

Educational implications for dyslexia disability

"Dyslexia is a specific learning disability that is neurological in origin. It is characterised by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge." **International Dyslexia Association and Australian Dyslexia Association** <http://dyslexiaassociation.org.au/index.php?page=what-is-dyslexia>

"The definition of 'disability' in the Disability Discrimination Act 1992 (DDA) is sufficiently broad as to include dyslexia within the meaning of that term as outlined in recommendation 1. Dyslexia would therefore be covered by the provisions of both the DDA and the Disability Standards for Education 2005 made under that Act. Hence, amendment of the DDA is not necessary." Australian Government Response to Working party on Dyslexia http://www.dss.gov.au/sites/default/files/documents/09_2012/response_to_dyslexia_working_party_report_online_version.doc#_Toc331669022

Under the **Disability Discrimination Act (1992) and the Standards for Education (2005)** schools are required to make reasonable adjustments so that students with disability in all settings are provided opportunities and choices that are comparable to students without disability.

Dyslexia and mental health

Anxiety

Anxiety is a normal human response to situations of stress. It is a flight or fight response to a fearful situation. If anxiety becomes out of control and starts to impact on daily life the anxiety becomes a mental health disorder. Research shows that as many as 20 percent of children with dyslexia suffer from an anxiety disorder (Illcutt, and Gaffney-Brown 2004).

Anxiety affects a student's attention to a task. Anxiety utilises mental capacity and therefore greatly impacts academic achievement, concentration and ability to solve problems. Then

anxiety is experienced it is common to avoid the situation as a protective response. Avoidance behaviour can be interpreted as laziness or misbehaviour and may result in school refusal and learned helplessness. Studies show working memory is significantly impacted by anxiety and this is also an area of weakness common in dyslexic students. It is common for students with dyslexia to have poor processing speed. Poor processing speed can also be the result of anger, stress, fear or anxiety. Anxiety about a task, particularly if it is timed may increase the impact of the dyslexia causing further anxiety, frustration and failure.

Self esteem

Research conducted by Dr. Kenneth Kavale of the University of Iowa and Dr. Steven R. Forness of the University of California at Los Angeles indicates that as many as 70% of children with learning difficulties suffer from poor self-esteem.

Self esteem is how we think of ourselves. The dyslexic's self-image appears to be extremely vulnerable to frustration and anxiety. If children meet constant failure and frustration at school, they learn that they are inferior to others, and that their effort makes very little difference. Instead of feeling powerful and productive, they learn that their environment controls them. They feel powerless and incompetent. Then students successfully break the code and read well, they receive pleasure stimulation, but if the students mastery falls short , that is intrinsically punishing.

Learned helplessness

Learned helplessness is a conditioned response to failure that creates cognitive, motivational, and emotional deficits in children. Effort to them seems futile, and they give up trying. These students develop self-defeating

strategies that eventually lead to the very failures that they are attempting to avoid. They strive for unattainable goals, they procrastinate, and they accomplish only tasks that require little effort. They are depressed, and a form of depression in children is anger.

They feel that they are "too stupid" to learn so why try. The learned helpless child believes he/she has no control over the learning process, and, after many failures, the child gives up trying because it hurts too much to try.

Dyslexia in the classroom

Reading

- **Slow, laboured, inaccurate reading of single words in isolation**
- **When reading aloud, reads in a slow, choppy cadence and often ignores punctuation.**
- **Becomes visibly tired after reading for only a short time.**
- **Reading comprehension may be low due to spending so much energy trying to figure out the words.**
- **Strong auditory comprehension skills**

ADJUSTMENTS FOR READING DIFFICULTIES

- Provide high interest low ability readers.
- Provide books on tape, CDs, or on an electronic reader or textbook.
- Create opportunities for oral reading on a one-on-one basis.
- only ask the student to read aloud in class if she volunteers.
- Provide outlines, summaries of chapters, vocabulary words and preview questions.
- Allow students to use a highlighter to mark important parts of the text. Coloured pens can also often be of benefit.
- Used shared reading or reading buddies.

