

# THE → NEXT → FRONTIER →

## Summary of Report Recommendations

### RECRUIT REWARD RETAIN

1

#### Recruit, Reward and Retain High-Quality STEM Teachers

- Replicate successful teacher training programs at Texas universities
- Support new teacher induction programs with coaches, weekend workshops and online support
- Support successful continuing professional education programs for STEM teachers
- Provide increased stipends, higher pay and performance-based bonuses for highly qualified teachers
- Raise salaries for STEM specialists
- Offer financial assistance for teachers to continue their education
- Provide financial incentives to teachers who earn advanced degrees

### ENGAGE & ENCOURAGE STUDENTS

2

#### Support STEM Curricula That Engages and Encourages Students

- Support programs featuring hands-on activities, field trips, internships and mentoring relationships
- Expand the role played by science centers, museums and other community-based activities
- Support programs offering high school students experience in higher education research labs
- Extend involvement in Advanced Placement Strategies
- Fund elementary school science labs
- Help disadvantaged yet STEM-strong students get into Texas colleges

### DEFINE STEM CONCEPTS, SKILLS & TECHNOLOGY

3

#### Match STEM Concepts to Higher Education and Industry Needs and Reward Students and Schools That Meet Them

- Define the STEM concepts, skills and technology students need to succeed and develop high school classes aligned with these concepts
- Change accountability measures so that commended students, growth and progress mean more
- Open up access to K–12 educational performance information, and fund new technology for performance improvement
- Test grades 3–8 students in science annually, and in high school end-of-course exams
- Conduct district-wide external curriculum audits in math and science every six years

### CREATE AN ADVISORY COUNCIL

4

#### Create a Statewide STEM Advisory Council Responsible for Improving the System

- Establish the Texas STEM Advisory Council—made up of STEM classroom teachers, school leaders, higher-education representatives, industry leaders and policymakers—responsible for coordinating stakeholders, advising policy makers and education agencies, and identifying programs, practices and materials proven to be effective