

Increasing Parent Engagement in Student Learning Using an Intelligent Tutoring System

Zachary R. Broderick, Neil T. Heffernan, Cristina L. Heffernan

Worcester Polytechnic Institute

Christine M. O'Connor, Courtney E. Mulcahy

Oak Middle School, Shrewsbury, MA

Abstract

This study demonstrates the ability of an Intelligent Tutoring System (ITS) to increase parental engagement in student learning. A parent notification feature was developed for the web-based ASSISTment ITS that allows parents to log into their own accounts and access detailed data about their students' performance. Parents from a local middle school were then invited to create accounts and answer a survey assessing how engaged they felt they were in their students' education. A 60 day study was run during which messages were sent home to parents regarding what their students were studying in class and how they were performing. After having them take a post-survey, it was found that parents felt significantly more engaged in their students' education. Additionally, the messages significantly increased how frequently parents logged in to check reports on their students' performance data using the ASSISTment system. Qualitative feedback from both parents and teachers was very positive.