Andrew G Bennett* (bennett@math.ksu.edu), Department of Mathematics, Kansas State University, Cardwell Hall, Manhattan, KS 66506. What Really Happens When Students Work Online?

Online homework systems are becoming increasingly popular since (when they work) they are convenient for both faculty and students. But online systems can change homework from a system where students do their work once and get partial credit for partial success to a system where students are expected to repeat their work until they get it right. How does this change how students approach homework? Furthermore, systems that rely on mechanical grading are naturally best adapted to more mechanical types of problems, raising issues of whether an increasing reliance on such systems will privilege the assessment of procedural knowledge over the assessment of conceptual knowledge. Fortunately, online systems naturally and efficiently capture large amounts of data about student work. Combining this with student interviews allows us to analyze what and how students are learning from certain online tools. (Received September 19, 2007)