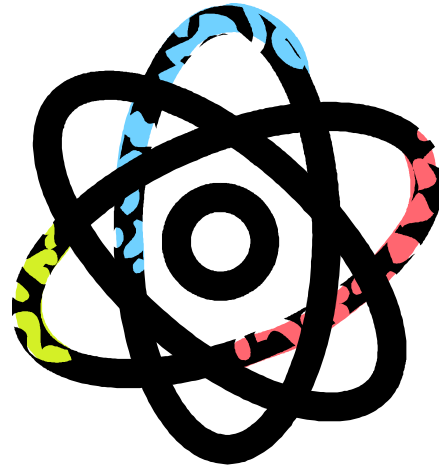


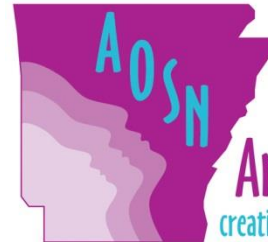
WELCOME!!!

The STEM Academy – Springdale, AR



STATE
ARKANSAS STATE
UNIVERSITY

Childhood Services



Arkansas Out of School Network
creating safe, healthy and enriching experiences for arkansas youth

Schools can't tackle this issue by themselves.

- Children spend less than 20% of their waking hours in school. OST programs offer both additional time and the opportunity to diversify the ways that students experience STEM learning.

