

ARKANSAS STEM Works

STEM Works is an initiative of the Governor's Workforce Cabinet created in August 2011. It is intended to transform education by recognizing that future educational and workforce demands will be driven by the 21st century economy, requiring higher level skills for workers at all levels and more talent to fill openings in science, technology, engineering and mathematics occupations. STEM Works focuses on the preparation of STEM teachers who are skilled in problem-based learning and the creation of secondary schools designed around hands-on learning, student teams, and projects that integrate educational standards with real-world situations.

STEM Works is comprised of four components: New Tech Network, EAST Core, Project Lead the Way (secondary education), and UTeach (higher education). Schools participating in these nationally recognized STEM programs commit to transform school culture, engage all students through project-based learning, and use ubiquitous computing to foster collaboration and deeper learning.

Quick Facts

- In three years, STEM Works has grown to include 57 secondary schools: 13 New Tech, 7 EAST Core, and 39 Project Lead the Way being supported by 3 UTeach campuses that project as many as 350 new STEM Teachers by 2020.
- The state, federal, and philanthropic investment is above \$12 million. This figure does not account for in-kind contribution of staff, equipment, professional development, etc. by districts and universities.
- Arkansas district superintendents have overcome the challenge of acquiring affordable, high-speed broadband to implement STEM Works programs.

Areas of Emphasis

- **Rural/Remote Locations**
Increasing participation in all STEM Works programs especially in rural and geographically isolated, or historically underserved, regions of the state.
- **Sustainability**
Providing seed money to assist with planning and implementation, and helping districts achieve long-term viability with local funding.
- **Broadband**
Overcoming barriers to expanding Internet access will allow more schools and districts to participate in STEM programs and provide a more equitable accessibility to information for all Arkansas students.

Governor's Workforce Cabinet COHORTS I, II, III, and IV

Schools

New Tech Network

New Tech offers a model for schools to facilitate project-based learning across the curriculum. Students work in groups, deeply engaged in projects that encompass multiple disciplines of learning and large, open areas provide an environment for collaboration. Classroom teachers also serve as facilitators and guides and help students direct their own learning. New Tech currently serves 4,817 Arkansas students.

COHORT I (*Began 2011-12*)

Cross County High School
Lincoln High School

COHORT II (*Began 2012-13*)

Arkadelphia High School
Dumas High School
El Dorado High School
Highland High School
Hope High School
Marked Tree High School
Riverview High School
Van Buren High School

COHORT III (*Began 2013-14*)

Blytheville High School
Hillcrest High School
Rogers High School
Trumann High School

COHORT IV (*Begins 2014-15*)

Trumann Intermediate School

EAST Core

EAST schools (Environmental and Spatial Technology) are an Arkansas education innovation where student experience hands-on, project-based learning through community service projects. EAST Core is a division of EAST with the goal of expanding EAST's hands-on, project-based approach to the whole school and tying EAST experiences to a 21st-century curriculum. EAST Core currently serves 2,200 Arkansas students.

COHORT I (*Began 2012-13*)

Harrisburg High School
Hot Springs High School
Morrilton High School
Prairie Grove High School
Star City High School

COHORT II (*Began 2013-14*)

Malvern High School
Monticello High School

Project Lead The Way

Project Lead The Way (PLTW) offers a rigorous, project-based curriculum for schools in three areas: Technology, Engineering and Biomedical Sciences. PLTW focuses on the critical-thinking and problem-solving skills taught in traditional career and technical education classes while integrating national academic and technical learning standards and STEM principles. PLTW currently serves 7,382 Arkansas students.

COHORT I (*Began 2012-13*)

Gravette High School

Hope High School
Jonesboro High School
Monticello High School
Northark Technical Center

Prairie Grove High School
Riverview High School
Star City High School

COHORT II (*Began 2013-14*)

Beebe High School
McClellan High School
Morrilton High School
National Park Technical Center
Northeast Arkansas CT Center
Osceola High School

Ouachita Area High School Career Center
Paragould High School
River Valley Technical Center
Siloam Springs High School
Star City High School
Van Buren High School (*Two programs*)
Vilonia High School

COHORT III (*Begins 2014-15*)

Bentonville High School
Bentonville-Fulbright Jr. High School
Bryant-Bethel Middle School
Bryant Middle School
College of the Ouachitas-Ouachita Career Center
Dumas Jr. High School
Dumas New Tech High School
Farmington High School
Izard County High School

Little Rock-Forest Heights Middle School
Monticello Middle School
National Park Technology
North Little Rock High School
Pulaski County-Fuller Middle School
Pulaski County-Jacksonville Middle School
Pulaski County-Jacksonville High School
Springdale-Lakeside Junior High School
Texarkana-AR High School

