Welcome & Poll

Please type your name, organization, and role in the chat

Which STEM Career competency do you find most intriguing and why?
Technical Information

- This Q&A session is being recorded and will be shared post-event
- Participants will be muted
- Chat is available for questions, conversations, and comments

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STEM Learning & Research Center (STELAR)

- NSF Resource Center for the Innovative Technology Experiences for Students and Teachers (ITEST) Program

- Education Development Center (EDC) has supported the ITEST program since 2003

- STELAR assists both ITEST grantees and those interested in submitting a proposal
What STELAR does:

- Facilitate projects’ success through technical support
- Inform and influence the field by disseminating ITEST project findings through project syntheses
- Deepen the impact and reach of the program by broadening participation in the ITEST portfolio
STELAR Website:

Resource Library

ITEST Proposal Development

ITEST Project Profiles

- GET TO KNOW ITEST
- PREPARE YOUR PROPOSAL FOR SUBMISSION
- DEVELOP A ROBUST RESEARCH DESIGN
- CREATE AN EFFECTIVE EVALUATION STRATEGY
- CONNECT WITH PARTNERS
- REACH UNDERSERVED POPULATIONS
- DEVELOP THE WORKFORCE OF THE FUTURE
STEM Learning and Research Center (STELAR)

National Science Foundation

Innovative Technology Experiences for Students and Teachers (ITEST) Program

ITEST-funded research and development projects

STELAR synthesizes and disseminates findings to the STEM education field

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This framework identifies 10 foundational career competency areas correlated to characteristics of future work at the Human Technology Frontier and what thought leaders in the field believe successful workers in those environments need to know and be able to do. It is meant as a guide for teachers interested in helping their students develop the foundations of skills, knowledge, and abilities needed to be successful in life when they exit formal schooling. Many of the suggested competencies may already be included in the curriculum or pedagogy in K-8 classrooms. In those cases, this guide may simply help teachers connect what they are already doing to prepare their students for success in future work. It also suggests competencies and resources to help teachers make connections across disciplines.

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K-8 STEM CAREER COMPETENCIES: DEVELOPING FOUNDATIONAL SKILLS FOR THE FUTURE OF WORK

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Today’s Facilitators
Today’s Q&A Session

• Review of framework focus and motivation behind this work
• An overview of the competencies
• Q&A
Motivation Behind this Framework
World of work is changing

• Employment in engineering occupations is projected to grow 3 percent from 2019 to 2029 (about 74,800 new jobs)

• Employment in computer and information technology occupations is projected to grow 11 percent from 2019 to 2029 (about 531,200 new jobs)

• NSF's Human Technology Frontier
1. Predominance of Dynamic, Interdisciplinary Teams
2. Focus on Data
3. Artificial Intelligence
4. Ubiquitous Computational Thinking
5. Engineering Design/Design Thinking
6. Convergence/Focus on Life Sciences
7. Cybersecurity
8. Blurred Boundaries between Humans and Machines
9. Lifelong and Flexible Learning
10. Ethics at the Human Technology Frontier
What is in this Framework?

1. Artificial Intelligence Literacy
2. Computational Thinking
3. Digital and Media Literacy
4. Cybersecurity & Digital Citizenship
5. Data Literacy
6. Dynamic Interdisciplinary Teaming
7. Design Thinking
8. Systems Thinking
9. STEM Career Development
10. Lifelong and Flexible Learning
Why this Framework?

The **K-8 STEM Career Competencies Framework** is designed to support teachers in integrating opportunities for students into curricula

- Skill awareness
- Knowledge development
- Required attributes

**Question answered in this framework:**

*What can we do in K-8 to help students develop awareness, explore, and start to prepare for careers in this changing world of work?*
Question & Answer Session
Thank you!

If you have questions or comments, please do not hesitate to contact us at:

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Or visit us at:

www.stellar.edc.org
Evaluation

Please take the time to complete a brief evaluation:

https://edc.co1.qualtrics.com/jfe/form/SV_9XdI7sgzECK5nWS