Efficacy of using a Game-Based Keyboarding Tool to Improve Keyboarding Skills of Elementary Aged Students

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Introduction/Rationale: The development of keyboarding skills has been a long-standing recommendation of occupational therapists to improve written communication for students struggling with handwriting skills. However, as the use of computers and digital communication becomes more commonplace in cultures throughout the world, keyboarding proficiency has become an essential life-skill. Understanding the components of effective keyboarding and evidence-based ways to teach these skills are important for occupational therapists.

Objectives: Attendees will explore the effectiveness of a developmentally appropriate game-based keyboarding tool for use by occupational therapists, parents, or teachers.

Method: A pre-test/post-test quasi-experimental study uses Keyboarding Without Tears (KWT) in 2 rural American schools (N=969 kindergarten through 5th grade students) compared to 2 control schools (N=1157 kindergarten through 5th grade students). Outcome measures include keyboarding speed using net words per minute (accounting for both speed and accuracy) and keyboarding technique using a previously established rating scale. T-tests will compare speed and technique by grade level.

Results: Post-test data collection occurred May 8-12, 2017. Preliminary analysis indicates that students using the KWT program have shown greater change in net typing speed overall with significant results for some grades. Preliminary analysis also supports a significant change in keyboarding technique for students in the younger grades who used KWT.

Conclusion: This presentation will present the full analysis of the efficacy study comparing experimental to control schools and will inform occupational therapy practice on the usefulness of KWT to improve keyboarding skills of students in a classroom setting.