



# STEM

SCIENCE • TECHNOLOGY • ENGINEERING • MATHEMATICS

## STEM Perspectives



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**

# WHAT IS STEM?

Describe what you feel STEM is to the person sitting next to you.



# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION

# CHALK TALK

This activity will explore the multiple *perspectives* of STEM.

## What to do?

*Time= 30 min*

- On the screen we will post 9 different visual STEM models.
- Each model will be shown for 3 minutes so groups can discuss.
- ***For Each Model*** the group will create words, phrases, diagrams to better describe each perspective.

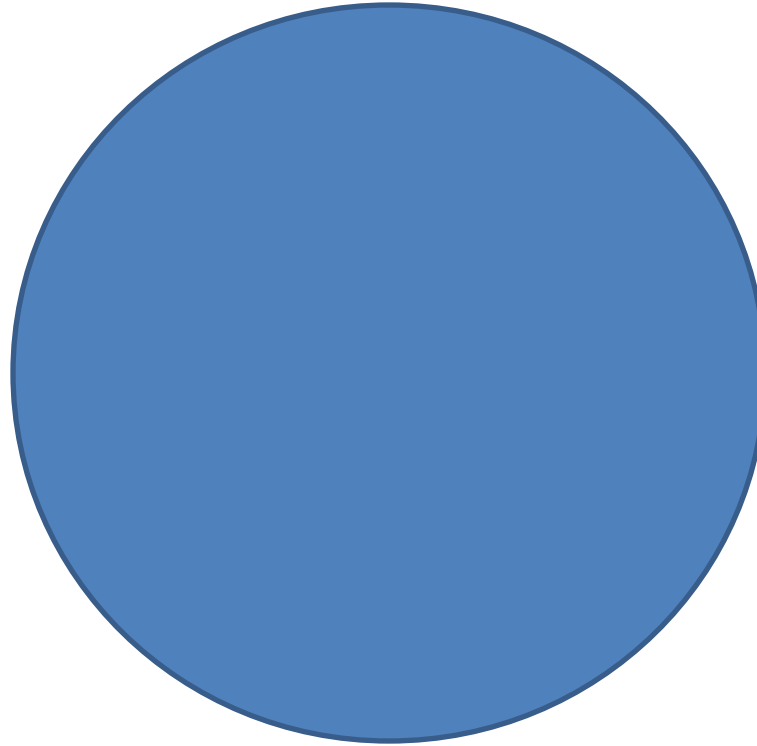


# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION

# SCIENCE



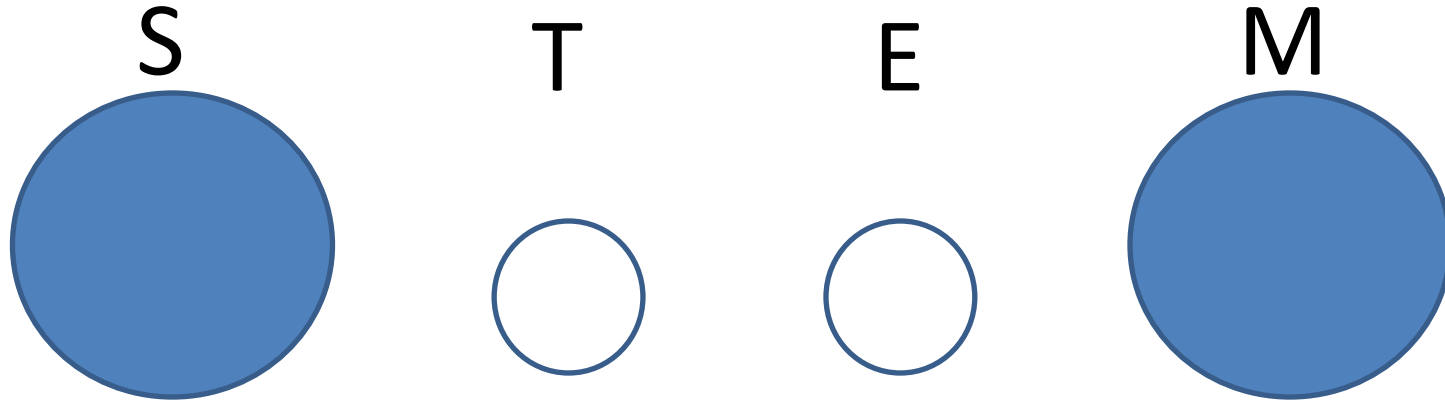
**Single-Discipline Reference**



# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION



**STEM as a Reference for Science and Math**

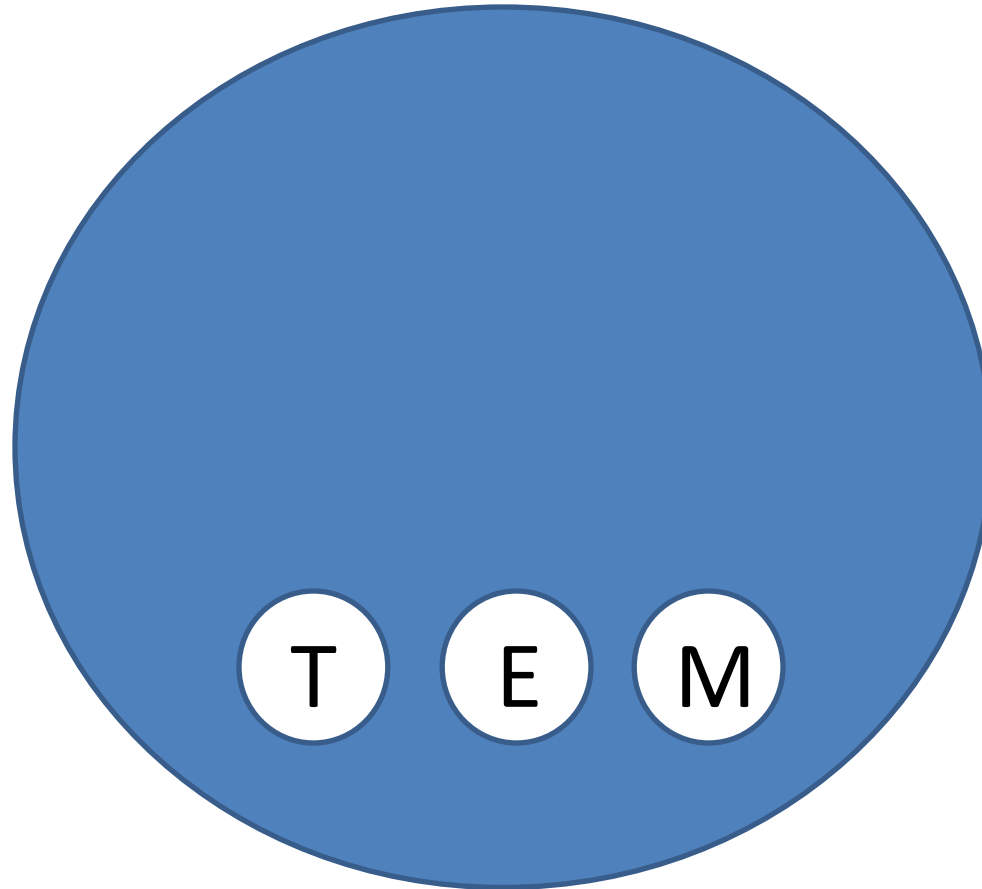


**STEM**



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**

SCIENCE



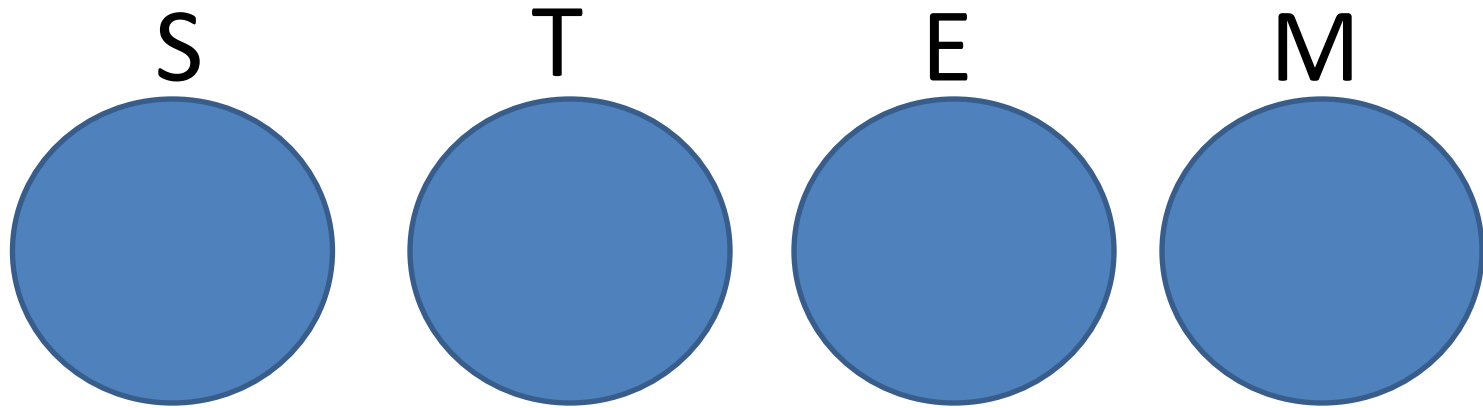
**Separate Science Disciplines That  
Incorporate Other Disciplines**



