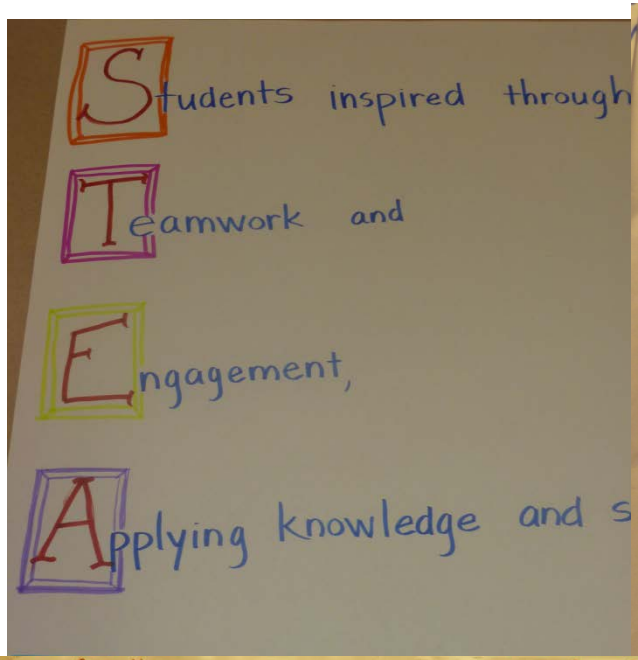
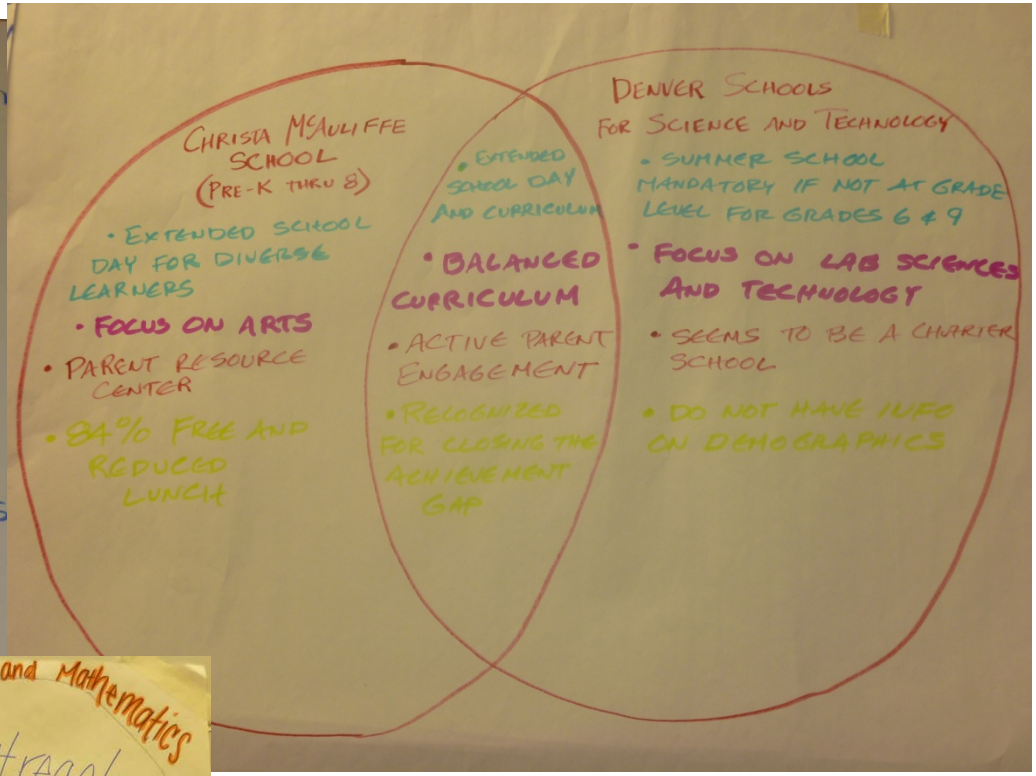
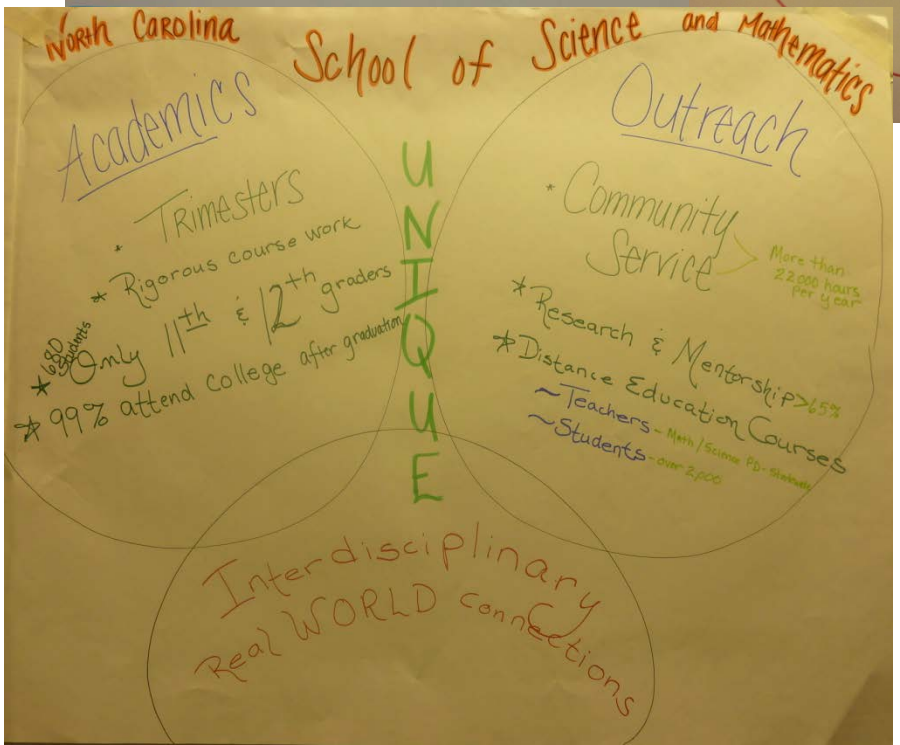

