

<https://bit.ly/URSASTEM25>

Note Catcher

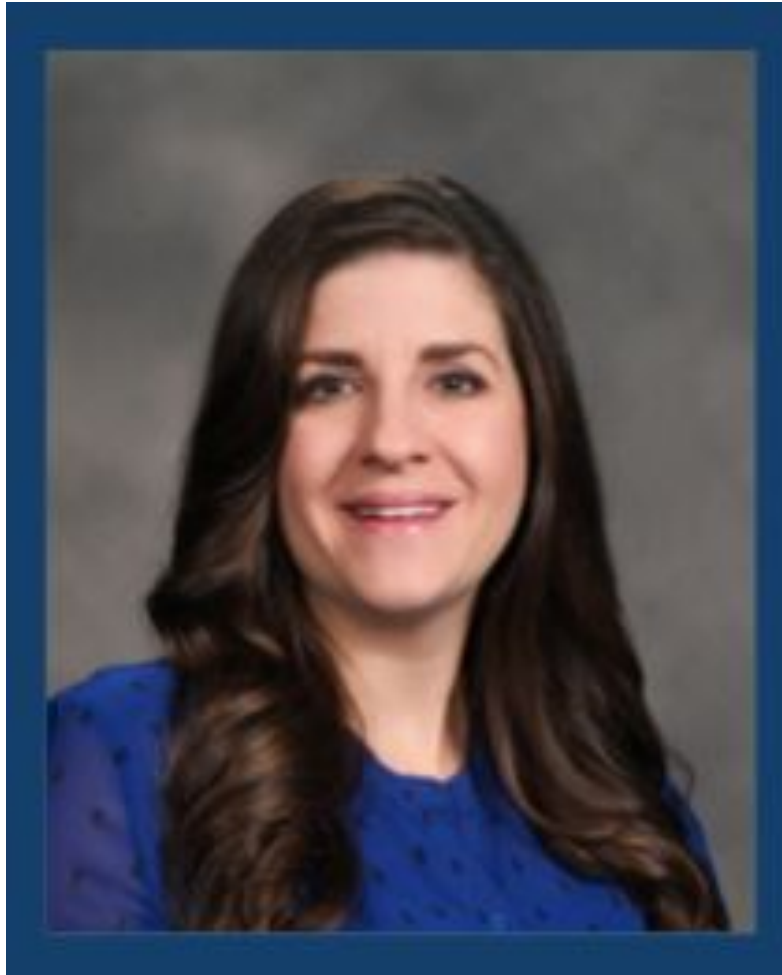


Rural Utah STEM

A deep dive into the National Academies Report for Action

Link: [K-12 STEM Education and Workforce Development in Rural Areas](https://bit.ly/URSASTEM25)

Introduction



Title: USBE Elementary Science/STEM Specialist

Experience: 17 years in education, elementary teacher, math instructional coach, K-12 STEM instructional coach

When I'm not at work: I love spending time with my family (husband, daughter, son, and dog). I also love being outdoors when it's warm. I enjoy crafting and cooking.

Learning Intentions

- Dive into key insights from the National Academies Report on K-12 STEM Education and Workforce Development in Rural Areas, specifically chapters 5 and 6.
 - Identify opportunities and challenges related to creating effective STEM learning experiences
 - Identify opportunities and challenges related to recruitment, retention, place based learning, and professional learning
- Start Action planning concrete next steps.

Which Image says STEM?





Report Highlights (5 minutes)

- Read independently
 - What do you notice?
 - What do you wonder?
 - Does anything surprise you?
 - Is there anything relatable?

Chapter Deep Dive

Chapter 5

Effective STEM Learning Experiences and Pathways

- Productive STEM Experiences
- Leveraging Assets
- STEM Pathways and Workforce

Chapter 6

Educator Recruitment, Retention, and Professional Learning

- Recruitment and Retention
- Professional Learning
- Promising Practices

Chapter Jigsaw

- **Activity - Identify Opportunities/Challenges related to your chapter**
 - 10 mins individual reading.
 - 10 mins for individual or small group brainstorming, jotting down ideas.
 - **Capture these ideas visibly.**
 - 5 mins brief group share-out of few key opportunities/challenges.

Research Review Jigsaw

Chapter 5: Effective STEM Learning Experiences and Pathways

- **What do productive experiences look like? (128-135)**
 - How People Learn in STEM
 - Effective Instruction
 - Role of Instructional Materials
- **Leveraging assets of rural communities? (135-140)**
 - Leveraging Local Rural Knowledge
 - Place-Based Learning Experiences
 - Culturally Competent Instruction
- **STEM pathways and workforce development (141-147)**
 - Building Pathways
 - Developing and Leveraging Partnerships and Network

Research Review Jigsaw

Chapter 6: Educator Recruitment, Retention, and Professional Learning

- **Recruitment and retention (155-160)**
 - Geographic Isolation
 - Salaries
- **Assets and professional learning (161-164)**
- **Promising Practices (164-169)**
 - Pre Service Teacher Training for Rural Areas
 - Grow Your Own (GYO) and Rural Residency Programs
 - Teacher Recruitment
 - Teacher Retention
- **Professional Learning (160-161, 169-175)**

Additional Resources

- [Resource library- STEM Action Center](#)
- [CTE Pathways](#)
- [Computer Science Grant](#)
- [Resource links and ideas](#)
- [21st CCLC federal grant](#)
- [UtahCF- Contact Kristina Yamada](#)
- [ECEP](#)
- [CTE Pathways- Advanced Engineering and Computer Science](#)
- [Four Corners Meeting supporting Native American Students](#)
- [Rural STEM Education: Promising Practices from Rural California](#)

Chapter Jigsaw

20:00

- **Activity - Identify Opportunities/Challenges related to your chapter**
 - 10 mins individual reading.
 - 10 mins for individual or small group brainstorming, jotting down ideas.
 - **Capture these ideas visibly.**
 - 5 mins brief group share-out of few key opportunities/challenges.

07:00

What's Happening in Your Space?

- Identify project, initiative, or resource in your context.
 - **Brief summary**
 - **Leverage Local Assets**
 - Natural Environment
 - Community Networks
 - Local Industries

Action Planning (5-7 minutes)

- Individual Action Plan template:
 - **Planned Change:** specific action, initiative, or project
 - **Hope:** desired outcome and impact
 - **Steps:** concrete steps
 - **Supports:** resources and people
 - **Progress:** tracking progress
- Choose idea, opportunity, or challenge from the previous discussions that resonates and begin filling out your [Individual Action Plan](#).

Goal: "Hope" and first "Steps"

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Closing Reflection

On 3 post-its, jot down:

- One thing to appreciate from the day.
- One thing that was an a-ha for you today.
- One ask you have, lingering questions (feel free to put in more)

Place on the poster

Staying Involved

- [SSC- listserv](#)
- [National Academies Website](#)
- [USBE Science Website](#)
- [Elementary Science & Engineering](#)
- [Secondary Science & Engineering](#)
- [CTE- listservs](#)
- [Emedia hub](#)



Questions

Thank you!

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