

Reading

In today's classrooms, there is much concern about student reading competence. Teachers and other educators are observing that many students struggle with learning to read, and these struggles often persist into high school, at which point it is very difficult to work on improving reading skills and acquire curriculum content at the same time. Secondary teachers are hard pressed to find the time or the resources to help their students achieve grade-appropriate reading levels.

Students with reading difficulties may be characterized as having a reading disability or dyslexia.

DEFINITION OF DYSLEXIA (International Dyslexia Association, www.interdys.org)

"Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties 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 growth in vocabulary and background knowledge."

- It is estimated that 15 to 20% of the population as a whole (U.S. statistics) have some degree of dyslexia.
- The majority of students who qualify for special services in educational settings are thought to present with dyslexia.
- Approximately 50% of students with language disorders struggle with decoding. All students with language disorders ultimately struggle with reading comprehension. This is a reflection of their oral language difficulties.

When is a reading difficulty NOT dyslexia?

Challenges with reading acquisition may occur alongside cognitive, language and other developmental delays and conditions, such as:

- dysphasia/specific language impairment,
- autism,
- Down Syndrome,
- intellectual impairment,
- inadequate exposure to print and/or effective classroom instruction, etc.

In these cases, the term dyslexia does not apply, as the difficulties are not "unexpected in relation to other cognitive abilities and the provision of effective classroom instruction," as stated in the IDA's definition above.

However, there is some debate about the relationship between *dyslexia* and *dysphasia* (aka specific language impairment or SLI). Confusion about this relationship arises from the notion that dyslexia is a *language-based disorder*. Are dyslexia and dysphasia *related* developmental disorders or are they *distinct* developmental disorders? The jury is still out, but research seems to suggest that they are *distinct* disorders (Catts, Adlof, Hogan, & Weismer, 2005). According to these researchers, dyslexia is a *developmental language disorder*. Dyslexia is characterized by problems in phonological processing and word reading deficits. On the other hand, SLI is best categorized as a disorder involving problems in oral language. Oral language problems would include difficulties in semantics (language meaning), syntax (grammar), and/or discourse processing (describing, explaining, storytelling, etc.). Thus, students may present with both dyslexia and dysphasia.

Furthermore, Catts et al. (2005) discuss other research that has identified yet another group of children who may be described as *poor comprehenders*. These children exhibit a difficulty in reading comprehension in spite of the fact that they decode in a normal or near-normal manner. It has been found that this group of children have a wide range of abilities in oral language, but their difficulties do not include the areas of phonological awareness and phonological memory.

Hopefully, ongoing research will help clarify these issues!

What is the relationship between oral language and literacy?

It is now commonly understood that, in most cases, reading difficulty is language-based. Students with reading difficulties usually present with problems in other language areas, such as spelling, writing and speech sound production. In addition, it is important for educators to know that reading difficulties can, in turn, have a direct and profound effect on a student's general language development. Thus there is a mutually interdependent relationship between literacy and language.

How can a classroom teacher identify if a reading problem exists?

Classroom teachers have the tools on hand to identify students who are struggling with reading acquisition. The following are not meant to serve as tools for **diagnosing** dyslexia, but can prompt a teacher to implement more intensive and explicit instructional techniques as a preventive and monitoring measure. If the student's difficulties persist, the teacher then has ammunition to refer the student for more formal testing.

- According to the International Dyslexia Association, students with dyslexia may present with difficulties in the following areas:
 - Learning to speak
 - Learning letters and their sounds, **especially short vowels**
 - Organizing written and spoken language
 - Memorizing number facts
 - Reading quickly enough to comprehend
 - Persisting with and comprehending longer reading assignments
 - Spelling (drill and repetition do not help)

- Learning a second language
- Correctly doing math problems
- Natural samples of students' writing can serve as an indicator of dyslexia, as well as indicate other difficulties that a student may be having, such as language impairment, attention difficulties and nonverbal learning disability.
- A free online screener is available for teachers who wish to obtain more precise information about a student's reading level. It's called the San Diego Quick Assessment. It takes roughly 5 to 10 minutes and provides a grade level for single word reading. The assessment may be accessed at www.lexercise.com.
Be aware that **this screener does not diagnose dyslexia or a reading disorder**, but provides an indication of the student's reading level and whether or not the student is having difficulty reading simple syllables by using his/her sound-symbol knowledge.

Can reading difficulties, including dyslexia, be overcome?

The answer is **yes**, and it is never too late to intervene. Even adolescents and adults with severe dyslexia can benefit from specialized reading instruction delivered by a highly trained instructor. Students are most likely to benefit when teachers, parents, tutors, SLPs and/or reading specialists all work together to promote improved reading ability in the context of both individual and everyday learning situations. At minimum, educators should aim for students to attain a Grade 3 reading level. This is considered to be a level of reading that will allow an individual to survive in the world.

General considerations for treating dyslexia and other reading difficulties:

- **Early identification and treatment** is key
- **Help from a teacher (tutor or therapist) who is specially trained** in using a systematic, structured instructional approach.
- **Consistent, explicit, focussed, structured and systematic** are key words to consider when implementing a reading intervention program. Research has shown that teachers who are **systematic in their approach to teaching reading** have significantly more success in teaching their students to read than those who do not. In fact, it doesn't matter which program the teacher is using, as long as it is structured and systematic in its approach to building reading skills.

