicate 'diabetes' and will prescribe the right kind of medicine. Imagine what would happen if in fact he prescribed a 'migraine headache' medicine instead. This may sound absurd but this is exactly what happens when we treat all "LD" the same way.

The LD category is actually composed of seven different types of disabilities, each of which is significantly different from the others. As a number of scientists have recently pointed out, it simply makes little sense to conduct investigations of some broadly defined entity called "learning disabilities" given what we already know about the differences between the various types of learning disabilities.

*NICHD Research Program in Learning Disabilities by G. Reid Lyon, Ph. D.
and Duane Alexander, M.D. Their world 1996/1997*

"70-80 percent of all children identified as learning disabled by public school are impaired in reading." (Lerner 1989)

ASK THE EXPERTS

2. What are the different types of Learning Disabilities (LD)?

The following are the different sub-types of LD.

- a. Dyslexia, (listening, speaking, reading, writing, spelling)
- b. Dysphasia (oral comprehension)
- c. Dyscalculia (math reasoning)
- d. Non-verbal learning disabilities (writing, oral comprehension, math reasoning, impaired social skills)

3. *Are there more males than females who are dyslexic?*

Despite the widely held belief that males are more likely to have reading disabilities than females, research has shown that as many females as males have difficulties learning to read. More males have usually been identified by teachers in school because of their tendency to be more rowdy and active than females.

Dr. G. Reid Lyon, ibid

4. *Are dyslexia and ADD the same thing?*

No. Dyslexia and ADD are different. However, they may co-exist.

5. *I heard that some people with dyslexia have been good writers, how can that be?*

Depending on the type of dyslexia, yes, it is possible to become a good writer. However, the spelling will always be 'atrocious'. Most people with dyslexia will use a ghostwriter or have someone to assist them with revising and editing their work.

ASK THE EXPERTS

Many famous writers were dyslexics. Read what was said about one such person.

Yeats, the greatest lyric poet Ireland has ever produced, is one of the major literary figures of the 20th-century and the acknowledged leader of the Irish Literary Renaissance. He has been acclaimed the greatest poet since William Wordsworth. He won the Nobel Prize for Poetry in 1923. He was dyslexic and his dyslexia prevented him from spelling the titles of his own plays correctly. He often gave multiple renderings of the same word within a single paragraph. He dictated his letters because of his painful and relentless eye problems.

R. A. Oldaker

IN GOOD COMPANY

There are many famous people who have dyslexia. This partial list was compiled from a range of sources (books, articles, newspapers and websites.)

Author/Writers/Journalist

Georges Bernard Shaw

Victor Villasenor

Jules Verne

Zelda West-Meads

Edgar Allan Poe

Alexander Pope

Rudvard KiplingHans

Christian Anderson

Mark Twain

Milton

Esther Freud

Jonathan Dalby

Gustave Faubert

Sophy Fisher

Dorothy Einon

A.A. Gill

Matthew Sturgis

Lord Willis

William Butler Yeats

Murray Lachlan Young

Gary Chapman

Jeanne Betancourt

Agatha Christie

Patricia Polacco

Edward Hallowell, MD

Lynda La Plante

F. Scott Fitzgerald

Tomina Edmark

Sophie Fisher

Stephen J. Cannell

Dale S. Brown

Richard Cohen

Robert Scheer

Nola D. Chee

Eileen Simpson

Earnest Hemingway

Debbie Macomber

Patricia Polacco

Girard Sagmiller

Prophet Joseph Smith

Elizabeth Daniels Squire

Victor Villasenor

Artists

Pablo Ruiz Picvasso

Vincent VanGogh

Chuck Close

John Irving

Auguste Rodin

François Schuiten

Leonardo Da Vinci

David Bailey

Robert Rauschenberg

Mozart

Beethoven

Anthony Gormley

Politicians/Military/ Aviation

General George S. Patton

Winston Churchill

Georges Washington

William Childs

Westmoreland

Woodrow Wilson

Nelson Rockefeller

Thomas H. Kean

John F. Kennedy

Robert Kennedy

Lorna Fitzsimmons

Dwight D. Eisenhower

Benjamin Franklin

Carolyn McCarthy

IN GOOD COMPANY

George Bush

Frank Dunkle

Charles Lindburgh

Anna Eleanor Roosevelt

Lyndon Johnson

Nicholas Brady

Andrew Jackson

**Scientists/Inventors/
Researchers/Medicine/
Education/Law**

Albert Einstein

Sir Isaac Newton

Eli Whitney

John VonNeumann

Thomas Edison

Dr. James Lovelock

John Robert Skoyles

Jeffrey H. Gallet

Erin Brockovich

David Boies

Dr. Simon Clemmet

Fred Epstein

Nancy L. Sonnabend

William James

Dr. Helen Taussig

John W. House, M.D.

