EDC Education Development Center

WORKFORCE DEVELOPMENT: WHAT'S THE FUTURE GOT TO DO WITH IT?

Workforce Development through CTE Summit

Anaheim, CA
December 3, 2019

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EDC at a Glance

Education Development Center, Inc. (EDC), is a global nonprofit that advances lasting solutions to improve education, promote health, and expand economic opportunity. Since 1958, we have been a leader in designing, implementing, and evaluating powerful and innovative programs in more than 80 countries around the world.

1958 EDC was founded by MIT scholars and researchers.

200+ projects managed annually by EDC.

$169.4 million FY19 operating budget

EDC has 1,300 employees.

Funders include USAID, NSF, NIH, MasterCard Foundation, DoEd, and SAMHSA

GLOBAL REACH
EDC has worked in more than 80 countries and in all 50 states in the U.S.

REGIONS
- Africa
- Asia
- Europe
- Latin America and the Caribbean
- Middle East
- United States

Career Development

Your personality type matched with a compatible work environment will lead to success and satisfaction.

Developmental in nature:
- **K-6 Awareness**
- **7-8 Exploration***
- **9-12+ Preparation**

Begins in the home, nurtured in school, translated into productive and rewarding work. Career Development can be guided.

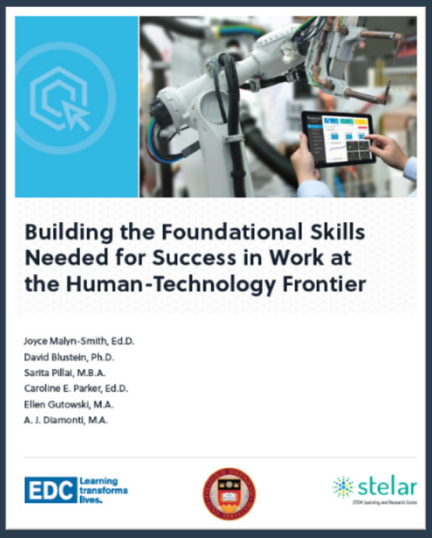
Begin in K-12 – especially for students with limited STEM role models
Guide development of STEM interests
Develop foundational STEM knowledge/skills,
Connect with STEM workers
Develop self efficacy as a STEM technical/professional. "I can do it!!"

Employ strategies:
- ***Career Education Standards***
- ***Use technical terminology***
- ***Provide role models/first hand experiences such as:***
  - ***Guest Speakers***
  - ***Field Trips***
  - ***Shadowships***
  - ***Internships***
  - ***Work-based learning***
  - ***Apprenticeships***

Human-Technology Frontier

Human-Technology Frontier

- Predominance of dynamic, interdisciplinary teams



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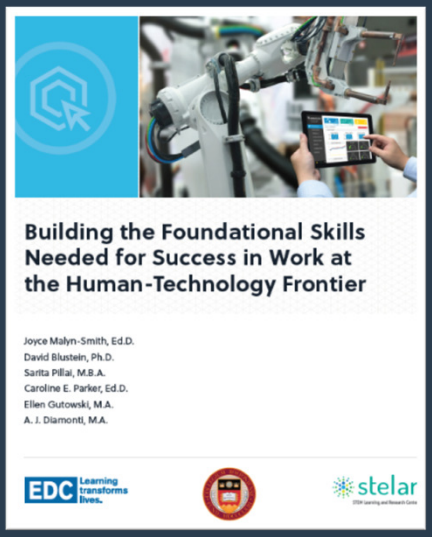
Human-Technology Frontier

- Predominance of dynamic, interdisciplinary teams
- Focus on data



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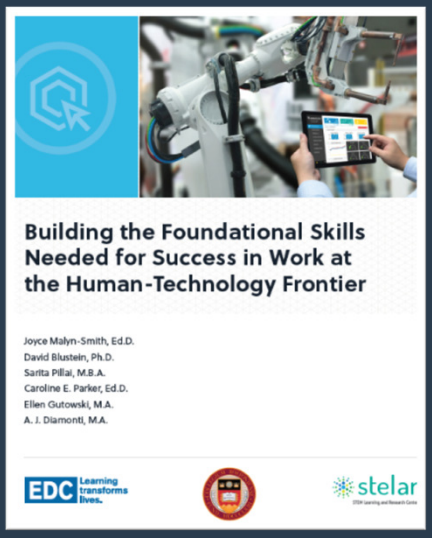