Students inspired through
Teamwork and
Engagement,
Applying knowledge and s


CHRISTA MCAULIFFE SCHOOL (PRE-K THRU 8)
• EXTENDED SCHOOL DAY FOR DIVERSE LEARNERS
• FOCUS ON ARTS
• PARENT RESOURCE CENTER
• 84% FREE AND REDUCED LUNCH
• EXTENDED SCHOOL DAY AND CURRICULUM
• BALANCED CURRICULUM
• ACTIVE PARENT ENGAGEMENT
• RECOGNIZED FOR CLOSING THE ACHIEVEMENT GAP
DENVER SCHOOLS FOR SCIENCE AND TECHNOLOGY
• SUMMER SCHOOL MANDATORY IF NOT AT GRADE LEVEL FOR GRADES 6 & 9
• FOCUS ON LAB SCIENCES AND TECHNOLOGY
• SEEMS TO BE A CHARTER SCHOOL
• DO NOT HAVE INFO ON DEMOGRAPHICS


North Carolina School of Science and Mathematics
Academics
Trimesters
* Rigorous course work
* Only 11th & 12th graders
* 99% attend college after graduation
* 650 Students
Outreach
* Community Service
More than 22,000 hours per year
* Research & Mentorship >65%
* Distance Education Courses
~Teachers - Math/Science PD - Statewide
~Students - over 2,500
UNIQUE
Interdisciplinary
Real WORLD connections

QRSD Outcome #3

Community Engagement/ Outreach (CSL projects)

H.S.

- Recycling club
- Prof. Devel. & Proj. Citizen
- HS-MS Friday Memo - featuring STEM

Middle

- After School After School clubs - "green" service learning
- Prof. development "Green in the middle"
- Parent night Info for Bridges Program STEM Projects displayed.
- Science Fair - Display at Art Show
- PARENT STEM ACADEMY

Elementary

- Jobs Program/ Green Club Leadership team (5-6)
- Service Learning (4-6)
- PD Service Learning
- FAMILY FUN NIGHTS
- (WB) WEEKLY NEWSLETTER
- Celebrate the Child Art / Music / Writing
- Community Math Day (K-6)
- DIGITS Gr 6
- DIGITS
- STEM PARENT ACADEMY

QRSD Outcome #1

ENROLLMENT

(Retain QSD students Recruit School Choice)

H.S.

