



Fact Sheet on the ASSISTment Project

<http://www.assistment.org>



- **What Is The ASSISTment System?** The ASSISTment system is a web-based tutoring program for 4th to 10th grade mathematics. The word “ASSISTment” blends tutoring “assistance” with “assessment” reporting to teachers. This gives teachers fine grained reporting on roughly 90 skills that the system tracks per grade level. More generally, the system is a great tool to help achieve the US Dept of Education’s goal of turning education research into an evidence-based science, as the system is able to do large-scale studies of what constitute effective educational practice.
- **What Is The Goal?** No Child Left Behind urges schools and teachers to use formative assessment information to inform their classroom instruction. The dilemma is that every minute spent testing is a minute taken away from instruction. The ASSISTment system solves this problem by tutoring students on items they get wrong, thus providing integrated assisting of students while they are being assessed. Teachers can use this detailed assessment data to adjust their classroom instruction and pacing.
- **How Is It Used?** Math teachers assign problem sets to their students to do on the computer, and students are tutored on the items they get wrong. Teachers log on to the System and study detailed reports about their students’ difficulties and strengths. Teachers can also use content already developed at WPI or write their own content.
- **Who is using it?** In 2007-2008, just over 4000 students used the mostly, mostly near Worcester, MA and Pittsburgh, PA. We have scalability results that suggest we should be able to scale up nicely with the 11 servers we have in place so that we can support every classroom in the state of Massachusetts.
- **What do we know about its effectiveness?**
 1. What do we know about its effectiveness as an assessment system? In Razzaq et al (2005)¹, we showed we can predict a student’s MCAS score with a high degree of reliability.
 2. What do we know about its effectiveness as an instructional assisting system? In the same Razzaq et al (2005), we showed that students were reliably learning.
 3. What do we know about the effectiveness of the system to study the learning that is taking place outside of class? We have found that the ASSISTment system can track individual skills being learned inside of classrooms, thus opening the door to using the system to study any classroom intervention, as teachers like to use the system with their students.
- **Who built the Assistments?** In 2003, Neil Heffernan and Ken Koedinger conceived of the idea of the ASSISTment system and received funding from the US Department of Education to get started. This idea was successful, in part, due to prior funding from the Office of Naval Research to build tools to make it more cost effective to build intelligent tutoring systems. In 2004, Heffernan was funded by a National Science Foundation CAREER grant to extend the Assistment system from 8th grade up to 10th grade. Over 30 students at WPI and several full time staff at CMU helped make it all happen.

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¹ This document and dozens more of documents related to the ASSISTment system can be found at www.assistments.org or <http://teacherwiki.assistment.org/Publications>.