

Mathematics: Passive No More

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Abstract

Low retention in core-curriculum college mathematics courses is a widespread problem. At our institution, the current emphasis on student retention has become the basis for decisions regarding budgets, faculty hiring, promotion, and tenure. It is clear that the success of first-year students is crucial to meeting institutional retention goals.

We intend to describe how in-class practice worksheets have enhanced student engagement and led to increased achievement in our entry-level mathematics course. In 2010, failure rates at Middle Georgia State College (MGSC) in Math 1101 averaged about 45% across the board. Titled Math Modeling, the course explores basic algebraic concepts but focuses on applications and functional models of real-world data. Since Math Modeling is the primary mathematics course for all Middle Georgia State non-technical majors, the impact on student retention and graduation was profound. In 2009 MGSC had achieved the dubious distinction of having the lowest graduation rate among all colleges in the University System of Georgia.



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