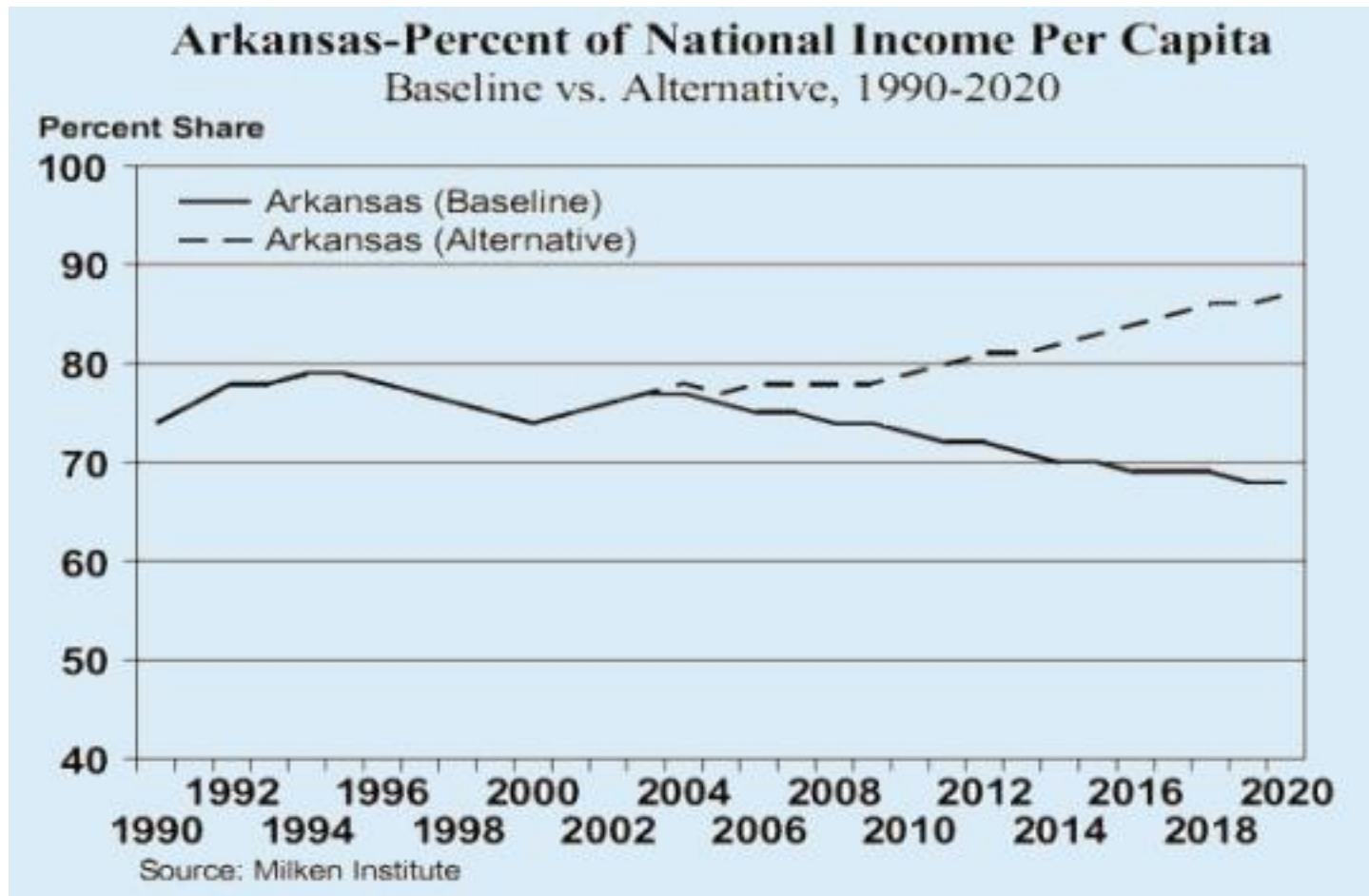
Why STEM and Afterschool

- **Afterschool programs complement and supplement school-day learning** and are well-positioned to engage and motivate participants. By offering innovative hands-on, project-based learning, STEM fields come alive for youth.
- **High-quality STEM afterschool programs produce positive outcomes:**
 - Improved attitudes toward STEM fields and careers
 - Increased STEM capacities and skills
 - Higher likelihood of graduation and pursuing a STEM career

“There is an urgent need to improve science, technology, engineering and math (STEM) skills among U.S. students.”

Nearly 80% of future careers will require some STEM skills. A stimulating STEM education is essential for developing the basic analytical, problem-solving and critical thinking skills central to academic achievement and workforce readiness in the 21st century.

Accelerate Arkansas



Accelerate Arkansas Strategies:

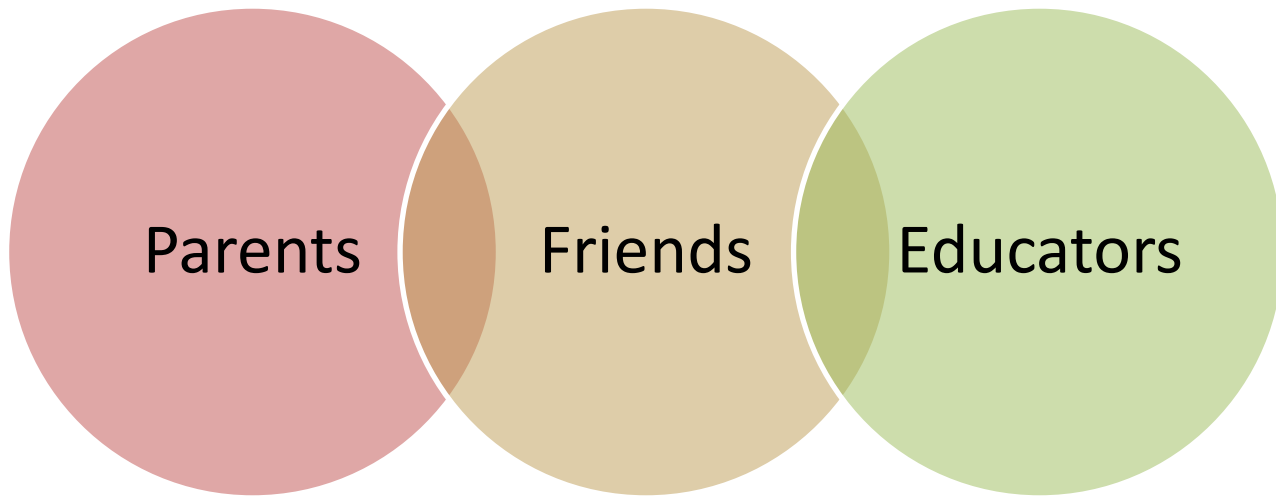
- Support job-creating research.
- Develop risk capital that is available for all stages of the business cycle, especially the funding gap.
- Encourage entrepreneurship and accelerated new enterprise development.
- Increase the education level of Arkansans in science, technology, engineering and math.
- Sustain existing industry through advancing technology and competitiveness.

