

STEM-Centered Learning Newsletter



STEM-Centered Learning Definition:

STEM-centered learning focuses student thinking and discussion around real-world phenomena, problems, issues, or events across all content areas with the purpose of students collaborating in order to make sense of the world and persevere in solving problems.



Indicators of Success:

- Wonder
- Sense Making
- Problem Solving
- Creativity
- Collaboration
- Communication
- Critical Thinking
- Grit

What is STEM-Centered Learning?

STEM traditionally stands for Science, Technology, Engineering, and Math. In Davis School District (DSD), STEM has been refined to incorporate eight key indicators: wonder, sense making, problem solving, creativity, communication, collaboration, critical thinking, and grit. Together, these eight indicators shape instruction in DSD to support student success and growth.

Teachers guide students to wonder about the world around them by engaging them in real-world problems, tasks, natural phenomenon, issues, or events allowing student questions to drive the learning. Students engage in exploratory inquiries, gain an understanding of gathered information, and assign meaning to perceived randomness. Additionally, students will focus on patterns for prediction to understand phenomenon. In DSD problem solving is a collaborative process of discovering solutions to difficult or complex issues.

When students work together on a problem they must think critically and creatively while also building self-awareness, self-management, and personal responsibility to the group. The problem-solving process requires students to utilize prior knowledge, analyze facts and gather data. By engaging students in creative problem solving we will equip students with vital skills for future success.

This year has been full of challenges and setbacks, but the STEM team is pressing forward. STEM-centered learning provides students the skills to innovate and thrive while being able to work through unknown real-world problems. The STEM newsletter will be sent out monthly and focus on the indicators of success and communicate the latest information about STEM-centered learning and opportunities in DSD.

STEM-Centered Learning Newsletter

STEM Indicator of the Month

Wonder

When teachers ask intentional questions to expand student thinking and help students explore concepts, learning is enriched and curiosity grows. Teachers asking intentional questions are nurturing student's sense of wonder and the result is a classroom full of students engaged in joyful and appropriately challenging learning.

When students wonder about their world, they experience a feeling of surprise mingled with admiration. We strive for students to experience something beautiful, unexpected, unfamiliar, or inexplicable every day. Teachers guide students to wonder about the world around them by engaging them in real-world problems, tasks, natural phenomenon, issues, or events allowing students to drive the learning.

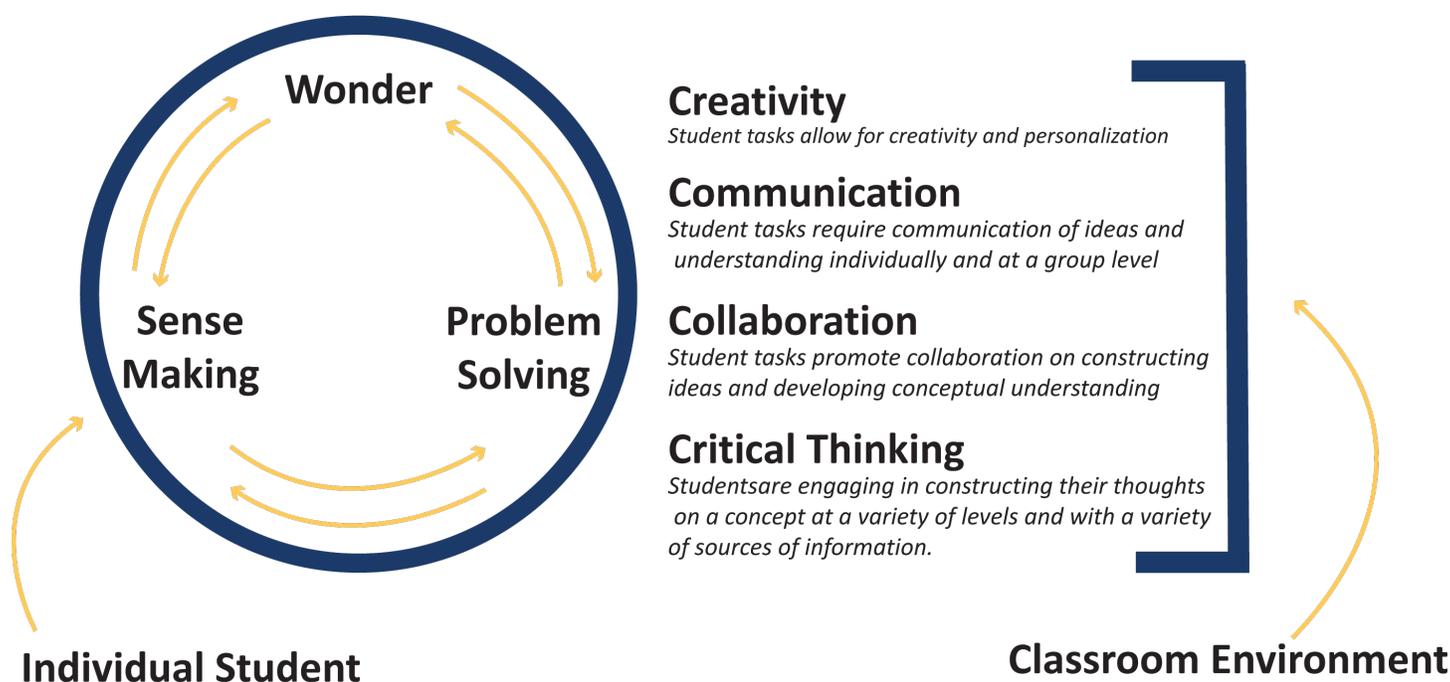


Figure 1. Student-centered model that drives STEM learning opportunities in Davis School District.

Upcoming STEM Professional Learning Opportunities

- 10/8/20- Utah Science Teacher Association Conference
- 10/22/20- Math Endorsement Class
- 10/29/20- Math Endorsement Class
- 11/5/20- Math Endorsement Class
- 11/2/20- STEM Prep Specialist Share-a-Thon
- 11/4/20- Computer Science Prep Specialist Share-a-Thon
- Ongoing- Utah Science with Engineering Education (SEEd) Standards K-12 Online Course
tinyurl.com/OnlineSEEdPD

STEM-Centered Learning Newsletter

Meet Our STEM Team

Tyson Grover
STEM Section Director
tgrover@dsdmail.net
801-864-8604



MaryEllen Marx
K-6 Computer Science Supervisor
mcarlson@dsdmail.net
801-402-5790



Annette Foncesbeck
K-12 Science Supervisor
afonnesbeck@dsdmail.net
801-402-5145



Alexa Jensen
STEM Analyst/Coordinator
alejensen@dsdmail.net
801-402-5162



Celeste Harding
Interim K-6 Math Specialist
charding@dsdmail.net
801-402-5277



Julie Sargent
Administrative Assistant
jsargent@dsdmail.net
801-402-5128



Jennifer Walker
Interim K-6 Math Specialist
jennwalker@dsdmail.net
801-402-5270



Margo Hammond
Administrative Assistant
mhammod@dsdmail.net
801-402-5251



Trisha Syversen
Interim Secondary Math Specialist
tsyversen@dsdmail.net
801-402-5263