Spelling

- **Their spelling is far worse than their reading.**
- **Spelling is phonological**
- **Continually misspells high frequency sight words —despite extensive practice.**
- **Misspells even when copying something from the board or from a book.**

ADJUSTMENTS

- Don't mark all spelling errors on a page especially if the focus is to be creative.
- A useful marking strategy is to tick all the correct letters in a word.
- use a multisensory approach to spelling.
- Dyslexics seem to be unable to correct their spellings spontaneously as they write, but they can be trained to edit their work as their reading exceeds their spelling.
- Use assistive technology

Writing

- **poor, nearly illegible handwriting.**
- **Unusual pencil grip, grips too tightly, poor posture when writing**
- **Writing is a slow, laboured, non-automatic chore.**
- **there is a huge difference between their ability to tell you something and their ability to write it down.**

ADJUSTMENTS

- allow students to use a word bank or dictionary as appropriate as this may reduce spelling errors enough so that writing is more readable.
- Offer alternative projects instead of written reports.
- Minimise the amount of copying from the board by providing sheets to highlight.
- Enable the student to show her interest, knowledge and skills in other formats.
- Reduce written work
- encourage verbalisation of ideas before writing. If possible record this to be written later.
- use mind mapping for ideas
- provide scaffolded text type proformas to support and guide writing. These could include sentence starters.
- Allow use of assistive technology.

Testing

ADJUSTMENTS

- Allow students to take tests orally
- Allow for extra time
- Provide alternatives to testing, such as projects, oral or video presentations
- Allow tests to be taken outside of the classroom, in a quiet area with minimal distractions
- Have students state answers into a tape recorder
- Allow the use of assistive technology
- Avoid timed tasks.

Instructions and organisation

- **Learning any task that has a series of steps which must be completed in a specific order can be difficult. That's because you must memorise the sequence of steps, and often, there is no logic in the sequence.**
- **learning facts that are not personally interesting and personally relevant is extremely difficult for most dyslexics.**
- **People with dyslexia have an extremely difficult time organising their belongings and schoolwork.**

ADJUSTMENTS

- Break large tasks into steps
- Read written directions or instructions to the student
- Make sure the parent is provided with a copy of the assignment.
- Make instructions short, simple and clear
- Ask children to repeat instructions back to make sure they have understood
- Make lessons engaging and relevant.
- Use visual aids

Homework

- A student with a low processing speed, which is common in dyslexia, is likely to take far longer at the same homework task than other students who do not have difficulties.
- Reduce homework, especially assignments requiring reading.
- Limit time spent on homework. Dyslexic students are already working very hard at school.
- Wrote learning of spelling lists for homework is no benefit to a dyslexic. They must be taught the patterns and rules of spelling.

Technology

ASSISTIVE TECHNOLOGY CAN:

- enable dyslexics to be more independent learners.
- improve the speed and accuracy of work increasing their confidence
- help students to 'fit in' with classroom learning and routines
- decrease frustration and remove areas of great difficulty

Classroom learning environment

- Have student sit near the teacher
- use multi-sensory activities to further understanding of topics
- Use a positive reinforcement program with rewards and consequences
- Allow additional response time when answering questions or contributing to class discussions.
- Increase communication with parents.
- Assign classroom jobs that will help to increase self-esteem
- Work with student to create achievable goals
- Sit student with good role models and well motivated peers that could offer assistance when needed.
- Provide one step directions at a time. Because dyslexia is a processing disorder, students with dyslexia have a difficult time processing, prioritising, and remembering long lists of directions at one time.
- acknowledge that students with dyslexia have to work harder than most of their peers and even then the results may be disappointing (both to the teacher and the student)
- appreciate that dyslexics have good days and bad days
- accept that progress is likely to be slow and praise small achievements
- recognise signs of fatigue & give a break, change activity
- If one approach doesn't work, try something different, work on one step at a time, go back to a stage they can manage and build from there

Marking

- Credit for effort as well as achievement are both essential. This gives the pupil a better chance of getting a balanced mark. Creative writing should be marked on context and ideas and not on spelling and
- Spelling mistakes pinpointed should be those appropriate to the child's level of spelling. Marking should be done in pencil and have positive comments.
- Only ask a pupil to rewrite a piece of work that is going to be displayed. Rewriting pages for no reason at all is soul destroying as usually much effort will have already been put into the original piece of work.
- To gain a true representation of the student's content knowledge the teacher should scribe answers during assessment tasks.
- Allow additional time for low processing speed.

Resources

The following are excellent resources for teaching strategies and best practice for dyslexia friendly schools.

http://dlb.sa.edu.au/specedmoodle/pluginfile.php/583/mod_resource/content/1/Dyslexia%20friendly%20schools.pdf

http://www.bdadyslexia.org.uk/files/dfs_pack_English.pdf

<http://www.bdadyslexia.org.uk/files/Technology-for-Literacy-2013.pdf>

<http://education.qld.gov.au/health-safety/promotion/drug-education/docs/pd-part-f.pdf>

<https://www.kidsmatter.edu.au/primary/programs/mind-magic-confidence-box>

<http://www.sess.ie/dyslexia-section/dyslexia-and-reading-instruction>

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0089900>

<http://www.interdys.org/ewebeditpro5/upload/DyslexiaInTheClassroom.pdf>