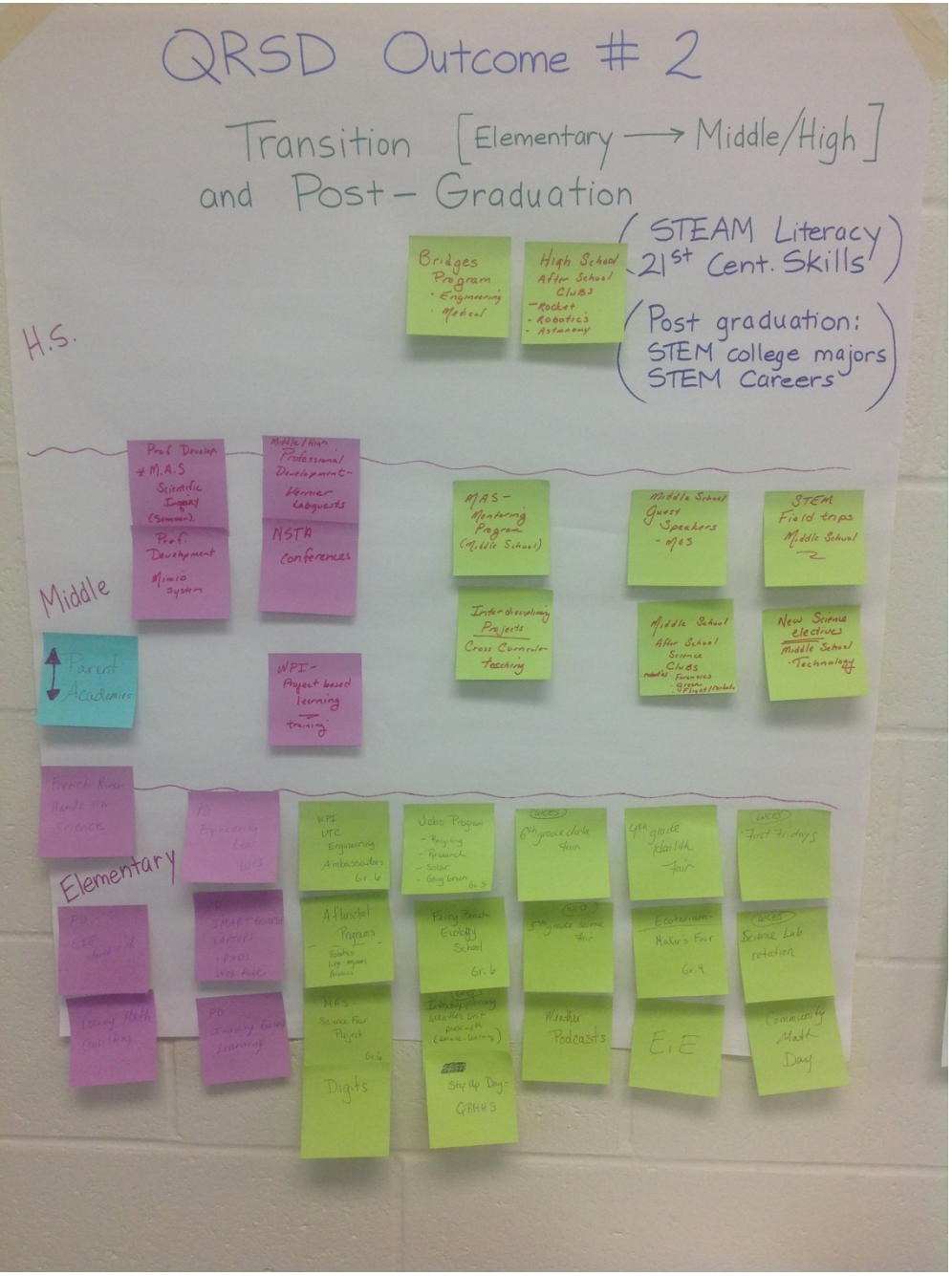
- Bridges Program
- 1 New Science Elective Engineering Tech
- Intro to Bridges #1
- #1
- #1