OST STEM programs are best positioned to impact:

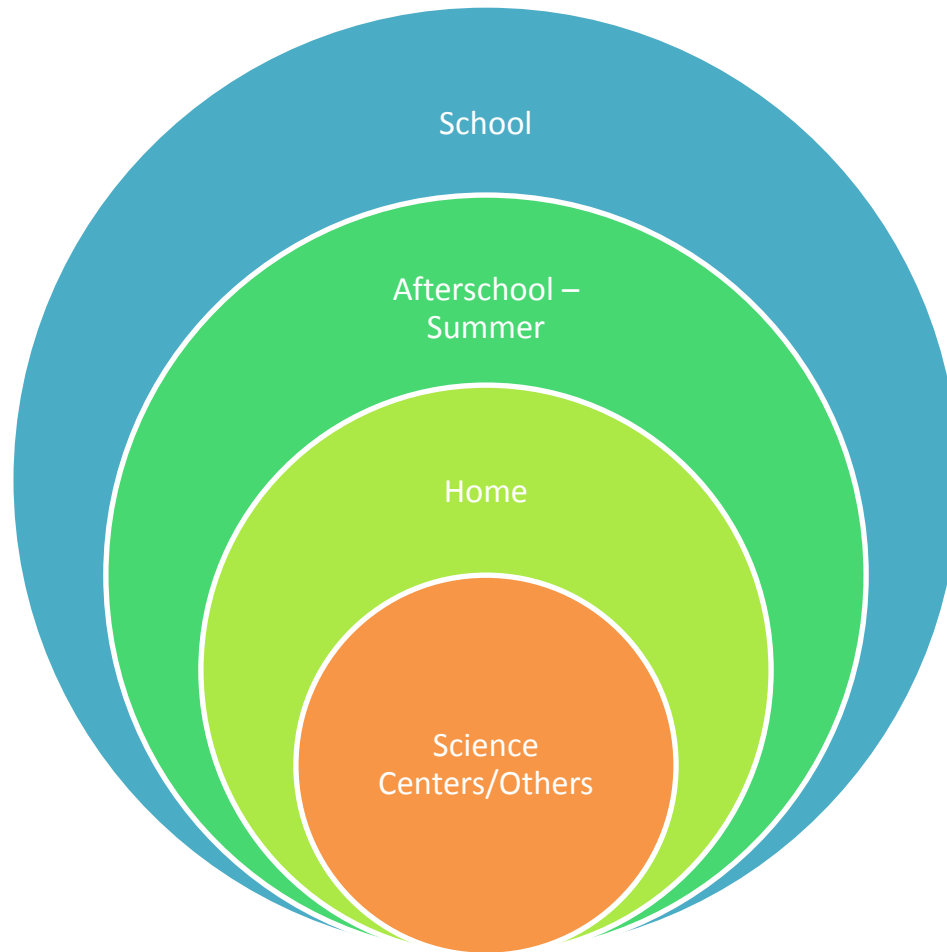
- Active participation in STEM learning opportunities
- Curiosity about STEM topics, concepts or practices
- Ability to productively engage in STEM processes of investigation
- Awareness of STEM professions
- Ability to exercise STEM relevant life and career skills
- Understanding the value of STEM in society

(The Afterschool Alliance)