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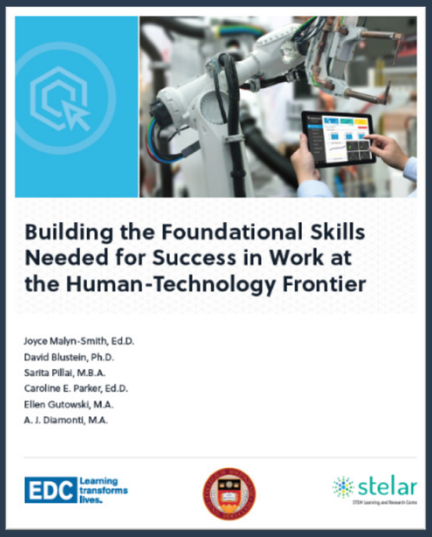

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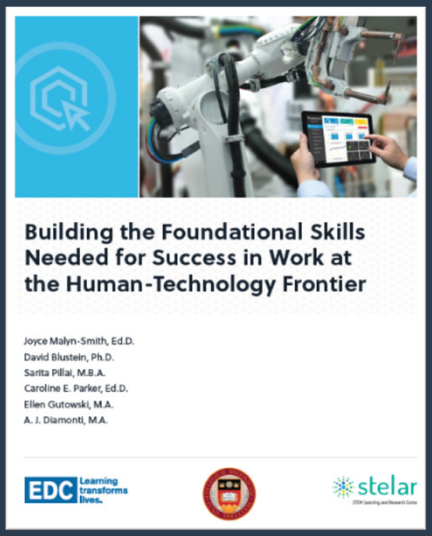
Human-Technology Frontier

- Predominance of dynamic, interdisciplinary teams
- Focus on data
- Artificial intelligence
- Engineering design/design thinking
- Ubiquitous computational thinking



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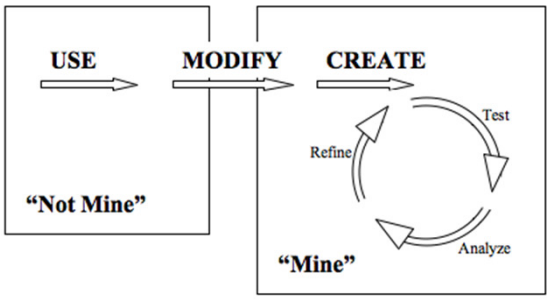
Lessons Learned through ITEST

Computational Thinking

Youth develop computational thinking as they use technologies – then modify technologies – then create technologies creating a natural skills progression from Digital Literacy/Fluency to Computer Science.

Beginning in early grades, youth engage in a skills learning progression from Digital competency/fluency -> Computer Science fluency.



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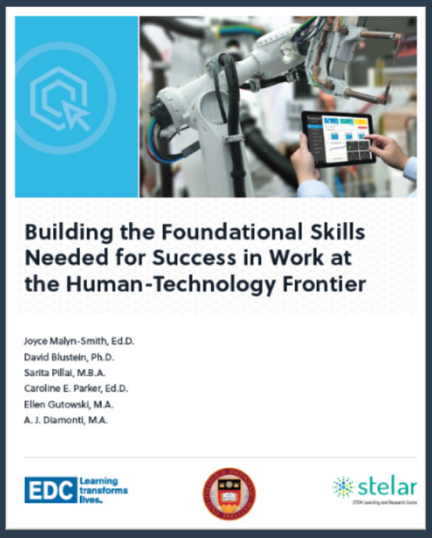
- Convergence and focus on life sciences



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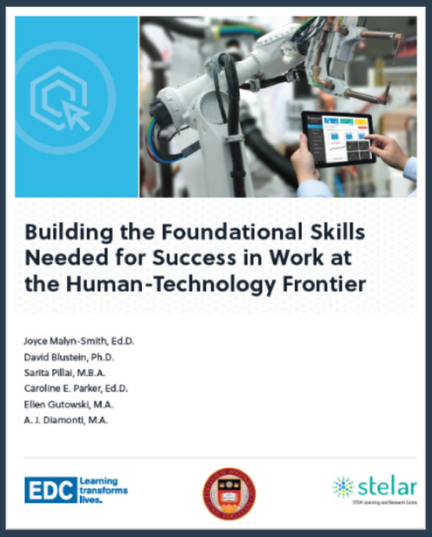
- Convergence and focus on life sciences
- Cybersecurity and working within insecure systems/ boundaries



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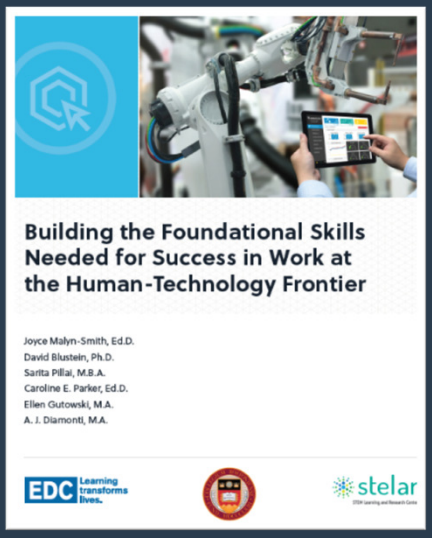
- Blurred boundaries between humans and machines



