

Grades 4-8

Representational Connections in Algebraic Reasoning

A Professional Development Program in Mathematics Education

2017 Teacher Quality Grant
The University of Texas at Arlington
<http://mathed.uta.edu/TQ>

UT Arlington's graduate program in K-8 mathematics education

This program consists of professional development courses offered through the Mathematics Department. *The courses are intended to help elementary and middle grades mathematics teachers improve their content knowledge in ways that will impact their understanding of mathematics, as well as impact their classroom teaching.* Courses can be taken *à la carte* as a special student, or as part of the M.Ed. program in Curriculum & Instruction.

UT Arlington Teacher Quality Project

A grant from the THECB will support a cohort of teachers teaching mathematics in grades 4-8 to participate in UT Arlington's K-8 mathematics education graduate program for Spring & Summer 2017. Benefits and responsibilities are described below.

Program Calendar

Orientation: Tuesday, January 10, 5:00pm – 8:00pm

Spring 2017: Tuesdays, January 10 – May 9, 5:00 pm – 8:00pm

MATH 5376 Constructing Rational Numbers and Operations in K-8 Mathematics

Summer 2017: May 11 – June 22, 16 meetings in evening/ afternoons

MATH 5377 Algebraic Reasoning in K-8 Mathematics



In each course, participants...

- Work together to solve math problems that evoke issues analogous to those faced by K-8 students
- Discuss articles and case studies that present new ideas or research on children's mathematical thinking
- Analyze their own, & others', students' mathematical thinking in detail
- Exchange ideas & discuss episodes from their own teaching

Participant Benefits

Upon completion of UTA course requirements, 2017 grant participants will receive:

- **6 hours (2 courses) of graduate credit in K-8 mathematics education** (tuition, fees, and parking paid by TQ grant), applicable to an M.Ed. (Support is not applicable to other programs or courses, including online courses.)
- **Books valued at over \$100, and classroom manipulatives valued at over \$200**
- **\$100 stipends** for completion of each course
- **Opportunities to build and enhance relationships with other local mathematics teachers**

Participant Responsibilities

Each grant participant agrees to do all of the following:

- participate fully in both the summer and academic-year courses, including completing required assignments and action (classroom) research outside of class meetings. Courses provide extensive peer and instructor support, but do represent a significant time commitment.
- facilitate the scheduling of classroom observations and other data collection by project staff for purposes of evaluating the program's impact (*not* to evaluate participants)
- implement project objectives in your classroom, including regular analysis of student work
- facilitate the scheduling of visits by master-teacher coaches who will assist in development and implementation of content and instructional skills



Application and Acceptance Timeline:

- Complete applications must be received by **midnight on Sunday, November 27, 2016**. Complete applications include:
 - (1) an online application form at <http://mathed.uta.edu/TQ>,
 - (2) a 2-page signature form (available at <http://mathed.uta.edu/TQ>) which must be mailed or faxed in, and
 - (3) notifying your ISD's UTA liaison office (usually the mathematics department) of your intent to participate.

Incomplete applications cannot be considered. In accordance with funding agency guidelines, preference will be given to teachers with high numbers of students from underrepresented groups, to teams of teachers from the same campus, and to teachers with fewer mathematics courses in their academic backgrounds.

- Teachers selected for the program, **will be notified by email** during the week of November 27, 2016, and teachers must accept or decline selection by **Saturday, December 3, 2016**.
- Participating teachers will need to complete application to UTA's Graduate School by **December 20, 2016** (see <http://www.uta.edu/admissions/graduate/> for details).

For more information please visit the program web site (<http://mathed.uta.edu/TQ>), or contact Dr. Christopher Kribs (Project Director, kribs@mathed.uta.edu, 817-272-5513), Dr. Theresa Jorgensen (Project Co-Director, jorgensen@uta.edu, 817-272-1321) or Dr. Kathryn Rhoads (Project Co-Director, kerhoads@uta.edu, 817-272-5168). Our fax: 817-272-5802.