**STEM**



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**



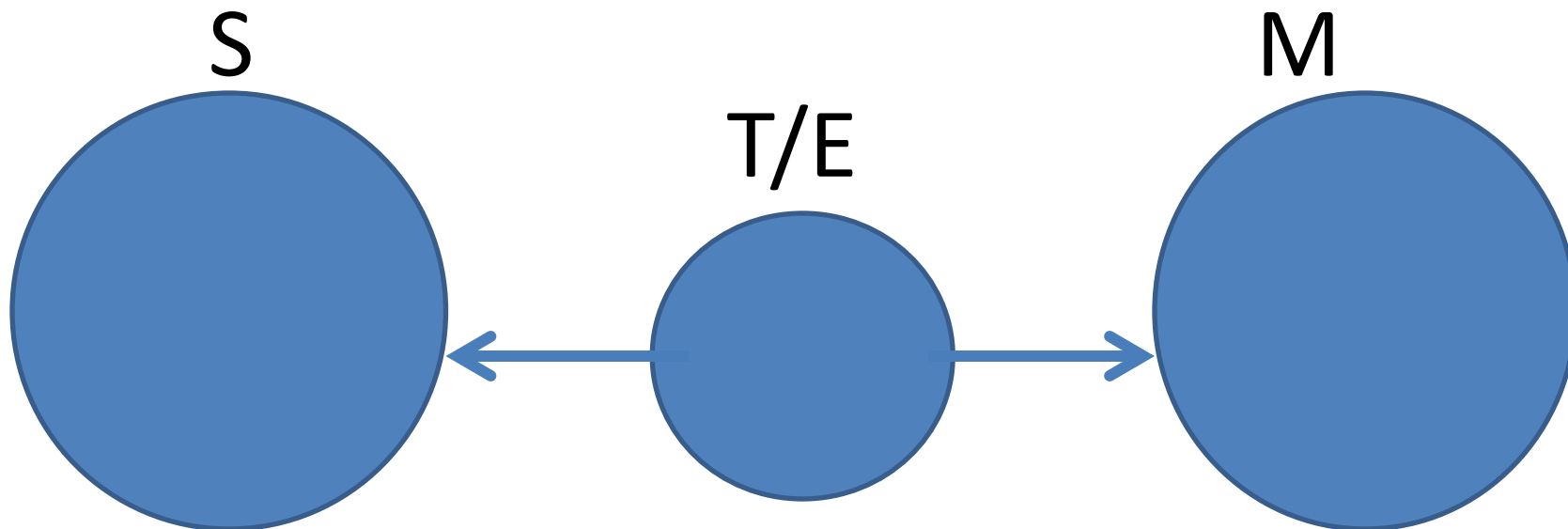
**Separate Disciplines**



**STEM**



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**



**Science and Math Connected By  
Technology or Engineering Program**

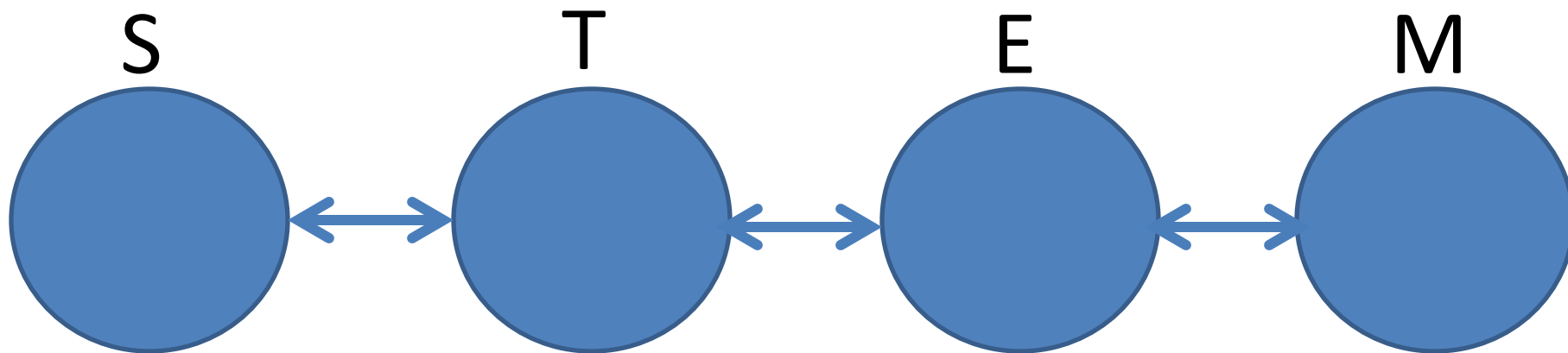


**STEM**



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**





## Coordination Across Disciplines

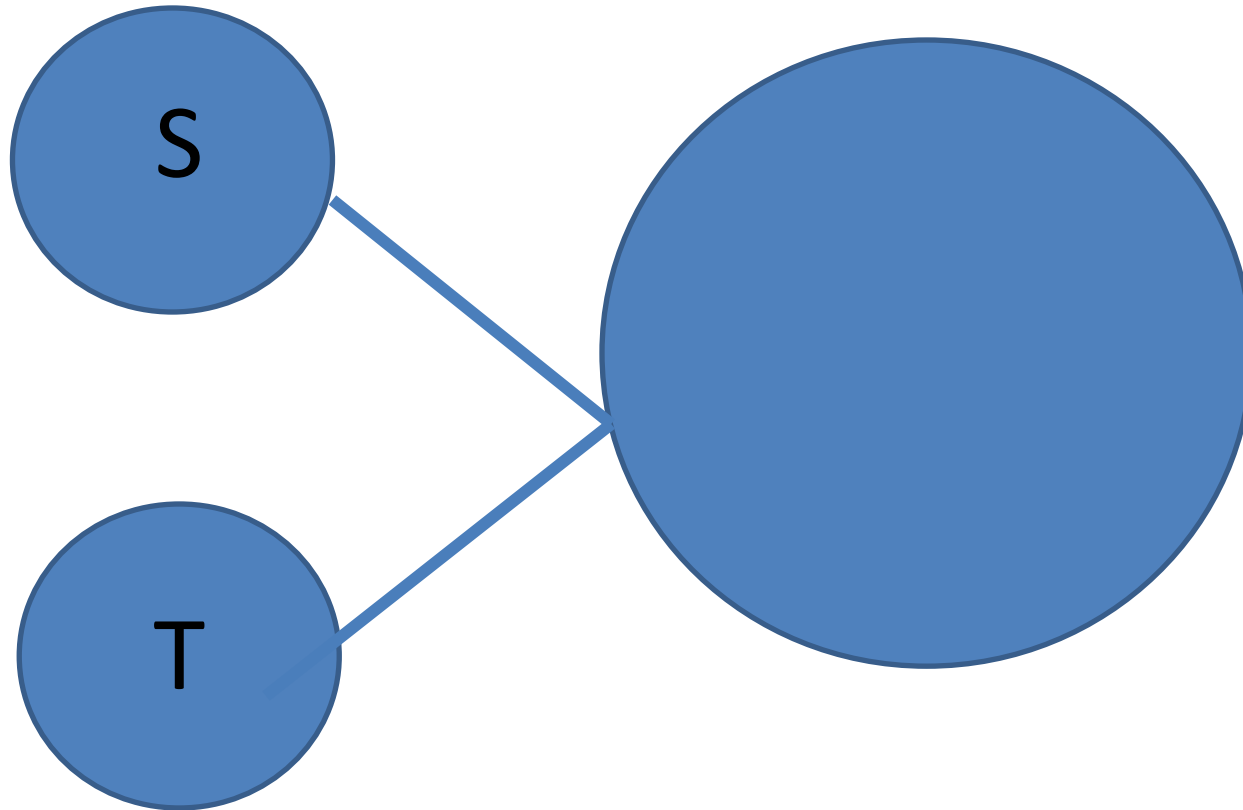


# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION

## ***Science and Technology***



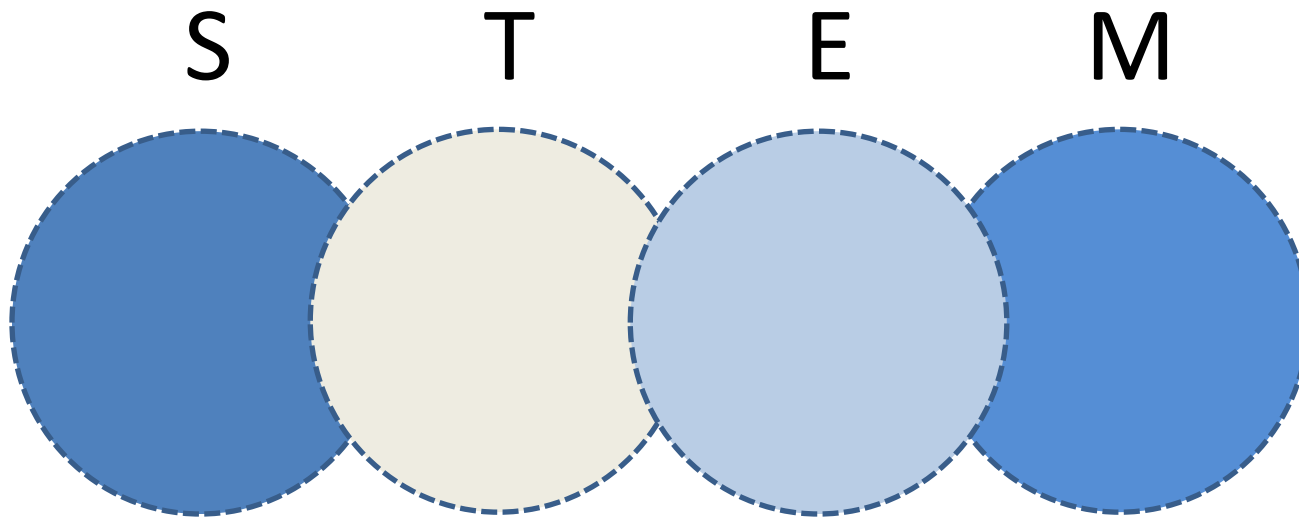
