Wichowski and Herberly (2009) reported on a research project that was developed to address the low reading skills of many career and technical education (CTE) students. Instructional modification materials were produced for use in five Governor’s Institutes to help CTE teachers incorporate proven reading strategies into their instructional practices. The project focused on providing teachers with instructional modification; specifically selected reading strategies like reciprocal teaching, scaffolding, and journaling, that could be integrated into the CTE instructional process. Training institutes and guidebooks were designed to provide CTE teachers with tools to improve the reading skills of students who might be marginal readers and to enhance the reading ability of good readers.

**Goal**

To provide instructional modification strategies to help CTE teachers improve the reading skills of CTE students.

**Research Question**

How did the implementation of the reading strategies impact the reading ability of CTE students as measured by Pennsylvania System of School Assessment (PSSA) test scores, publisher-made tests, student NOCTI tests, teacher-made content tests, and independent measures?

**Target Audiences**

1. CTE teachers for the instructional strategies
2. Students for the impact of instructional strategies

**Research Design**

Reading instructional modification materials were used in the delivery of five Governor’s Institutes on Integrating the Pennsylvania Standards on Reading, Writing, and Speaking and Listening (RWSL) between 2003 and 2007. The research population consisted of 262 CTE teachers who participated in the five Governor’s Institutes.

A four-part research instrument was developed that included sections on the background of the respondents, activities associated with the implementation of RWSL strategies, levels of student achievement attributed to the use of RWSL strategies, and factors associated with the training of colleagues in the use of RWSL strategies.

Individuals in the study were contacted via a web-based electronic survey, which yielded an initial self-selecting sample of 43 (a 16% response rate). A follow-up survey, conducted three weeks later, increased the response rate to 29% (n = 75).
Results

Data collected over the experimental five-year period supported positive gains (Wichowski, 2010). Among students whose teachers utilized the instructional modifications, there was a 12% gain on the 11th-grade PSSA Reading Test, a 15% gain on student NOCTI written tests, and an 8% to 20% increase in scores on teacher-made tests. The pass rate on a publisher-made unit test increased from previous scores in the 40% range to the 90% range after adoption of the instructional strategies. It was reported that students adopted new techniques that added to their reading ability. Students self-monitored their use of the reading strategies, suggested modifications of the reading strategies and developed their own vocabulary games. The mix of reading strategies served a wide range of learning styles, and reading gains were noted among all students, including those with Individualized Education Programs (IEPs). Other student gains were seen in vocabulary, class discussions, number and levels of questions asked, ability to follow instructions, and comprehension of material studied.

Sources


Other Resources

Reciprocal Teaching


Scaffolding


Journaling


Promising practices as a concept has many operational definitions. The NRCCTE approach to this designation is to identify research from reputable sources (e.g., major funded studies, institutional research, district or state analyses of data) and share this with you. Some of the research identified here is a result of very rigorous research (e.g., longitudinal designs with carefully matched samples, experimental designs). However, other studies may not rise to that level of rigor but nonetheless suggest a practice worth examining. We invite readers to follow the links provided and form their own judgments regarding the quality of the research.