Title

Reading profiles of struggling readers in 5th and 6th grades: What does it mean in the era of the Common Core State Standards?

Purpose

Over the past 15 years, the literacy field has experienced calls and mandates to improve reading performance in our schools (Snow, Burns, & Griffin, 1998; National Reading Panel Report, 2000; No Child Left Behind, 2001; Common Core State Standards, 2012). Yet many of our upper-elementary and middle-school students continue to struggle with reading (National Assessment of Educational Progress, 2011). One reason may be that we tend to oversimplify the needs of older, struggling readers. Too often they are identified as “struggling” by their performance on high-stakes, standardized assessments. These students are then lumped together, with no further analysis of their specific reading strengths and weaknesses (Valencia, 2007).

Researchers have utilized the technique of establishing profiles of developing readers to better understand the complexities of readers who struggle (e.g. Catts, Hogan, & Fey, 2003; Leach, Scarborough & Rescorla, 2003; Spear-Swerling, 2004). Valencia has articulated the need to more carefully examine assessment data to better understand the varying problems and needs of struggling readers (Valencia, 2007; Valencia and Riddle Buly, 2004). Riddle Buly and Valencia (2002) studied the performance of a group of fifth-grade struggling readers. The researchers randomly selected fifth-grade students (N =108) who had scored below average on their end-of-fourth-grade state reading test. Using assessment tools that probed key components of reading ability, Valencia and Buly reported that all the children scored below average in three familiar categories: (1) word identification (word reading in isolation and context), (2) meaning (vocabulary and comprehension), and (3) reading fluency. However, using cluster analysis, the authors found six distinct profiles among their 108 fifth-grade low readers. That is, the researchers were able to identify distinct groups of readers who shared similar attributes within the group (in regard to word identification, vocabulary, and fluency), but were different from the other groups (e.g. automatic word callers, struggling word callers, slow comprehenders, disabled readers). Another profile study that is noteworthy is the Catts et al. (2003) study, in which the researchers found four distinct profiles of struggling second-grade readers.

These approaches are promising, but to date little data exists about older struggling readers. The identification of diagnostic profiles (or subgroups) among older, struggling readers obviously would have theoretical as well as instructional implications, as different subgroups might well benefit from different instructional emphases. The primary purpose of our study is to expand upon earlier research (Catts et al., 2003; Riddle Buly & Valencia, 2002; Valencia & Riddle Buly, 2004; Valencia, 2007) by studying a different population of older students and incorporating additional assessments.

Theoretical Framework

We ground our work with cognitive models of the reading process (e.g., Adams, 1990; Hoover & Gough, 1990; Kintsch, 2004; LaBerge & Samuels, 1974). In particular, we use the simple view of reading as our frame for this study. The simple view of reading articulated by Gough (Gough, Hoover, & Peterson, 1996; Gough & Tunmer, 1986; Hoover & Gough, 1990) suggests reading comprehension is composed of two basic independent constructions: word recognition (print processing) and language comprehension. The simple view allowed us to identify key components of reading, we believed would provide pertinent assessment data when investigating the profiles of struggling readers.
Methodology

Participants. The participants were fifth graders (N = 36) and sixth graders (N = 29) from a rural school system in Appalachia that serves approximately 1,800 students. All participating students had scored below the 50th percentile on the state, end-of-grade reading test administered the previous spring.

Assessments. We tested the students individually for approximately 90 minutes over several days. In addition, the students completed a group-administered standardized reading test. We used assessments that targeted key components of the reading process, including print processing (i.e., word recognition-in isolation, oral reading accuracy, and oral reading rate), vocabulary, and comprehension.

To measure word recognition-in isolation, we used (a) an informal word recognition test (flash and untimed presentations) (Authors, 2011), and (b) the Sight Word Efficiency subtest from the TOWRE (Torgesen, Wagner, & Rashotte, 2012). To measure oral reading accuracy and oral reading rate, we used graded passages from an informal reading inventory (reliability information is reported in Authors, 2011). We also recorded the students’ responses to the IRI comprehension questions that accompanied each passage. To measure vocabulary, we administered the Peabody Picture Vocabulary Test 4 (PPVT 4), a measure of receptive vocabulary. Finally, to provide a standardized measure of reading comprehension, we administered the Gates-MacGinitie Reading Test, a group-administered measure of silent reading comprehension.

Results

Cluster analyses and descriptive statistics were used to analyze the data.

As expected, our students scored below average in standardized measures of comprehension. However, cluster analyses revealed four distinct groups of students. Similar to Catts et al. (2003) study, our participants fell into the following categories:

- High/High, students who scored high on both print processing measures and language measures,
- High/Low, students who scored high on print processing measures but low on vocabulary measures,
- Low/Low, students who scored low on print processing and vocabulary measures,
- Low/Hi, students who scored low on print processing but high on vocabulary measures.

Using the four categories identified by the cluster analysis as a framework, we used descriptive statistics to analyze further how students performed on leveled print processing and vocabulary measures. We established cut scores on the vocabulary and print processing measures (representing the dimensions of the simple view of reading) to place students into four quadrants (Table 1). To qualify for “high” in vocabulary, participants needed to score in the 40th percentile or higher on the PPVT. In order to qualify as “high” in word processing students needed to score higher than 96% on oral reading accuracy and read with a rate of 100 wpm or faster. Of our participants, we identified 6 students who fell into high/high category; 11 students fell into the high/low category; 35 fell into the low/low category; and 13 fell into the low/high category. These data and groupings support the outcome of the cluster analyses groupings.

Importance of Study

Findings from this study contribute to the fields’ growing understanding of reader profiles. Like previous studies with younger students, our study found older struggling readers are not a homogeneous group.
Using assessment data, our study investigated the underlying constructs of reading comprehension, and the data demonstrate reading comprehension is a multifaceted process, in which an underdeveloped construct can derail the intended outcome of reading comprehension for a variety of reasons. Moreover, the data from the study illustrate several patterns in student performance, which must be considered when developing instruction for these students. Given the variance in skills and instructional needs of the struggling readers in this study, assessment-based instruction is the only way to inform instruction that will meet the needs of this diverse group. Upper elementary, struggling readers cannot be taught as a homogenous group, strengths and weaknesses of individual reading skills must be addressed.

References


Authors, (2011).


Table 1 Reading Profiles

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