Case Study: Writing Program Uses Technology to Improve Student Writing Scores Based on Standard Writing Rubric

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DRAFT:Builder® SOLO
Graphic Organizer Tool

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District: Fairfax County Public Schools

Technology Writing Class

Santina Montagna Brown is an assistive technology resource teacher and case manager for the Fairfax County Public School system in Virginia. She supports students with disabilities in ten elementary schools and works with teachers to provide effective learning interventions for students who have special learning needs.

In 2006-07, Ms. Brown and educators at Orange Hunt Elementary School designed a Technology Writing Program using assistive technology tools, Draft:Builder, a graphic organizer and Write:OutLoud, a talking word processor. These tools were used to improve students' writing skills, (spelling, capitalization and punctuation) and composition skills, (central idea, elaboration, organization, unity).

In this study, Ms. Brown highlights the Technology Writing Program and will share the key elements of the program's success to support students with writing difficulties. She also highlights the leadership and collaborative efforts of the educators at the school. The team included two special education teachers, Eve Tschetter and Amanda Alsbaugh and the ESOL teacher, Meg Wagoner – who together made significant improvement on student writing outcomes as measured by the state writing assessment rubric.

Ms. Brown explains… "I am part of a large assistive technology team in the Fairfax County, VA school system and work with teachers and administrators to identify strategies, tools and technologies for students with learning disabilities. The key element to the success of this writing program was the collaborative efforts of the principal and the teachers at Orange Hunt Elementary School. Students who participated in the program came from a number of classrooms, each taught by a different teacher. We knew that these students could not be successful learners unless their teachers participated. The principal gave us the resource classroom, the computers and her full support. We owe a lot of our success to her involvement and leadership."

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Keys to Success

- Teacher and administrator support
- Consistent skill practice through guided instruction and technology
- Student motivation to practice writing independently
- Replicable results

Teacher and Administrator Support – Student Identification

We identified a group of 5th graders who were writing below grade level and who were struggling to keep up with their writing assignments. Four of these students were identified as ESOL learners with a learning disability. We knew that if we did not provide extra writing support and time to help these students practice their skills, they would not be successful on the VA state writing exam which consists of multiple choice questions and paragraph essay writing.

Choosing Draft:Builder

Early in the program, we tried a couple of writing programs and saw our students quickly 'catch on' to Draft:Builder. They liked the instructional scaffolds that helped them focus on one writing concept at a time. Draft:Builder is designed to break down the writing process into small steps to help students manage and organize their thoughts and ideas. Students were able to express themselves more clearly when they could focus on one sentence at a time.

Implementation

Students attended the program three days a week for 1.5 hours each period. Every Thursday afternoon, they came to our classroom, pulled laptops from a mobile cart and logged-on to Draft:Builder. We initially worked together from a projector in the front of the room. On Fridays, the groups would meet again and complete the previous day's writing prompt. On Tuesdays, the students would break into smaller groups with the special education teachers and work on grammar and language writing skills.

This consistent writing practice approach proved very successful. It was wonderful to read our students' essays, see how they used the talking spell checker and listen to them read their essays aloud using words they would never be able to write with paper and pencil. Draft:Builder's talking spell checker helped them locate misspellings and make corrections. This spell checker proved to be much more user-friendly for students than typical spell checkers.
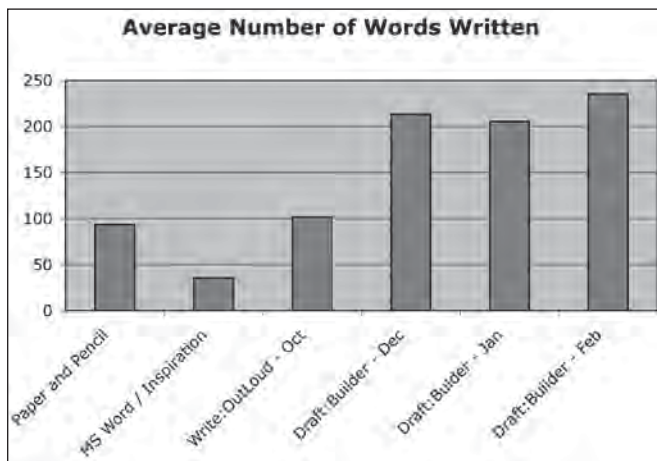
Writing Independence

Another key to student success was getting them excited about a new way of learning. We told them this was a 'one-of-a-kind technology program' they were chosen for. Over the course of six months we saw how honored they were to be in the class—they even skipped recess to come and write! Toward the end of the class, they were so focused you could hear a pin drop. That was a special moment for us and them to see their hard work pay off!

Results

At the end of the 06-07 school year, a high percentage of students in the first technology writing class passed the VA state writing test.

Average Student Writing Scores based on Writing Rubric
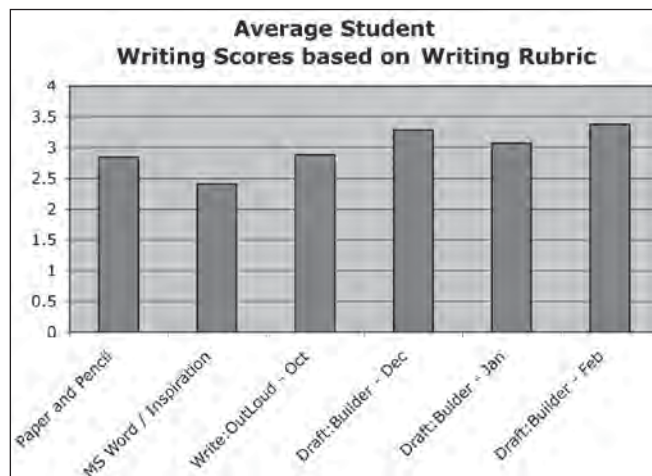
Average student writing scores grew by over 0.5 points when scored on the 4-point Virginia state writing assessment rubric.

Average Number of Words Written

This led the team to broaden the program in 2007-08 to support more students and collect more data. Again, they saw repeatable results. Of the eight students whose writing was a part of this data collection project, six passed the writing portion—one with an advanced score. Of the two students who did not pass, one did not use the technology on the state exam while the other was close to a passing score.

Average student essay length grew by over 150% between the first writing test (paper and pencil) to the last test using Draft:Builder.

Pride

The results were also rewarding for our administrators, general educators and the students' parents. During an IEP meeting, Ms. Tschetter showed student writing samples to some of the parents and general education teachers. One general education teacher expressed that she had never seen this kind of writing from the students.

Replicable Results Using Technology

As educators, we know that the combination of a collaborative team, the use of the right technology, solid instruction and appropriate time-on-task will improve results for even the most struggling learners. We also saw confidence in students' abilities to achieve success in school and beyond. They were proud of the new writing skills they developed and the voice inside them that came out using the technology. Our students have come a long way in their writing skills and have developed the motivation necessary to continue life-long learning.

> " *The use of technology with the auditory component and structured drafting process was paramount to the success of each student's writing. The students were engaged, demonstrated significant writing progress over the course of the year and made progress towards their IEP goals.* "
>
> Eve Tschetter,
> Special Education Teacher

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