Background

Recruiting and retaining highly effective teachers is vital for developing a culture where great teaching is rewarded and valued. The New Teacher Project notes that a key way to retain highly effective teachers—“irreplaceables”—is to provide them with meaningful opportunities for professional growth and leadership. According to a series of white papers from 100Kin10, teacher leadership contributes to a collaborative work environment in which teacher voices are privileged and teachers help drive decisions about professional development, curriculum, and instructional resources.

In mathematics, a number of key groups have advocated for teacher leadership as both a career ladder for effective teachers and a resource for their peers. For example, a joint position paper from the National Council of Supervisors of Mathematics, the NCTM, and the Association of Mathematics Teacher Educators advocates for certified elementary mathematics specialists (EMS) in every K-6 school. EMS leaders have also been recommended by the National Mathematics Advisory Panel as a practical alternative to increasing all elementary teachers’ mathematics content knowledge.

Mathematics teacher leaders should have opportunities to develop specialized content, pedagogical, and leadership skills for working with both students and adults, as well as to progress along a well-defined career ladder. Such a career ladder might progress from working with small groups of students around particular mathematics needs (e.g., struggling learners and/or gifted learners), to teaching mathematics in elementary schools, to coaching other teachers within a school or district, and finally to having responsibility for decisions about mathematics curriculum, instruction, and assessment systems at the district or state level.

Look Fors

State plans should express support for the widespread use of mathematics teacher leaders to increase retention of highly effective teachers and improve program effectiveness. Plans might describe ways in which SEAs will—

1. promote the use of school and district-based mathematics specialists who have significant opportunities to collaborate with their peers;
2. encourage the development of advanced certification opportunities through higher education and regional resource centers;
3. develop a set of job descriptions for a career ladder based on increasing responsibilities, educational expertise, and experience;
4. develop models for district-level funding strategies to support these critical new roles;
5. develop a leadership collaborative network that connects mathematics specialist leaders across the state; and
6. create policies and mechanisms that encourage collaboration between leaders (school, district, and regional) and university faculty.

States with Promising Features

The following states were identified as a result of the Promising Features Survey in which 13 state plans were reviewed by mathematics leaders across the country. Related text from the full state plans mentioned below can be found in Tool #12 at http://nctm.org/essatoolkit.

- **New York** has developed a Career Ladder Pathways Framework that supports LEAs in rewarding effective educators with meaningful opportunities for career advancement, including serving in mentorship roles.
- **Oklahoma** will implement a teacher-leader career ladder in order to elevate teachers who take on responsibilities of mentor, model, and lead roles while receiving additional compensation.
- **Utah** will create a pilot grant opportunity for LEAs to develop a teacher leader program.