John Horner

Charles Darwin

Ann Bancroft

Alexander Graham Bell

Harvey Cushing

Michael Faraday

William Lear

Jon R. Horner

Galileo

Steven Hawkings

Louis Pasteur

Dr. Larry Silver

Paul Ehrlich

Dr. Donald Lyman

Dr. Elizabeth Wiig

Abbott Lawrence Lowell

Dr. Ann McGee-Cooper

William Simmons, MD

Sylvia Law

Werner Von Braun

Business

Nicholas Negroponte

Wright Brothers

Charles Schwab

Richard Strauss

Richard Branson

Paul J. Orfalea

Henry Ford

Anita Roddick

Fred Curry

Drexel Burnham

G. Chris Anderson

Bill Gates

Ronald Davis

Neil Bush

Terry Bowersock

Stephen Bacque

John Corcoran

Fred Curry

William Hewlett

F.W. Woolworth

Mark Torrance

Malcome Goodridge

William Doyle

Weyerhauser family

Wrigley

Russell Varian

Craig McCaw

Fred Friendly

Mike Drury

Hamish Grant

David Fogel

Lord Richard Rogers

Mike Norris

John Chambers

Arthur Ochs Sulzberger



IN GOOD COMPANY

Royalty

Olaf – King of Norway
(and his children)

King Carl XVI of Sweden

Prince Charles

Prince William

Duke of Westminster

Actors/Musicians/Singers/ Television/Movies

Cher

Whoopi Goldberg

Brian Conley

Tom Cruise

Susan Hampshire

Margi Clarke

Adie Allen

Athletes

Eric Wynalda

Russell White

Nolan Ryan

Jackie Stewart

Greg Louganis

Dexter Manley

Dan O'Brian

Muhammad Ali

Magic Johnson

Bruce Jenner

Ellie Hawkins

Sir Steven Redgrave

Dennis Bergkamp

Chris Boardman

Peter Rose

Carl Lewis

Loretta Young

Brooke Theiss

Joe Montana

Actors/Musicians/Singers/ Television/Movies

Anthony Andrews

Henry Winkler

Marlon Brando

Sarah Brightman

Georges C. Scott

Lindsay Wagner

Tom Smothers

Sylvester Stallone

Michael Barrymore

Steve McQueen

Edward James Olmos

Danny Glover

Tracey Gold

Bob Jiminez

David Jones

Noel Gallagher

Liam Gallagher

Fanny Flagg

Walt Disney

Harry Anderson

Anthony Andrews

Harry Belafonte

George Burns

Fred Astaire

Enrico Caruso

Jay Lenno

Brad Little

Robin Williams

Harrison Ford

Zsa Zsa Gabor

Dustin Hoffman

Jack Nicholson

Guy Ritchie

Anthea Turner

Felicity Kendall

Oliver Reed



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APPENDIX 1: REQUEST FOR ACCOMMODATIONS

Name of Student: -----

Course: -----

Professor: -----

I have difficulty with:

- Reading Writing Spelling
 Speaking Handwriting Light sensitivity

I have been diagnosed with dyslexia:

- Yes Dysnemkinesia (Motor) Dyseidesia (Visual)
 Dysphonesia (Auditory)
 No

Comments: -----

The following accommodations are required:

- Reading Machine Computer
 Scribe/Notetaker Tutor
 Tape recording of lectures
 Access to the lecturer's typewritten notes
 Enlarged print
 12 point 13 point 14 point
 Copies provided on coloured paper
 Buff Blue Other

Exams and test format:

- Multiple choice questions Oral presentation
 Matching correct responses Take home essays

Date: -----

Name: -----

This information should be attached to all scripts of
Student Number.....

This student is dyslexic. Problems with writing become acute when writing under time pressure. The most common indicators, in addition to poor general organization of essays, are poor sentence structure and syntax, inappropriate use of tense, of singular and plural, and of punctuation and capital letters. The student may use inappropriate word or, in the case of unstressed words such as prepositions and conjunctions, may miss them out altogether. All of these factors, and spelling errors may increase with each page of writing as fatigues sets in and can make the student's work appear disjointed, immature or careless.

The dyslexic student is not aware of these errors.

Form Code No. -----