CLASSROOM STRATEGIES and ADAPTATIONS

Although it may be difficult to implement intensive, consistent and systematic reading instruction at the same time as targeting curricular content, classroom teachers may weave in a variety of strategies to facilitate reading skill improvement in the context of everyday teaching. Here are some key areas that you will need to target regularly:

- **Phonological Awareness.** Explicit teaching about how speech and language map onto print.
 - SoundPrints (see http://www.shapesofmind.ca/pdfs/SoundPrints_overview_rationale.pdf)

- Earobics™ can augment classroom teaching if needed.
- Use of **multisensory programs** and **resources** to build knowledge of **sound-letter correspondences**.
 - SoundPrints (see http://www.shapesofmind.ca/pdfs/SoundPrints_overview_rationale.pdf)
 - Jolly Phonics™
 - Raconte-Moi les Sons™
 - Earobics™ software can augment classroom teaching if needed.
- **Morphological Awareness.** Explicit teaching about the meanings of base words (roots), prefixes, suffixes and inflectional markers.
 - Structured Word Analysis is an example of a specific approach. (See www.WordWorksKingston.com for more information.)
- **Daily opportunities to interact with print.** In many classrooms, students spend the entire class listening to the teacher's lecture. Teachers may opt to set aside a certain amount of class time to let students learn the material by reading independently to themselves. Students with reading disabilities do not read outside of school so this may be their only opportunity to do so.
 - E-books and audiobooks may be used in the case of a student who cannot decode grade level material independently.
 - Kurzweil™ (www.kurzweilededu.com) and NaturalReader (<http://www.naturalreaders.com/>) are examples of text-to-speech software that can be helpful to students with literacy challenges. Natural Reader is free and available for download online.
- **Daily opportunities to write.** Writing is a more active process than reading. It forces the student to work explicitly on his/her ability to map speech sounds onto print, thus compelling the brain to work more effectively on this process. Brain imaging research has revealed that the areas of the dyslexic brain that should be active during the act of reading are inactive (or less active than for typical readers). Writing tasks naturally induce activation of these centers. However, we must not forget that writing is not just about spelling correctly. Students with dyslexia also need to be taught explicitly how to write sentences, paragraphs and a variety of text structures. This is important even if they're using assistive technology to produce their written work. (Please see the Writing section on this site for more information.)
- **Adapting classroom structure to facilitate literacy success:**
 - Daily 5™: <http://www.thedailycafe.com/public/department104.cfm>
 - Advanced 5: http://www.shapesofmind.ca/pdfs/Potential_Daily_Advanced_5_Pursuits_Cycle_2.pdf

Assisting the student in school success:

- Provide quality tutoring in subject areas
- Provide accommodations such as extended time and oral exams as permitted
- Adapt assignments (reduce the length of reading assignments or provide texts that are written at an appropriate level, while retaining essential curriculum content)
- Reduce the student's course load
- Assign the student to smaller classes if available
- Provide assistive technology such text readers, reading pens (e.g. Smartpen), as well as spelling and grammar checks
- Steer the student to a major course of study in areas of individual strength

Selecting reading materials:

General considerations and implications for material selection:

- What is your student's chronological age, level of social-emotional maturity and learning style?
- What is your student's reading level? Use the San Diego Quick Assessment (www.lexercise.com) or your own levelled reading materials to get a ballpark idea.
 - **Independent reading level** is the level at which the student makes 0 to 3 errors per page. This should be considered the student's current reading level.
 - **Instructional reading level** is the level at which the student makes 4+ errors per page.
 - **Frustration reading level** is the level at which the student makes several errors per page or per paragraph.

The following webpage may be consulted for more information on the subject of selecting level appropriate reading materials: www.righttrackreading.com/selectbooks.html.

- What is your student's level of language functioning? Consult the student's confidential file for speech-language reports or check out the developmental chart found on this website (http://www.emsb.qc.ca/centreofexcellence/pdf/childdevelopmentinfo.com-Language_Development_In_Children.pdf).
- Does your student have an intellectual impairment? Consult the student's confidential file for psycho-educational evaluations to determine if your student has intellectual delay. The student's educational code will also indicate the presence of a cognitive impairment.
- What is the purpose of the reading activity?

- Leisure/recreational/enjoyment? Use independent level reading materials and, if needed, assistive technology or audio-books to assist with decoding.
- Building reading skills? Use instructional level reading materials.
- Building vocabulary? Use instructional or frustration level reading materials with adult guidance and explanation.
- Building language and/or knowledge? Researching? Provide materials that the student can read independently, or be prepared to provide guidance and explanation.

