

Title: Assessing the Effectiveness of an On-line Math Review and Practice Tool in Foundational Mathematics.

Preliminary Research Report

Keywords: online practice, developmental math, educational technology, introductory statistics

Abstract: 150 words

Preliminary results of research into the effectiveness of an innovative on-line mathematics review and practice tool (www.mathessentials.ca) will be reported (data collection completion in Dec. 2010). The goal of the web-site is to provide students with the opportunity to review and practice developmental math skills (fractions, percents, etc.), thus filling in gaps in their knowledge. The development of the web-site begat the development of an innovative evaluation model, which can be used to evaluate online educational technologies. Key to the model is not simply evaluating improvement with pre/post test scores, or with anecdotal reports, but through tracking built into the site, which has the potential to provide a multidimensional view of improvement, usage and engagement (usability score). We believe that the web-site itself (support of student success) and the evaluation model ('gold standard' for evaluation of educational technologies) have implications for both teaching and research.