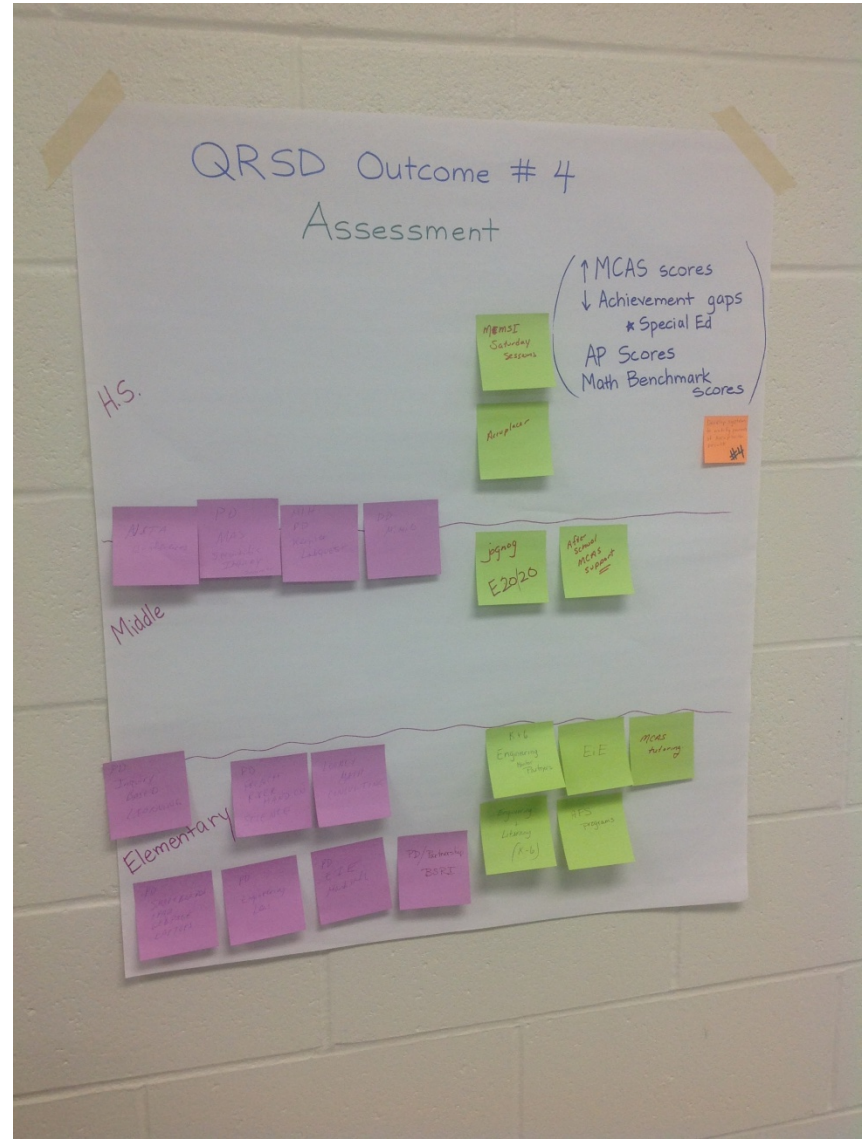
Middle

- Open House #1
- Use of Technology
- After School middle school programs
- Parent night Info for Bridges Program

