Victoria Knight, a graduate student at the University of North Carolina at Charlotte has received a grant from NCSeT to support her dissertation research.

Ms. Knight is studying questions about how supported text may be of use in supporting science vocabulary and comprehension skills for students with autism spectrum disorders (ASD). Although little research has been conducted in the area of supported eText for students with ASD, technology (e.g., computer assisted instruction) has been used for over 35 years to instruct students with ASD in academic areas. In her study, five middle school students with ASD will use the Book Builder™ program to access grade aligned science content. Ms Knight is using a single subject research design with multiple probe across participants design to evaluate the effects of supported eText on the acquisition of vocabulary and comprehension of grade appropriate science content. In addition, social validity measures are being collected from the teachers and students on the benefit of supported eText. The following specific research questions are being addressed:

- What is the effect of supported electronic text using the Book Builder™ program on comprehension and vocabulary of middle school science content for students with ASD?
- What is the effect of an “enhanced” version of Book Builder (i.e., including the use of explicit prompts) on the science comprehension and vocabulary of middle school students with ASD?
- Do students validate the strategy by indicating a preference for the electronic text over traditional text?
- Do teachers validate the strategy as “universally designed”?
- Do teachers validate the strategy as increasing access to science content?

This investigation uses all of the resources available from the Book Builder™ program, and as recommended by the CAST (2009) website. Ms. Knight has designed science electronic books to include all of the recommended resources by the Book Builder™ website. Specifically, each science electronic includes the following resources: (a) explanatory resources (e.g., hyperlinks to vocabulary definitions, embedded coaches); (b) illustrative resources (e.g., drawings, photos, sounds, and “typical examples” of a concept in the text); (c) translational (e.g., hyperlinks to vocabulary definitions, text to speech, simplified text at a lower reading level), (d) summarizing (e.g., concept map, list of key ideas), (e) enrichment (e.g., background information); and (f) instructional (e.g., embedded coaches).