Reading + Technology = Literacy

Sean Smith, University of Kansas, US
Steven Smith, University of Kansas, US
Mary Ann Petrich, Kansas City, Kansas Public Schools, US

This presentation will focus on the sustained integration of a hypermedia-based software application called READ 180. Integrated across Kansas City, KS Middle Schools, Read 180 has had a significant impact of student reading, both general and special education students, over the past two years. Data will be shared with participants concerning its effectiveness and its overall impact on the reading process.

READ 180 infuses the anchored instruction model researched by Hasselbirng and his colleagues at the University of Vanderbilt (Bransford, Sherwood, Hasselbring, Kinzer, & Williams, 1990; Hasselbring, Bottge, & Goin , 1992). Hasselbring and colleagues (1997) have examined the implication of READ 180 and its application to literacy development and the needs of the at-risk learner. In cooperation with the Orange County Public Schools, research has illustrated dramatic student improvement in the area of reading when instruction is anchored through multimedia applications. This presentation will also share findings from a study currently underway in the Kansas City, Kansas school district across seven middle schools.

READ 180 applies the components of anchored instruction benefiting from the interactivity of hypermedia. Hypermedia-based children's literature has several potential advantages for students with learning disabilities who are struggling to acquire basic reading skills. First is the motivational appeal of this body of software. For example, READ 180 with its dazzling graphics, realistic sound, and plentiful opportunities for interactions between the learner and the task, this type of software has the capability to capture and hold students' attention. As Erickson and Staples (1995) reported, even students with autism respond to the attractiveness of these programs with increased attention to the reading task. This level of motivational value may increase the probability that reluctant readers will persevere in their interactions with text. This would be a particularly valuable outcome because repeated readings of the same text have been found to be of value for students with learning disabilities (Sindelar, 1987).

Also, hypermedia-based children's literature offers students text that is speech-enhanced. Speech makes the text more accessible to readers or, in the words of Boone, Higgins, Falba, and Langley (1993), more cooperative. In addition, this software is a computer translation of children's literature. When transformed into computer-mediated "books," the quality of the texts and illustrations are preserved. Texts are typically heavily illustrated; also, they are often predictable and include narrative features such as repeated lines and rhymes. These features, like software speech enhancements, increase the cooperativeness of the text. Comprehension is aided because of the graphical cues and the predictability of the text. Also, if a computer-mediated book is used as a springboard for instruction in skills such as decoding, that instruction is easily "anchored," as Hasselbring and his colleagues (e.g., Bottge & Hasselbring, 1993) explain, to the student's experiences with that piece of children's literature.

This presentation will feature an extensive demonstration of the READ 180 software and how it has enhanced students with learning disabilities reading over the past two years. Data will be shared with participants concerning its effectiveness and its overall impact on the reading process.