Do students using electronic books display different reading comprehension and motivation levels than students using traditional print books?

Casey Wells

Date
11-2012

Department
School of Education

Degree
Doctor of Education (EdD)

Chair
Amanda Rockinson-Szapkiw

Primary Subject Area
Education, General; Education, Reading; Education, Technology; Education, Secondary

Keywords
Electronic Books, Reading Comprehension, Reading Motivation

Disciplines
Education | Educational Assessment, Evaluation, and Research | Educational Methods | Liberal Studies | Science and Technology Studies

Recommended Citation
https://digitalcommons.liberty.edu/doctoral/623

Abstract
The effect of electronic books on the reading comprehension of middle and high school students was examined using an experimental posttest-only control-group design. A convenience sample of 140 randomly assigned middle and high school English students at an independent school in eastern North Carolina participated. Half of the students used passages from text read on tablets while half utilized traditional print text passages. Data was collected during one class period in which the reading comprehension section of the Gates-MacGinitie Reading Tests®, a 35 minute test containing 48 questions, was administered. Reading comprehension data was analyzed using an independent t-test. The effect of electronic books on the reading motivation of middle and high school students was examined using a quasi-experimental pretest-posttest control-group design. All students from the Reading Comprehension testing took the initial Motivations for Reading Questionnaire, a 15-20 minute survey containing 53 questions, on day two. A posttest MRQ was administered in which 27 participants completed the MRQ after reading a book excerpt in paper form, and 27 participants completed the MRQ after reading the same excerpt in electronic form. Reading motivation data was analyzed using a MANOVA. Results demonstrated no significant differences in either reading comprehension or motivation levels based on book format.
Students judged their comprehension as better online than in print. Paradoxically, overall comprehension was better for print versus digital reading. The medium didn't matter for general questions (like understanding the main idea of the text). But when it came to specific questions, comprehension was significantly better when participants read printed texts. But when the reading assignment demands more engagement or deeper comprehension, students may be better off reading print. Teachers could make students aware that their ability to comprehend the assignment may be influenced by the medium they choose. This awareness could lessen the discrepancy we witnessed in students' judgments of their performance vis-à-vis how they actually performed. In while-reading activities, students check their comprehension as they read. The purpose for reading determines the appropriate type and level of comprehension. While-reading activities are important whether done by students in the classroom or at home. I believe the reading skill itself is difficult to assess in a student - too often is judged on the answers to poor comprehension questions rather than their ability to read effectively. When reading for thorough understanding (intensive reading), students need to ask themselves. Do I understand each main idea and how the author supports it? In post-reading usually the comprehension is checked in different ways. The most spread one is just asking questions about the text. Comprehension strategy instruction helps students become purposeful, active readers who are in control of their own reading comprehension. The seven strategies here appear to have a firm scientific basis for improving text comprehension. Students who are good at monitoring their comprehension know when they understand what they read and when they do not. They have strategies to “fix” problems in their understanding as the problems arise. Research shows that instruction, even in the early grades, can help students become better at monitoring their comprehension. Comprehension monitoring instruction teaches students to: Be aware of what they do understand. Identify what they do not understand. Use appropriate strategies to resolve problems in comprehension. Books and computers still preferred reading printed books rather than electronic ones. Students also reported that they would not purchase e-books, even though they were cheaper than the printed ones. In an EFL context, [12] examined 495 college students’ perceptions towards using e-books and related issues. The students were studying in different disciplines at various levels ranging from diploma to doctoral level. The results reported that students used books for two main purposes: general information and academics. 2.2 Preferences for electronic texts. Half of the students spent much more time reading traditional books (51%) than electronic books (25%). The findings revealed that students preferred reading their course.