**Combining Two or Three Disciplines**



# STEM



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**



**Complimentary Overlapping Across Disciplines**

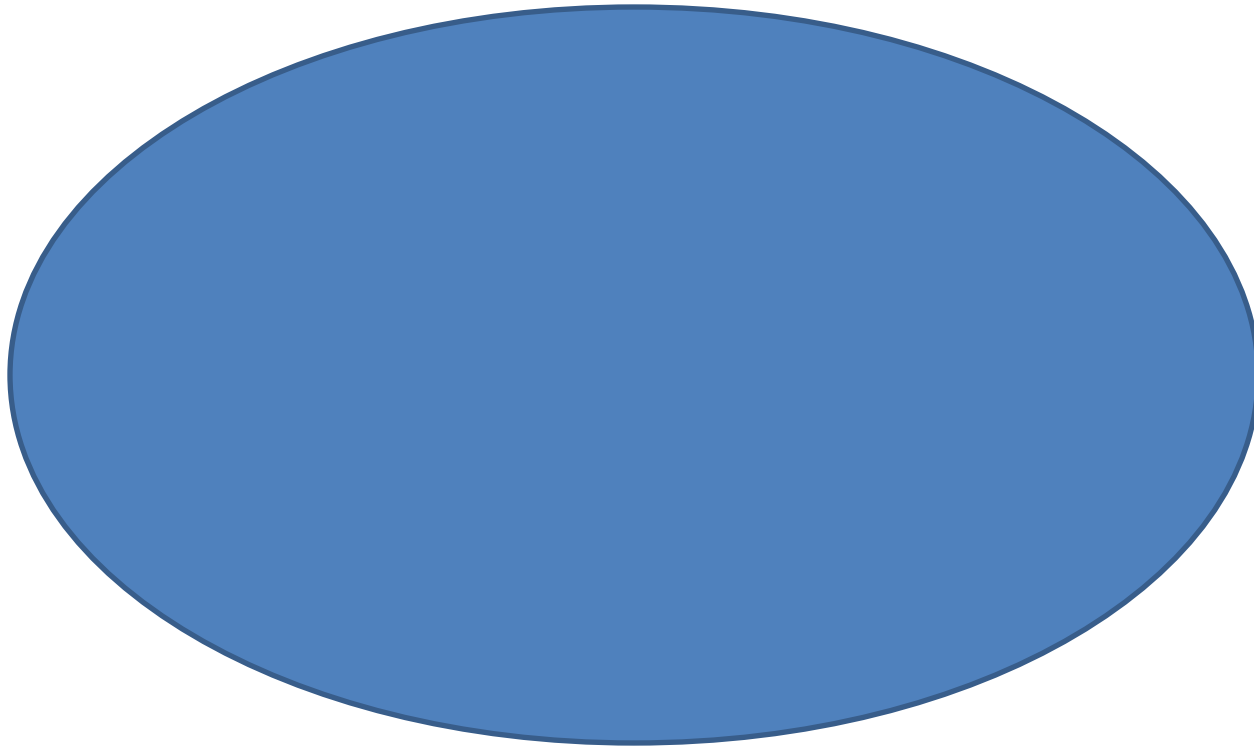


**STEM**



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**

# STEM



**STEM as a Transdisciplinary Course or Program**



# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION

# DISCUSSION

- Which perspective of STEM aligns with your vision of STEM?
- Have you adjusted your vision of STEM based on the perspectives you had a chance to view?
