

Appendix A: Research Summary

The **Teaching to Standards: English Language Arts (TS: ELA)** curriculum was developed from a series of single subject studies, along with some group studies. The studies addressed the effect of the instructional strategies contained in TS: ELA on the development of English language arts skills on middle school students with significant disabilities and/or autism. These studies also examined teacher fidelity in implementation of the scripted lesson. Teachers were from the Charlotte, NC region.

In the first study by Mims, Browder, and Spooner (in submission), methods for implementing a shared story with a specific focus on teaching students to respond to a variety of types of comprehension questions were evaluated via a multiple probe design across books with a concurrent replication across four students. The system of least intrusive prompts was used to promote story comprehension during a shared story activity. Stories were based on fictional novels. These students, who had moderate-to-severe intellectual disabilities, were nonreaders. Outcomes indicated that all four students increased the number of comprehension questions correctly answered during post-lesson questioning.

A second study by Mims, Hudson, and Browder (2012) examined the effects of a modified system of least intrusive prompting on text-dependent listening comprehension for four students with both intellectual disabilities and autism. The texts used during the read alouds were adapted grade-level biographies. This study offered students an opportunity to relisten to sections of the biography as a strategy for answering “wh” questions. The procedure was evaluated via a multiple probe design across students. Outcomes indicated that all students improved listening comprehension after intervention, and they maintained high levels of correct responding two weeks after intervention. In addition, three students generalized skills to new biographies.

These two studies, along with the research on reading aloud shared stories (Hudson & Test, 2012), provided the framework for the presentation of

the adapted grade-level literature. The lesson format was expanded to include other English language arts standards typically addressed at the secondary level of instruction. To teach these components, research on evidence-based practices for teaching academic content to students with moderate-to-severe developmental disabilities (Spooner, Knight, Browder, & Smith, 2012) was used. The evidence-based practices of constant time delay and least intrusive prompting were used. For writing, the dissertation research of Trela (2008) was used; she demonstrated how students could compose an argument through selecting options. Once these research-based components were combined, two additional studies considering the effectiveness of the fully scripted lessons were undertaken.

In a group pretest/post-test pilot study, Mims, Lee, Browder, Zakas, and Flynn (2012) evaluated Unit One of TS: ELA. Five teachers and 15 middle school students with moderate-to-severe disabilities, who were primarily served in a self-contained setting, were participants in the study. A one-group, nonrandomized, pretest/post-test design was implemented to measure vocabulary, comprehension of familiar and unfamiliar text, poetry, research, and writing skills. Results indicated significant gains in vocabulary and comprehension of familiar text.

Finally, in a randomized trial group experimental design, Lee, Mims, Browder, & Ahlgrim-Delzell (in preparation) compared an experimental group, who used the full Unit Four scripted curriculum of TS: ELA, with a control group, who used only interactive read alouds as the adapted text. Participants included middle school students with significant intellectual disabilities and/or autism who participated in North Carolina’s or Tennessee’s alternate achievement. This study included 13 experimental students and 14 control students. The researchers measured vocabulary growth, comprehension of (familiar and unfamiliar) text and poetry, research skills, and writing skills. In this quasi-experimental control group design with a pretest and post-test, students who received daily instruction using the curriculum had significantly higher scores on direct and indirect assessment.