The Informal STEM Learning Environment: Social Supports



Informal STEM Learning Environments



Research – Practice- Support

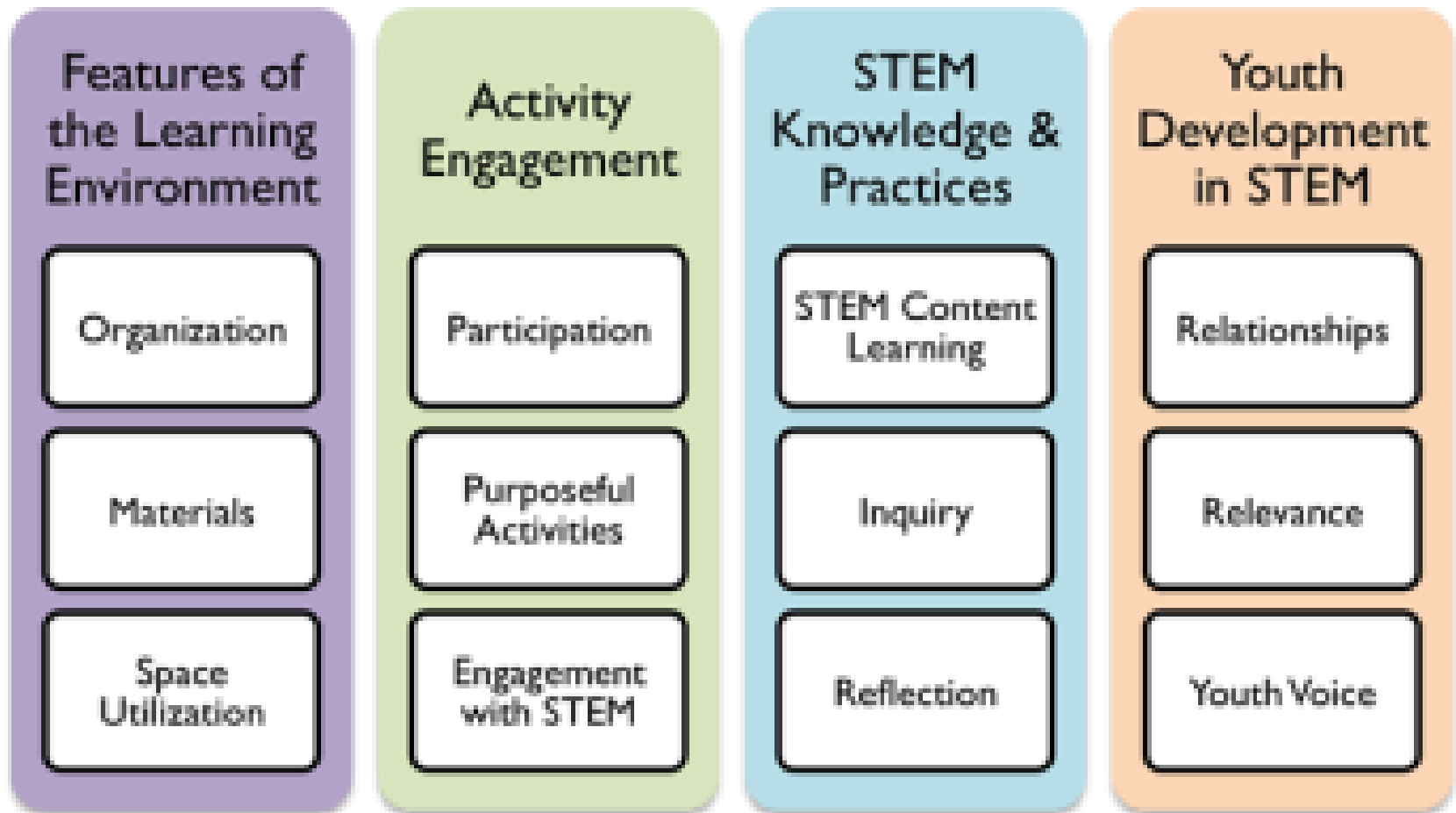
- The Afterschool Alliance STEM Youth Outcomes



The Dimensions of Success (DoS)

The Dimensions of Success observation tool, or DoS, defines twelve indicators of STEM program quality in out-of-school time (e.g., afterschool, summer camps, etc.). It was [developed and studied](#) with funding from the National Science Foundation (NSF) by the Program in Education, Afterschool and Resiliency (PEAR), along with partners at [Educational Testing Services](#) (ETS) and [Project Liff](#). The DoS tool allows researchers, practitioners, funders, and other stakeholders to track the quality of STEM learning opportunities and to pinpoint strengths and weaknesses.

