



The Rice University Mathematics Leadership Institute

MLI Description

- Developed a collaboration among the Rice University School Mathematics Project (RUSMP), Rice University's departments of Computational and Applied Mathematics, Mathematics, and Statistics, and the Houston and Aldine Independent School Districts
- Builds on RUSMP's twenty years of experience in providing high quality professional development in mathematics for the greater Houston area by developing lead teachers in the high schools of the two school districts

MLI Structure

- Three cohorts each attended two Summer Leadership Institutes
- Academic-year meetings and support
- Support to attend conferences, coaching institutes, advanced certification courses
- Material, print, and technology resources

MLI Goals

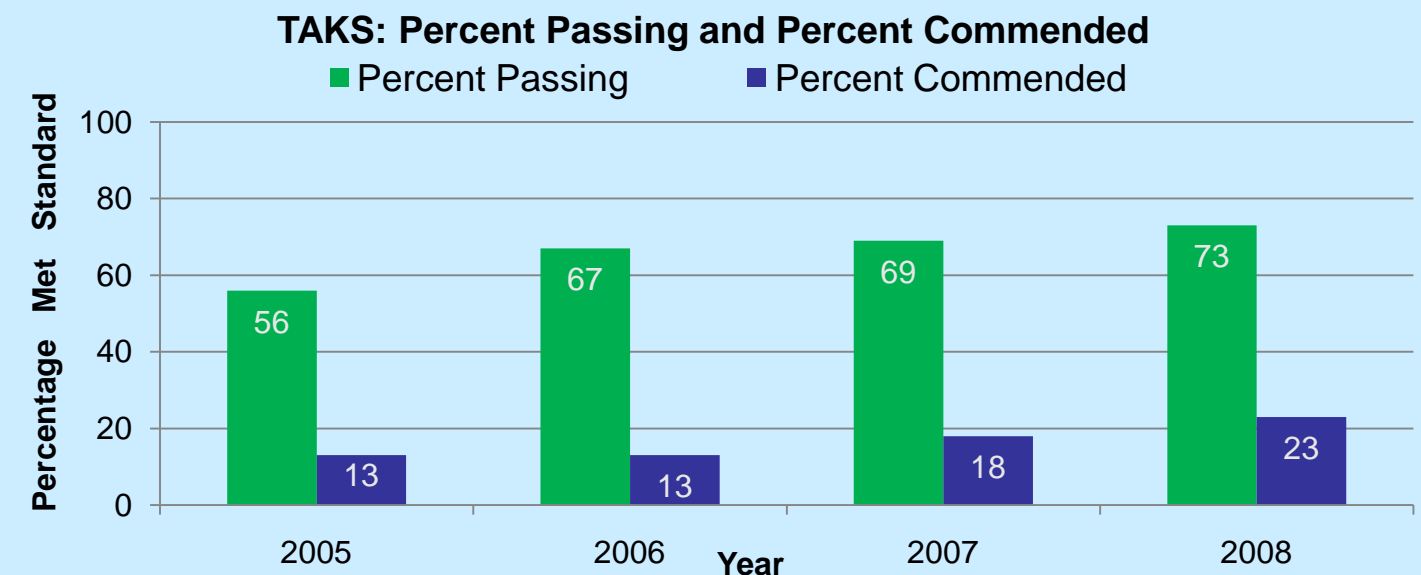
- Develop a cadre of lead teachers in mathematics
- Provide mathematics content and pedagogical support
- Develop highly-qualified mathematics teachers
- Ensure that **all high school students have access to** challenging mathematics courses
- Impact the instructional practices of mathematics faculty, post-docs, and graduate students

Challenges

- Dealing with turnover of administrators at the campus and district levels
- Losing lead teachers to instructional leadership roles outside of the classroom
- Creating the systemic changes necessary to continue the work of the Institute past the conclusion of the grant
- Increasing participation of university mathematics faculty in grant activities

MLI Successes

- Teachers' mathematics content knowledge increased as a result of their participation in the MLI.
- Many teachers have been able to share the benefits of the MLI with campus colleagues through collaboration and mentoring.
- Student success on standardized assessments has increased.



- Each year the percentage of MLI teachers' students passing the mathematics TAKS increased (4 to 11 percentage points).
- Except for 2005 to 2006, the percentage of MLI teachers' students scoring at the commended level on the mathematics TAKS increased (5 percentage points).

What We Need from Other Projects

- Feedback on our program design
- Discussion on best approaches for replication of project
- Input on how to deal with turnover of administrative personnel
- Mechanisms for increasing mathematics faculty participation in pre-college education programs