Welcome & Polls

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

What challenges are you facing around equity in your community?
• This webinar is being recorded and will be shared post-event
• Participants will be muted
• Chat is available for conversations
• Type questions into the Q&A pod
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

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
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
For more information:

• Email the team at STELAR@edc.org
• Join the STELAR mailing list: https://go.edc.org/STELAR-MailingList
• Follow us on Twitter: @STELAR_CTR
Developing the Next Generation of Talent: Perspective from the Field on Equity and The Future of Work

Presenters: Joyce Malyn-Smith, Eden Badertscher, Kevin Waterman

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Today’s Presenters

Joyce Malyn-Smith

Kevin Waterman

Eden Badertscher
Today’s Webinar

• Introduction and Overview of the Report
• Developing the Report
• The Equity Systems Change Compass
• Q&A
Part 1: Introduction and Overview of the Report
History and Evolution of the Report and the Compass
Building the Foundational Skills Needed for Success in Work at the Human-Technology Frontier

K–8 STEM Career Competencies: Developing Foundational Skills for the Future of Work
History and Evolution of the Report and the Compass
Guiding Questions

1. How can we best help educators and new, existing, and emerging private and public sector community members generate important equity questions related to the future of work?

2. How can we facilitate a deeper understanding of inequity in employment, learning, and work preparation systems?

3. How can we engage in actions that respond to human needs and promote human development for all?
Part 2: Developing the Report
1. What changes have occurred in the workplace, and how have they impacted equity?

2. What additional research and development are needed to encourage new ways of teaching and learning that will advance equity?

3. What are important elements of the new workplace that will affect the future success of our diverse students?

4. What learning innovations and new content will support students in their learning, both now and in the future?
The Champions Working at the Front Lines of Equity

Jacob Martinez, Founder of Digital NEST

Ritu Raman, Engineer, innovator, writer, and the d’Arbeloff Career Development Assistant Professor of Mechanical Engineering at MIT

Rich Milner, Chair of Education, Department of Teaching and Learning, Vanderbilt Peabody College

Marie Marquardt, Scholar-in-Residence at Emory University’s Candler School of Theology, Author, and Immigration Advocate

David L. Blustein, Professor and the Golden Eagle Faculty Fellow, Boston College
The Champions Working at the Front Lines of Equity (Cont.)

Stanley Andrisse, Endocrinologist Scientist and Faculty at Howard University College of Medicine

The Venerable Tenzin Priyadarshi, Director of the Ethics Initiative at the MIT Media Lab and President & CEO of The Dalai Lama Center

Juma Inniss, Founder and Director of The Message

Syrita Steib, Founder and Executive Director of Operation Restoration

Matthew Kincaid, Educator and Founder/CEO of Overcoming Racism
Greater Boston Area

Young Champions of Equity: Youth Focus Group

Young People’s Project (YPP) high school Math Literacy Workers (MLWs) and College Math Literacy Workers (CMLWs)
Human Needs Nexus

- Autonomy
- Security
- Well-being
- Competence
- Relatedness
Overview of the Compass

NSF’s STEM Learning & Resource Center (STELAR) Presents:
Developing the Next Generation of Talent
Perspectives from the Field on Equity and the Future of Work
stelar@edc.org

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Part 3: The Equity Systems Change Compass
The diagram that emerged—the Equity Systems Change Compass—can be used as a tool to guide conversations and thinking about equity and action in many contexts, addressing topics that are very broad (e.g., the disparity in academic performance between groups of students) and those that are very specific (e.g., the low number of minority students in medical schools).
Understanding the important dimensions of existing power structures

- Inertia prevents change.
- Power is entrenched in financial, educational, and cultural domains.
- Systemic racism is endemic.
- The powerful act to maintain their power.
- The disempowered see attempts to change as futile.
Analyzing actions that support or condone existing power systems

- Power systems reinforce one another.
- Implicit bias sustains power systems.
- Power is seen as zero-sum.
- It is easy to claim that individuals are to blame.
- Many fear that change can bring unintended consequences.
Understanding how society maintains existing power systems and the mental models that undergird them

- The rich get richer.
- Existing mental models target underrepresented populations.
- Market valuation takes precedence over human needs.
- Cultural norms give preference to dominant groups.
- Misinformation feeds negative biases.
Understanding power systems and identifying the impact of exclusion on individuals

• Bureaucracy resists change.
• Power is zero-sum.
• Stereotypes blur the complex systems that generate them.
• Individual success is valued over community success.
• People underestimate their individual and collective power.
Addressing the human needs (e.g., autonomy, relatedness, competence, well-being) of those who will build and recreate the needed new systems

- The individuals affected by a problem are not heard.
- Full representation is often lacking.
- “Success” is narrowly defined.
- Autonomy is valued over collaboration and connectedness.
- A narrow focus on individual grit misses the importance of compassion.
Envisioning ways that people can work together to initiate change in order to create, recreate, invent, or sustain more equitable institutions and systems

- Reimagine the American dream and what it would take to achieve it.
- Prioritize research skills.
- Include those affected by a problem in developing its solution.
- Keep the big picture in mind.
- Welcome paradigm shifts.
Defining dimensions of what new, positive systems change looks like in practice

- Culturally responsive teaching is the prevalent model.
- Focus is on the opportunities we owe young people.
- Rewards support engagement in equitable practices.
- Systems privilege high-quality solutions.
- Social media systems reform their practices.
Using new strategies to build, rebuild, influence, or change existing power systems

- Translate new institutional concepts into policy and legislation.
- Ensure that power is shared.
- Become socially and politically active.
- Communicate benefits and celebrate successes.
- Be transparent about challenges or mistakes.
Examples and Other Resources

• Examples in the report:
  • Learning loss due to COVID
  • A retrospective analysis of school desegregation

• Guidebook: Coming soon!

• Feedback opportunities: go.edc.org/esccompass-feedback
Q&A
Thank you!

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

STELAR@edc.org

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_7NBHhQxpYI2VdQ2

Your feedback is appreciated!
Keep this here please – I'll use this template for slides below