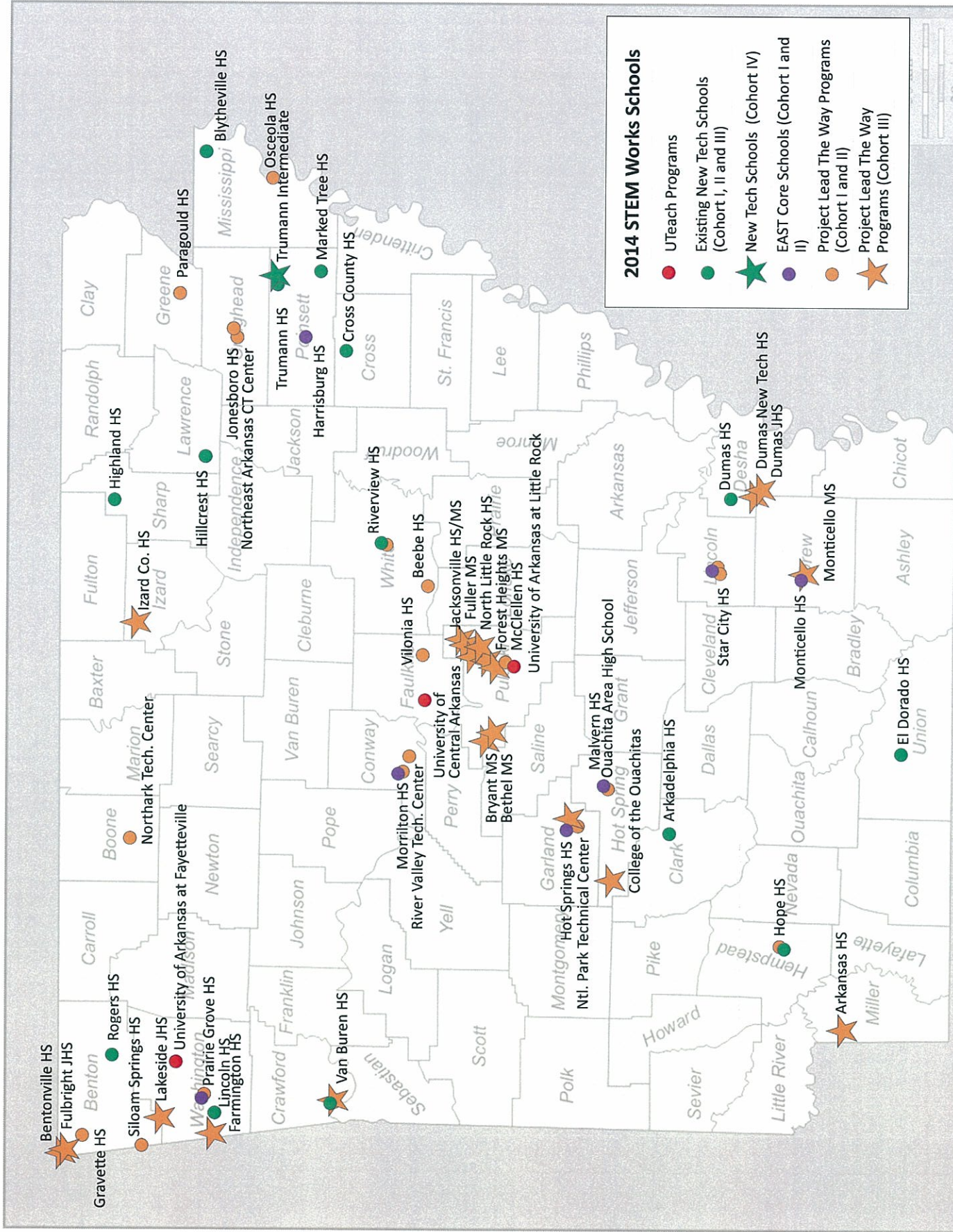
Universities

UTeach

UTeach is an innovative teacher preparation program created to attract science, mathematics, and computer science majors to secondary teaching careers, prepare them through an advanced field-intensive curriculum, and promote professional retention through induction support and ongoing professional development. The UTeach teacher preparation program has served 318 students since 2012.

COHORT I (*Began 2012-13*)

The University of Arkansas at Fayetteville
University of Central Arkansas
The University of Arkansas at Little Rock



2014 STEM Works Schools

- UTech Programs
- Existing New Tech Schools (Cohort I, II and III)
- ★ New Tech Schools (Cohort IV)
- EAST Core Schools (Cohort I and II)
- Project Lead The Way Programs (Cohort I and II)
- ★ Project Lead The Way Programs (Cohort III)

