

From: John Lee [johnrlee@icanlearn.com]
Sent: Monday, March 08, 2010 5:17 PM
To: What Works
Subject: Recent Review

Dear What Works Reviewers,

I read with interest your recent review of Ritter, Kulikowich, Lei, McGuire, & Morgan (2007) assessing the impact of *Cognitive Tutor*[®] *Algebra I* on the math achievement of ninth-grade students in three suburban junior high schools in Oklahoma. During the 2000–01 school year

I have concerns regarding the WWC determination that the Ritter et al. (2007) study of Cognitive Tutor meets evidence standards. This study included 11 control students who crossed over to treatment. These students should have been analyzed as controls through a conventional intent-to-treat (ITT) analysis, but the authors of the study dropped these students from the analysis (according to footnote 2 in Appendix A1 in the WWC Intervention Report for the Ritter et al., 2007 study of Cognitive Tutor). Because the authors did not conduct a proper ITT analysis, the WWC should reconsider its conclusion that this study meets evidence standards. As stated in the WWC Procedures and Standards Handbook (V 2.0): "Any movement or nonrandom placement of students, teachers, classrooms, or schools after random assignment jeopardizes the random assignment design of the study." Clearly, this non-random placement of 11 control students into the treatment condition, and the systematic exclusion of these students from the impact analysis of Cognitive Tutor compromises the integrity of this random assignment study. Because we would expect that the crossover students experienced the same benefit as treatment students, their systematic exclusion from the control group analytical sample overstates the magnitude of the Cognitive Tutor effect, especially in such a small study population of 255 students. Could you please address my concerns and respond back?

Thank you very much,

John Lee

