

Reading and Writing in Digital Contexts

Assistive Technology in the Literacy Classroom



Students experiencing difficulty with reading can often gain increased access to grade-appropriate learning through assistive technology. Computer software programs that read text aloud and speech-to-print software were only dreams just a generation ago. Today, they're nearly as common as textbooks and computers themselves, but these tools are just the tip of the iceberg. To explore the research on assistive technologies and the countless products available, visit <http://techmatrix.org>.

It's important to recognize that support for students learning to write is much more limited. So much of learning how to write depends on students' ability to organize and sequence thoughts and ideas. But speech-to-print technology doesn't help with that, because students

must have a good idea what they want to express before this technology is helpful. On the other hand, if there's a particular word a student wants to use but is hesitant to because the spelling isn't known, this technology can be a helpful resource.

Most older students do not struggle with the physical requirements of writing; it's the overall structure, organization, and logic of compositions they need to learn. Their success with these will depend on your writing instruction, including your specific feedback and support. It's important to remember that supportive technology doesn't teach—it's you and your instruction that will make the most lasting impact on your students' learning.

(Buly & Valencia, 2002; Morris, 2008; Wanzek et al., 2010). Older readers with specific learning disabilities typically achieve significantly below their peers—on average 3.4 years behind them (Melekoglu, 2011)—and one in five students with a learning disability reads at least five grade levels below their peers (NJCLD, 2008; Wagner et al., 2003). This does not have to be the case. With developmentally appropriate instruction and individualized accommodations, students with learning differences *can* and *should* achieve at the same level as their peers (Allington, 2012; Connor, Morrison, Fishman, Schatschneider, & Underwood, 2007; Klenk & Kibby, 2000). Your developmentally responsive instruction and student-centered accommodations, along with supplemental intervention services, will help ensure your students' optimal levels of achievement.

Accommodating Students Experiencing Difficulty with Literacy

Accommodations are defined as intentional and essential instructional modifications that are legally guaranteed to students who are identified as having a specific learning disability, as well as to English language learners. Accommodations make the regular curriculum accessible to these students. Appropriate accommodations are usually specified in students' IEPs and/or specially designed instruction. Typically, accommodations fall into the following five different categories: extended time, grouping and special settings, differentiated materials and assistive technology, instructional modifications, and student response (NICHCY, 2010b; NCLD, 2006). Examples of each type of accommodation follow:

Extended Time

- Providing students extra time to complete assignments and/or tests
- Breaking longer assignments or long-term projects into small parts or spreading the work across several days or class periods
- Allowing frequent breaks if needed