Elementary

- Step Up Day


QRSD Outcome # 2
Transition [Elementary → Middle/High]
and Post-Graduation
(STEAM Literacy
21st Cent. Skills)
(Post graduation:
STEM college majors
STEM Careers)
H.S.
Bridges Program
· Engineering
· Medical
High School After School Clubs
- Rocket
- Robotics
- Astronomy
Middle
Prof Develop.
* M.A.S Scientific Inquiry (Summer)
Prof. Development
Mimio system
Middle/High Professional Development - Vernier Labquests
NSTA conferences
MAS - Mentoring Program (Middle School)
Middle School Guest Speakers - MOS
STEM Field trips Middle School
Interdisciplinary Projects
Cross Curricula - teaching
Middle School After School Science Clubs
New Science electives Middle School
· Technology
Parent Academies
WPI - Project based learning
training
Elementary
French River Hands On Science
WPI UTC Engineering Ambassadors Gr. 6
Jobs Program
- Recycling
- Research
- Solar
- Going Green Gr. 5
6th grade data fair
4th grade Health Fair
First Fridays
Afterschool Programs
Ferry Beach Ecology School Gr. 6
5th grade science fair
Ecotarium - Maker's Fair Gr. 4
Science Lab rotation
MAS - Science Fair Project Gr. 6
Digits
Weather Podcasts
EiE
Community Math Day
Step Up Day - QRMHS


QRSD Outcome # 4
Assessment
↑ MCAS scores
↓ Achievement gaps
* Special Ed
AP Scores
Math Benchmark scores
H.S.
MEMSI Saturday Sessions
Aeroplacer
#4
Middle
Jognog
E20/20
After School MCAS support
Elementary
EiE
MCAS tutoring
Engineering Lab
PD/Partnership BSRI

STEM Integration for District Leaders

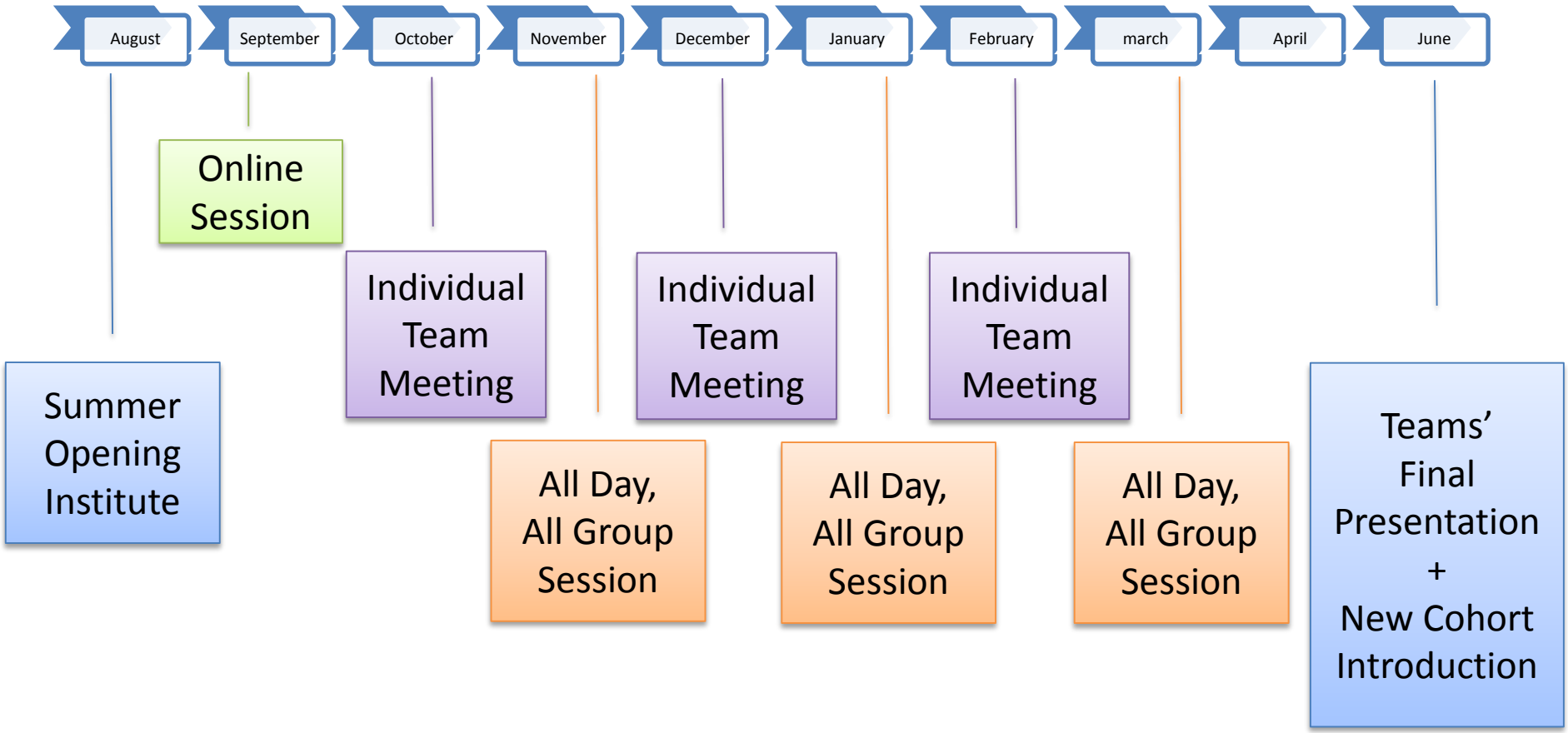
Program's goal:

To support district leaders as they develop a comprehensive, district-wide plan for STEM integration.

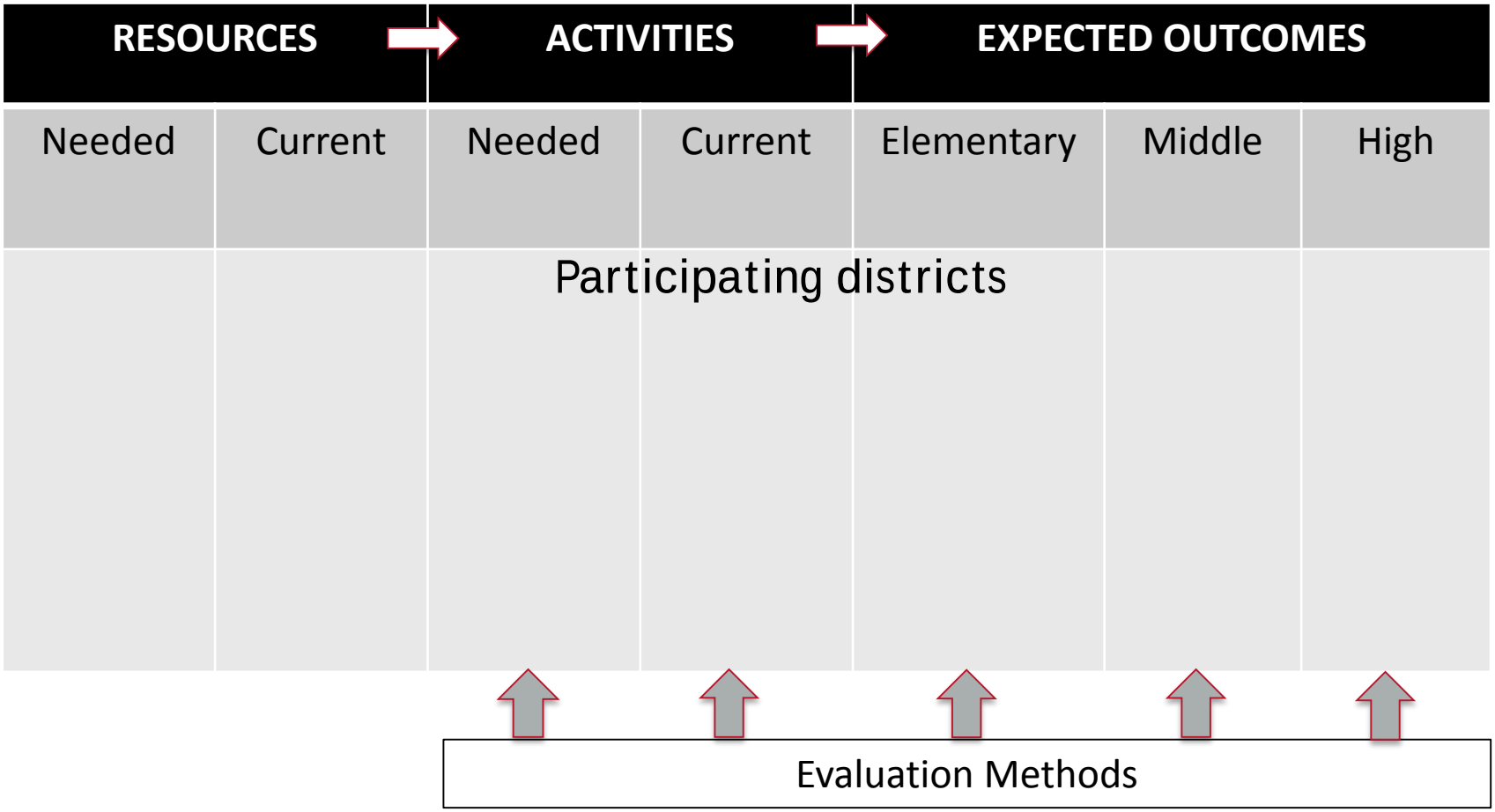
District leaders will:

