Case Study: NJ Middle School Students Demonstrate Improved Writing Outcomes—Educators See Added Value of Assistive Technology Tools

SOLO by Don Johnston

Dr. John Krewer, Superintendent and **Mr. Richard Flamini**, **Director of Special Education and Special Programs,** Spotswood School District, **Jo-Ann Moyer, Special Education Teacher**, Memorial Middle School, Spotswood, New Jersey

QUOTES

" Building upon the critical mass of teacher support, we have seen wider implementation of SOLO assistive technology software in both our high school and middle school. These technologies have played an essential role in improving achievement in our Language Arts Literacy scores. "

Dr. John Krewer, Superintendent, Spotswood School District, New Jersey

The administration team at Spotswood School District, NJ set a goal in 2007-08 to improve the reading and writing skills (Language Arts Literacy) of 6th, 7th and 8th grade students at Memorial Middle School in preparation for the NJ Grade Eight Proficiency Assessment (GEPA) exam. Through the use of the SOLO Literacy Suite, an assistive technology writing software and in combination with proven teaching and learning strategies, middle school students experienced growth in skill level and made adequate yearly progress in special and general education classes.

New Jersey Grade 8 Assessment - Language Arts Literacy

This chart demonstrates student improvements in Language Arts Literacy scores on the Memorial Middle School's 2007-2008 State Assessment. The Superintendent and staff members attribute some of their positive results to the impact of the SOLO Literacy Suite in supporting student achievement. These supportive assistive technologies include a text-to-speech reader, intelligent word prediction, a talking word processor and a draft building organization tool.

New Jersey Grade 8 Assessment Language Arts Literacy
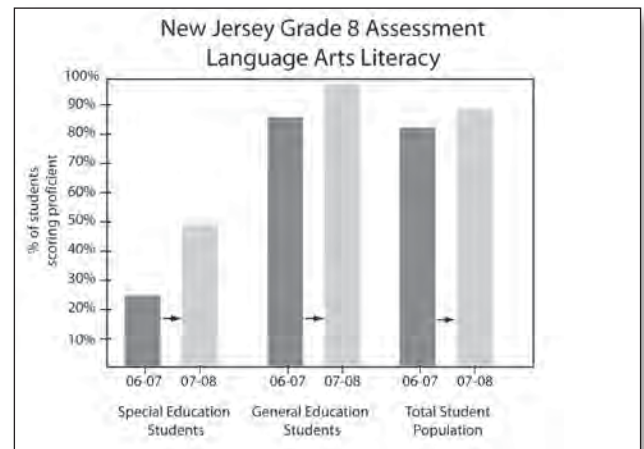
Director of Special Education and Special Programs, Mr. Richard Flamini finds these assistive technologies a "windfall" for students who struggle with reading and writing skills and learning challenges. He said, "Through these helpful technology tools such as Co:Writer, a word prediction program with helpful topic dictionaries, Write:OutLoud, a talking word processor and Read:OutLoud, a text-to-speech digital book reader, our students' writing process has become a more pleasurable learning exercise. The interaction between the text and the reader builds upon student success and contributes to advancing reading comprehension."

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Assistive Technology Strategies and Supports

According to Mr. Flamini, the SOLO Literacy Suite software has provided the strategies and the tools to move students forward in all aspects of the learning process. He said, "While the Don Johnston technology has already improved student test scores for the district, the far greater reward for parents and teachers is seeing the personal satisfaction in having students successfully complete every day reading and writing assignments. This technology has created a new enthusiasm and excitement for learners who have traditionally found learning difficult, if not impossible."

Technology Integration through Staff Development and Alignment to NJ State Tests

Superintendent John Krewer attributes the results to teacher, administrator, and parent support of the project and the corporate staff development and training from the staff at Don Johnston. He believes that professional development and technology integration is essential to long term gains and continuing quality of implementation.

"SOLO is a valuable component in our learning process because it is in full alignment with NJ Curriculum Core Content Standards," he said. "While the partnership has just completed its second year, sustained effects are anticipated."

A Perspective from the Special Education Teacher
Step-by-Step Learning with Guided Audio, Reading and Writing Support

Jo-Ann Moyer, Special Education Teacher at Memorial Middle School, used several components of the SOLO Literacy Suite with her 7th and 8th graders who needed reinforcement in writing. She calls SOLO, a group of 'technology tools' that provide guided, step-by-step audio and writing support.

For one student having dyslexia, Ms. Moyer said, "He responded well to the Read:OutLoud digital book reader in SOLO. During a writing assignment on the American Revolution, the student researched his topic independently on the Internet, collected facts and wrote notes for his five-paragraph essay. He then used Write:OutLoud, a word processing tool, to create his essay. Then he put his final writing assignment into PowerPoint to showcase what he learned. The auditory component in SOLO supported this student's specific needs. I believe he responded well to the multi-modality of hearing text read aloud to him while reading it on screen. He wrote his assignment well and was able to keep up with the class. Without having these tools, he would have required me or another teacher to help him read and research the assignment."

Ms. Moyer also used Co:Writer, the word prediction tool in SOLO, to help this student find the words he wanted to write which facilitated his improvement in the writing process. "These technology tools can be helpful for students with learning challenges," summarized Ms. Moyer. "Our task in middle school is to help each student become an independent learner. The SOLO assistive technology tools, combined with good teaching strategies, will support our efforts as educators to improve students' literacy skills."