- Why is it important to think about perspectives of STEM rather than defining STEM?
- What now?



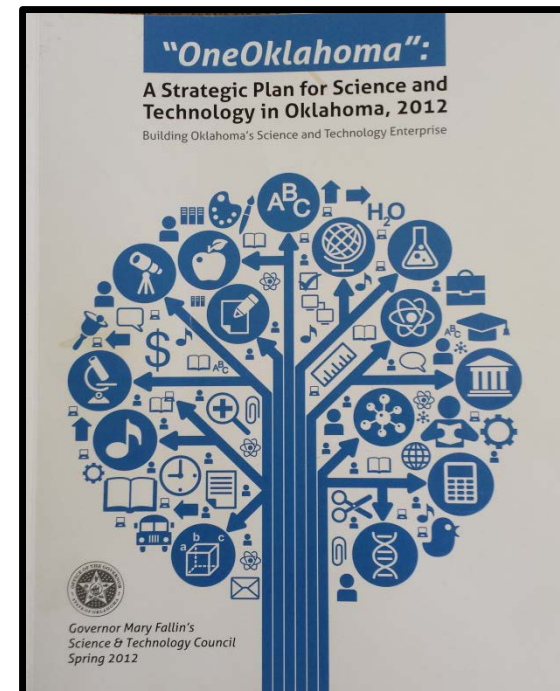
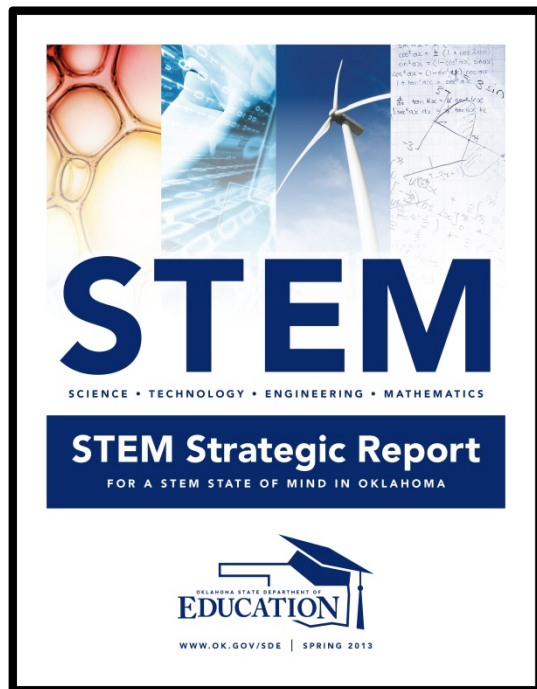
# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION

# WHAT IS OSDE STEM DOING?

- OSDE STEM Team has developed a K-12 STEM Strategic Report
- Complete alignment with Gov. Fallin's Science and Technology Council's Strategic Plan



# STEM



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**

# STEM VISION

- *To ensure Oklahoma students become inspired learners and prepared leaders who can solve the challenges of a world of vastly emerging STEM careers.*



# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION

# OSDE STEM TEAM

- Jeff Downs-*Executive Director of STEM*
  - Tiffany Neil – *Director of K-12 Science*
  - Jennifer Lamb – *Director of Elementary Math*
  - Levi Patrick – *Director of Secondary Math*
  - Lori Boyd – *Director of Advanced Placement*



# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION



# QUESTIONS?

- Contact information

Jeff Downs M. Ed.

Executive Director of STEM OSDE

[jeff.downs@sde.ok.gov](mailto:jeff.downs@sde.ok.gov)

<http://www.ok.gov/sde/>



# STEM



OKLAHOMA STATE DEPARTMENT OF  
EDUCATION