- Review different models of STEM integration
- Set up STEM goals for their students
- List current programs that support the defined goals and identify needed activities
- Review integrated STEM curricula and technological tools
- Identify required resources to support the activities

The Program: Timeline



The Program: Logic Model



QUABOAG REGIONAL SCHOOL DISTRICT

Middle School Innovation Vision

- *To **inspire** students to consider STEM careers and apply to the High School Bridges program.*
- *To **engage** students in STEM by providing hands-on, project based learning opportunities both in the **classroom** and **after school**.*
- *To **gain competencies in important skills** that will be critical to success in high school/careers such as teamwork, problem solving, and communication skills.*
- *To **provide access** to and experience with **cutting-edge technology**.*

QUABOAG REGIONAL SCHOOL DISTRICT

Elementary School STEAM Vision

Students inspired through

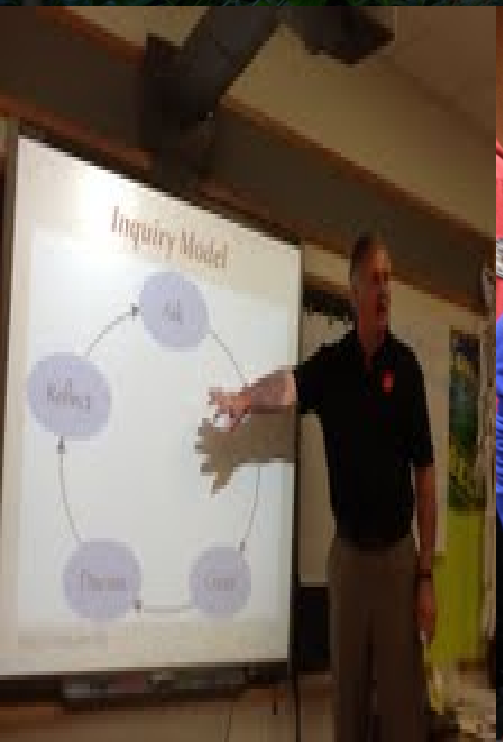
Teamwork and

Engagement,

Applying knowledge and skills to

Make a difference

Green and Renewable Energy
Seeds to Market


Inquiry Model

Stairs

QUABOAG REGIONAL SCHOOL DISTRICT

EXPECTED OUTCOMES	
Elementary	Middle -High
Enrolment (1) Retain students in elementary schools, ensure transition to Middle-High school (2) Recruit students to elementary schools	Enrollment (1) Retain (%) of students in QRSD (2) Recruit (#) students to QRSD through school choice (3) STEM programs/ECHS
Transition (1) Increase STEM literacy skills (2) Proficiency in 21st century learning expectations (develop rubric)	Post-Graduation (1) Increase graduation rate by (%) (2) Increase college-bound students by (#) (3) Increase (#) of college STEM majors applicants (4) Proficiency in 21st century learning expectations
Community Increase number of STEM community service learning projects to (#) per year	Community Increase number of STEM community service projects to (#) per year
Assessment (1) Increase MCAS scores by (%) (2) Decrease achievement gaps of low income students by (%) (3) Decrease achievement gaps of special education students by (%) (4) Increase math benchmark scores by (%)	Assessment (1) Increase MCAS scores by (%) (2) Decrease achievement gaps of low income students by (%) (3) Decrease achievement gaps of special education students by (%) (4) Increase qualifying scores on STEM AP courses by (%)