

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



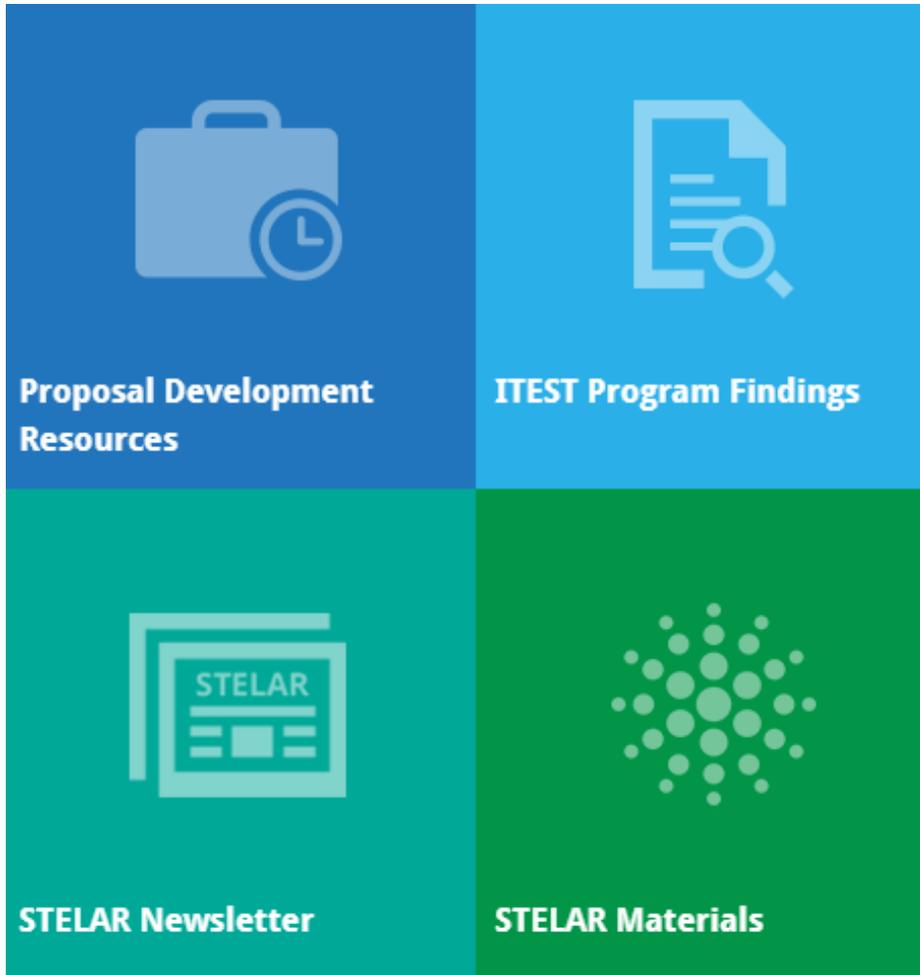
This material is based upon work supported by the National Science Foundation under DRL1312022, 1614697 and 1949200. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



STEM Learning & Research Center (STELAR)

- NSF Resource Center for the **I**nnovative **T**echnology **E**xperiences for **S**tudents and **T**eachers (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

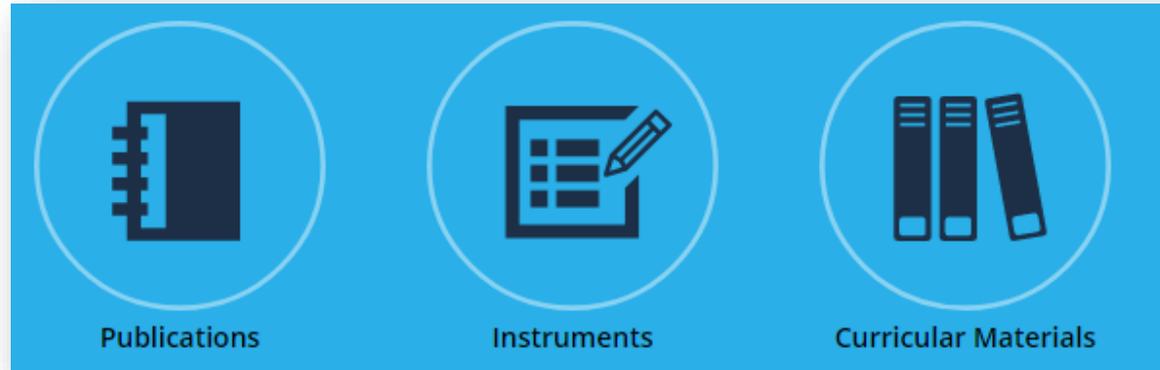
What STELAR does:



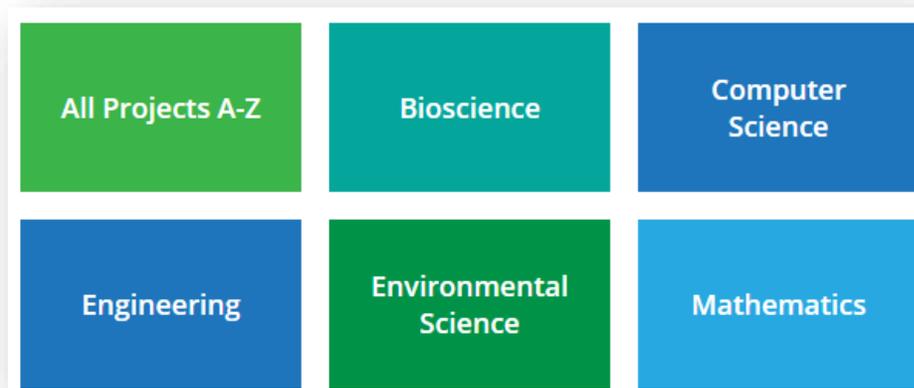
- Facilitate projects' success through technical support
- Inform and influence the field by disseminating ITEST project findings through project syntheses
- Deepen the impact and reach of the program by broadening participation in the ITEST portfolio

STELAR Website:

Resource Library



ITEST Project Profiles



ITEST Proposal Development



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

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

Facilitators: Joyce Malyn-Smith, Jessica Juliuson, Sarah MacGillivray, &
Clara McCurdy-Kirlis

For more information contact: Joyce Malyn-Smith, Distinguished Scholar at jmalynsmith@edc.org



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Joyce Malyn-
Smith



Jessica
Juliuson



Clara McCurdy-
Kirlis



Sarah
MacGillivray



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

Introduction

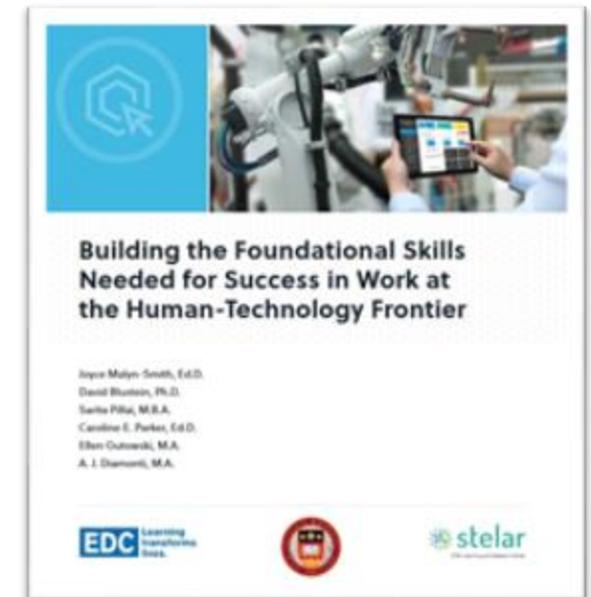
World of work is changing

- 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



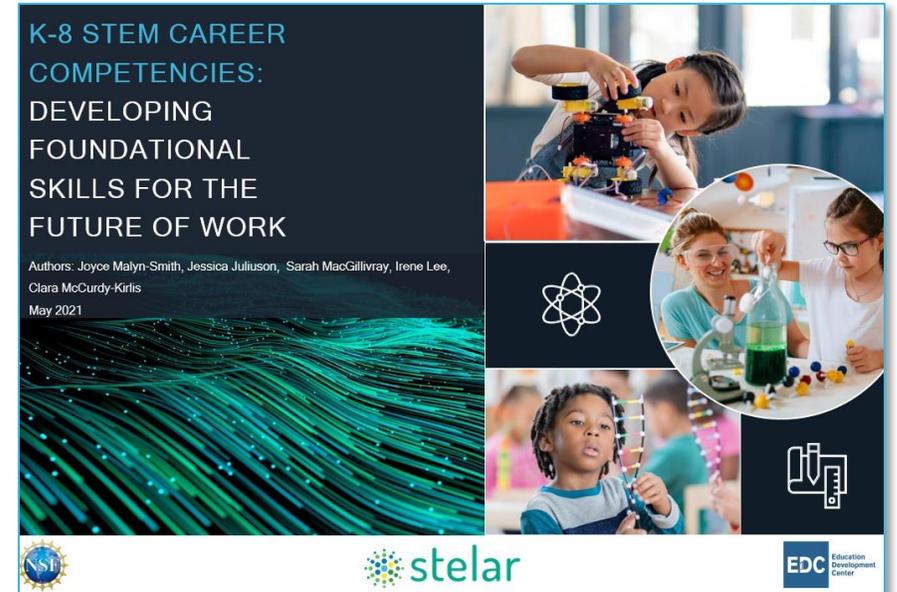
Foundational Skills Needed for Success in Future Work: 2016 Report

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:

STELAR@edc.org

Or visit us at:

www.stelar.edc.org

Evaluation

Please take the time to complete
a brief evaluation:



https://edc.co1.qualtrics.com/jfe/form/SV_9Xdl7sgzECK5nWS