Please consult the following suggested websites for examples of leveled books for a variety of learners:

<http://www.donjohnston.com/>

<http://www.scholastic.ca/readinglevels/>

<http://home.comcast.net/~ngiansante/>

Emotional Side Effects

(<http://www.interdys.org/ewebeditpro5/upload/SocialEmotionProblemsRelatedToDyslexia.pdf>)

On a final note, it is essential to understand the emotional side effects of reading challenges, especially if they are of a persistent nature. Most individuals with dyslexia will have some degree of difficulty with reading throughout their lives and may experience the following:

- **Anxiety**, the most frequent symptom, resulting in part from constant frustration and confusion in school. The student may become avoidant of reading as a result of anxiety.
- **Anger** due to frustration with school or in social situations
- **Self-concept issues** and feelings of inferiority
- **Depression**, the result of deep sadness and pain about the disability
- **Family problems** that are a result of the child's handicap: sibling rivalry and parental response

How can a teacher help address the emotional issues?

- Be consistently supportive and encouraging
- Guide the student to find an area in which he/she can succeed
- Listen to the student's feelings
- Reward effort, as well as the product
- Avoid using words such as "lazy" or "hopeless" when correcting the student's behaviour
- Help students have realistic expectations for themselves. Attainable goals yield success.

It is important for all educators to work in collaboration to facilitate success for students with reading challenges. The experts tell us that it is always possible to attain improvements in reading with our students, no matter their grade level. It is also important to understand that some of our students,

even with all the right measures in place, fail to achieve grade level reading. The important thing is to ensure that they reach their own personal potential.

Offering our students full access to the curriculum should be our priority, using assistive technology to compensate for reading challenges if necessary. When a student with reading difficulties enters our classroom, we are called to exercise pedagogical flexibility to address our student's different learning needs. In so doing, we can guide the student to reach his/her full individual academic potential in spite of his/her literacy challenges.

Online Resources

The speech-language pathologists of the English Montreal School Board have compiled a list of online literacy resources. The websites are not listed in any particular order. You are encouraged to explore them with a view to choosing ones that serve your particular needs. The lists will be updated on an ongoing basis, so keep visiting!

ENGLISH ONLINE LITERACY RESOURCES

DESCRIPTION	WEBLINK
Phonological awareness & phonics exercises	http://www.speechtx.com/emergent/phonologicalawareness.htm http://www.tampareads.com/phonics/phondesk/index-pd.htm www.seussville.com/university www.earobics.com/gamegoo/gooey.html
General reading sites	www.starfall.com www.fcrr.org http://www.interdys.org/ewebeditpro5/upload/DyslexiaBasicsREVMay2012.pdf
Fluency	www.greatleaps.com www.readnaturally.com
Games	www.primarygames.com www.pbskids.com
A reading program that is being developed by both Concordia and McGill; it has some activities too	www.grover.concordia.ca/abra/version1/abracadabra.html
Alphabet games, digraphs, short and long vowels	www.sadlier-oxford.com/phonics
Clifford Interactive Story Books	www.teacher.scholastic.com/clifford1

Free online game activities	www.helpme2learn.com
Curriculum Material Online (\$20/year)	www.enchantedlearning.com
Printable exercises in a variety of subjects and levels	www.edhelper.com
Activities for literacy and other areas	www.hubbardscupboard.org

FRENCH ONLINE LITERACY RESOURCES

DESCRIPTION	WEBLINK
Pistes pour travailler la conscience phonologique (CP)	http://www.aefe-ien-madagascar.mg/IMG/pdf/Pistes_phonologie_GSCP-2.pdf
Liste de ressources pour travailler la CP	http://www.trukastuss.over-blog.com/article-phonologie-exercices-tests-etudier-les-sons-au-cycle-2-43578860.html
Jeux à l'oral pour développer la CP	http://www.rased.fr/lecture/phono%20ASH%20Brest.pdf
Jeux pour CP	http://circo-vire.etab.ac-caen.fr/IMG/pdf/Atelier6.pdf
Ressources ped de UDM	http://coder-eoa.umontreal.ca/accueilRepertoireOrthov2.html
Catalogue en ligne de jeux pédagogiques en français pour différent professionnels	http://www.magie-mots.com/accueil.html
Site de partage de travaux pour thérapeutes. Licence Creative Commons.	http://logophonia.com/
Pictogrammes divers à imprimer	http://catedu.es/arasaac/index.php
Orthophonie libre, un blog qui répertoire les différent logiciels libres pouvant assister un orthophoniste.	http://orthophonielibre.wordpress.com/
Ressources pour les enfants de niveau maternelle. Une section propose des activités a télécharger. sur la CP.	http://pedagoludique.free.fr/

Liste d'activités a créer pour développer la CP et la phonologie en général.	http://www.cognisciences.com/IMG/Entrainement.pdf
Liste de jeux de fusion, séparation de phonème, de syllabes, etc...	http://www.crdp-strasbourg.fr/cddp68/ecole/docnath1.htm pt3
Jeux en ligne de CP.	http://www.micetf.fr/Phonologie/
Exercices en ligne pour phonèmes, syllabes...	http://ecole.lakanal.free.fr/exercices/phonologie.htm

References

Catts, HW, Adlof, SM, Hogan, T & Weismer, S.E. (2005). Are Specific Language Impairment and Dyslexia Distinct Disorders? *Journal of Speech, Language & Hearing Research*, 48(6):1378-1396.

This article may be found at the following website:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2853030/>