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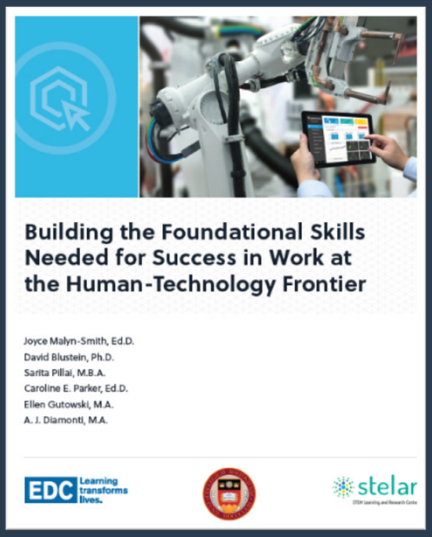
- Education/training emphasis on problem-based learning and solving real world problems



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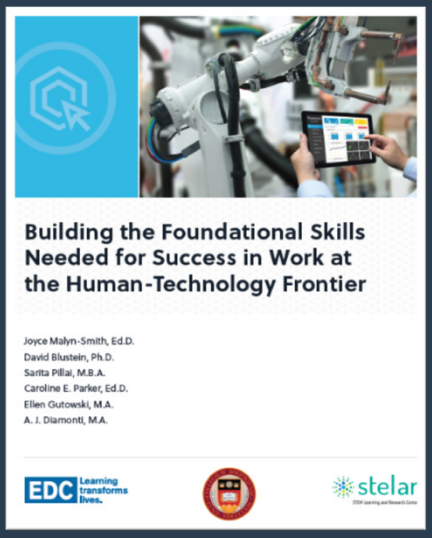

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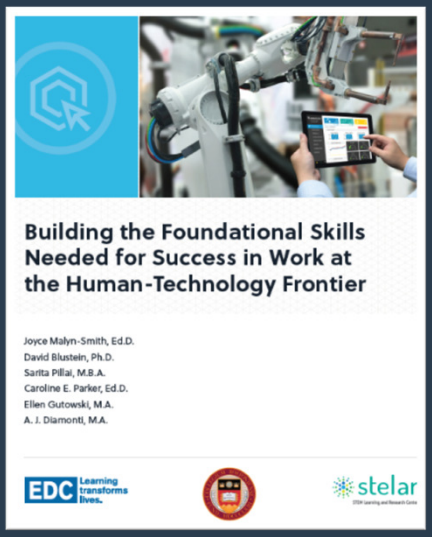

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New Type of Worker – STEM Competent

- Deep knowledge of science, technology and engineering
- Technical skills
- Keep data safe, interpret and tell data stories
- Computational thinking – use, modify, create technologies

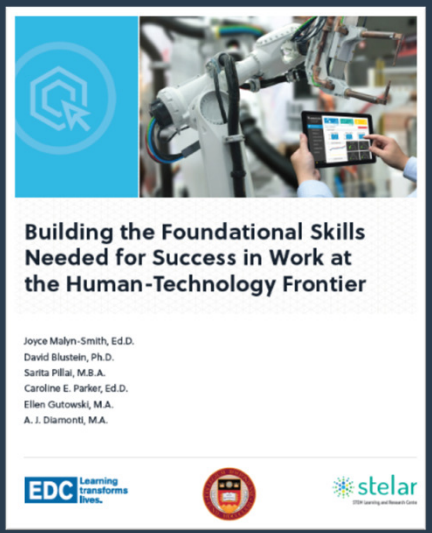
New Type of Worker – Abilities

- Willing to think outside the box, be innovative and disruptive
- Solve problems and risk failure
- Self-directed, curious, resilient
- Cooperative and interpersonally competent (humans/machines)
- Lead dynamic interdisciplinary teams to consensus
- Characterized by insight, diligence, persistence and cooperation

How do these trends impact your specific industry sectors and your dynamic workforce needs?

Human-Technology Frontier

- Predominance of **dynamic, interdisciplinary teams**
- Focus on **data**
- **Artificial intelligence**
- Ubiquitous **computational thinking**
- **Engineering design/design thinking**
- Convergence and focus on **life sciences**
- **Cybersecurity** and working within insecure systems/ boundaries
- **Blurred boundaries between humans and machines**
- Education/training emphasis on **problem-based learning** and solving real world problems
- Increased focus on **continuous, life-long learning**
- **Ethics at the human-technology frontier**



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THANK YOU

CTE AND THE FUTURE OF WORK

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