

Dyslexia Intervention: Reading and Writing Apps for Dyslexic Students

White Paper

Stephanie Talalai

New Jersey City University

Introduction

Teachers today are faced with innumerable classroom challenges. Dyslexia affects at least one out of every five children in the United States (Vidyasagar & Pammer, 2010). Educating a student with dyslexia in the classroom poses a number of challenges. This paper will outline specific applications teachers can learn about to help alleviate the difficulties students with dyslexia face in their classroom and beyond.

Background/ Problems

“Dyslexia is defined as a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities” (International Dyslexia Association). Additionally, New Jersey law now requires school districts to provide certain teaching staff members at least two hours of professional development instruction on the screening, intervention, accommodation, and use of technology for students with reading disabilities, including dyslexia (C.18A:6-131).

Solution

The identification and treatment of students with dyslexia and other reading difficulties can best be served through appropriate interventions facilitated by a well-trained teacher. In addition to the required two hours of professional development provided by the State, learning opportunities on how to implement additional resources and computer applications are needed. Technology solutions for students with dyslexia can include but are not limited to: text-to-speech applications, dictation software, word prediction programs, electronic graphic organizers, and numerous tools that support note taking and study skills. Training in the appropriate use of these tools allows for successful classroom implementation and differentiated instruction. The following list of applications (see Appendix A) provide teachers and students with strategies and

solutions to help alleviate the effects of dyslexia in some students. All of these tools will be presented and demonstrated at the New Jersey Council for Exceptional Children's Spring Conference, Bridging the Achievement Gap, on March 14, 2016, at Ramapo College.

References

Definition of Dyslexia. (n.d.). Retrieved November 11, 2015 from the International Dyslexia








Association: <http://eida.org/definition-of-dyslexia/>

NJAC, Pub. L. 2013, c.210, C.18A:6-131

http://www.njleg.state.nj.us/2012/Bills/PL13/105_.PDF

Vidyasagar, T. R., & Pammer, K. (2010). Dyslexia: a deficit in visuo-spatial attention, not in phonological processing. *Trends In Cognitive Sciences*, 14(2), 57–63.

Appendix A

Name of App	Description	Link to Resource
 <p>Popplet \$4.99</p>	<p>Popplet is a productivity app that also works as a mind mapping tool. Use the app to begin structuring the writing process. The app can also be used to create graphic organizers and classroom visuals.</p>	<p>https://itunes.apple.com/us/app/popplet/id374151636?mt=8</p>
 <p>iAnnotate Free</p>	<p>Annotate PDF's such as handouts/worksheets. Ability to type, handwrite with stylus, circle, highlight, etc. and use built-in microphone to speak into PDF's.</p>	<p>https://itunes.apple.com/us/app/iannotate-pdf-good-dynamics/id512730156?mt=8</p>
 <p>Voice Dream Reader \$9.99</p>	<p>Voice Dream Reader is the world's most accessible reading tool. With advanced text-to-speech and a highly configurable screen layout, it can be tailored to suit every reading style from completely auditory to completely visual, plus synchronized combination of both.</p>	<p>https://itunes.apple.com/app/id496177674</p>
 <p>Question Builder \$5.99</p>	<p>Question Builder is designed to help children learn to answer abstract questions and create responses based on inference. Use of audio clips promotes improved auditory processing for special needs children with autism spectrum disorders or sensory processing disorders.</p>	<p>https://itunes.apple.com/us/app/question-builder/id360577727?mt=8</p>
 <p>iReadWrite \$19.99</p>	<p>Typing with Word Prediction and text to speech, Picture Dictionary, Open Dyslexie Font</p>	<p>https://itunes.apple.com/us/app/ireadwrite/id600843386</p>
 <p>Tools 4 Students \$0.99</p>	<p>Tools 4 Students offers 25 graphic organizers supporting common comprehension skills like main idea and detail, sequencing, compare, and contrast, etc. Each organizer can be used again and again and be emailed, drop boxed, or saved as a PDF.</p>	<p>https://itunes.apple.com/us/app/tools-4-students/id472911218</p>
 <p>Sound Literacy \$24.99</p>	<p>Orton-Gillingham or Wilson reading Instruction in a mobile app. Provides a teacher, tutor, speech therapist, or parent a tool for enhancing literacy lessons.</p>	<p>https://itunes.apple.com/us/app/soundliteracy/id409347075?mt=8</p>

	<p>iWord Q \$24.99</p>	<p>iWordQ is an easy-to-use writing and reading application to assist struggling writers and readers with word prediction, spell check, and text-to-speech.</p>	<p>https://itunes.apple.com/us/app/iwordq-us/id557929840?mt=8</p>
	<p>Notability \$5.99</p>	<p>Students and teachers use Notability daily to take notes, sketch ideas, annotate PDFs, markup photos, record lectures, provide audio feedback and more.</p>	<p>https://itunes.apple.com/us/app/notability/id360593530?mt=8</p>
	<p>Word Wizard \$4.99</p>	<p>Talking Movable alphabet with phonetic sounds to practice spelling word lists, take quizzes.</p>	<p>https://itunes.apple.com/us/app/word-wizard-talking-movable/id447312716?mt=8</p>
	<p>Phonological Processes \$11.99</p>	<p>The Phonological Processes app was created for children who exhibit phonological disorders or delays. This research-based app implements a linguistic approach for the treatment of phonological disorders by engaging users in minimal pair contrast therapy.</p>	<p>https://itunes.apple.com/us/app/phonological-processes/id609362183?mt=8</p>
	<p>Simplex Spelling HD \$4.99</p>	<p>Simplex Spelling improves English spelling and reading skills in a fun and interactive way by combining a unique “reverse phonics” approach with contextually relevant spelling rules that explain why words are spelled in a particular manner.</p>	<p>https://itunes.apple.com/us/app/simplex-spelling-hd-dolch/id456744012?mt=8</p>
	<p>Letter School \$4.99</p>	<p>Write Letters and Numbers with full prompts fading to no prompts; Uppercase and lowercase letters, Choice out of three most popular typefaces in handwriting education, Progress and settings stored for up to three players.</p>	<p>https://itunes.apple.com/us/app/letterschool/id435476174?mt=8&ign-mpt=uo%3D4</p>
	<p>Audiobooks Free</p>	<p>Listen to 5,533 classic audiobooks free on your iPhone or iPad. Books are read by real people. Books in the public domain are free. Others can be purchased.</p>	<p>https://itunes.apple.com/us/app/audiobooks/id311507490?mt=8</p>