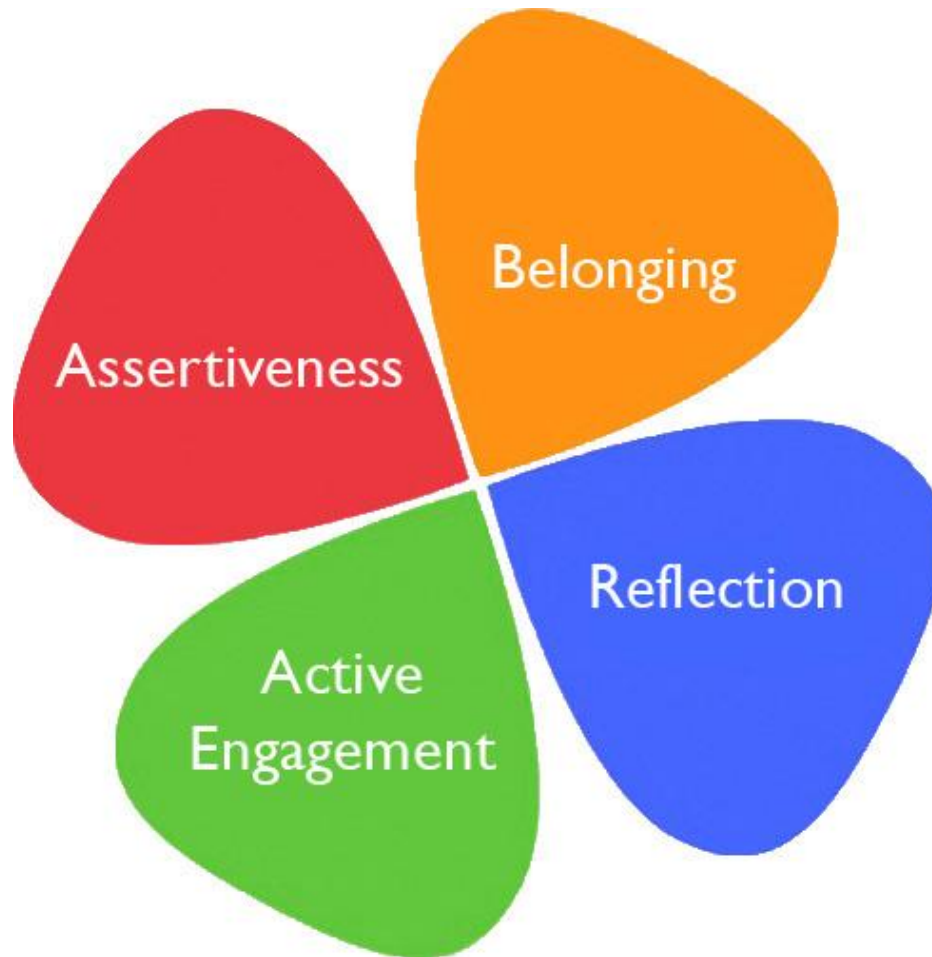
Dimensions of Success



Active Learning in STEM

- Active Learning STEM
- Purposeful, planned
- Supports STEM skills
- Reinforces STEM concepts
- Furthers development of STEM knowledge and practice
- A chance to reflect and make meaning
- Youth Voice
- Positive relationships

The Clover Model for Youth Development by Dr. Gil Noam, PEAR, Harvard University – is the foundation upon which the DoS Tool was built





Professional Development Situation: Coaching (Face to Face): The Click2Science Overview

Skill Focus: Preparing Yourself to Facilitate STEM

Time Required: 15 minutes

Arkansas Science Festival

Celebrate with us!

Science festivals are a celebration of science. We expect thousands of people to enjoy hands-on and educational activities, performances, demonstrations, displays and events that will be hosted throughout the state from mid-September through mid-October.

Come join the party!

For more
information email:
Amy Pearce at
apearce@astate.edu



HAVE FUN!!!!

