NSF ITEST Logic Model

From Guiding Questions in the solicitation

Provide students with technology-rich experiences

Motivation to pursue education

Knowledge of related content

Knowledge of related skills

Awareness of STEM and ICT careers

Critical thinking skills

Enter the STEM workforce

Dispositions	Knowledge	Skills	Actions	Dispositions	Knowledge	Skills	Actions

STEM Workforce Development Programs		LEARNING	**Students Underrepresented in STEM Careers - K-12**	CAREERS

LEARNING	**Educators - Formal and Informal**	TEACHING

2. Instructional and curricular models

Engage teachers

Utilize and integrate technologies

Student understanding of STEM-related occupations

3. Roles played by business and industry workforce members

1. Coherent sets of experiences

Motivation

Student competency (e.g. knowledge, skills)

Persistence

Productive participation in the STEM-related workforce of today or in the future?

Motivation

Become aware of careers in the STEM-related workforce

4. Roles played by business and industry

Teachers prepared to support student awareness of the workplace

Become interested in those careers

Prepared for those careers

Enter careers in the STEM-related workforce

Engage principals, guidance counselors, and other school system administrative leaders

STEM-related learning

6. Strategies

Student and teacher **adoption** of technologies

STEM-related career awareness

7. Shifting demographics reflected in our current classrooms and in our country

Effective **use** of technologies

5. Strategies adopted by parents, mentors and caregivers in the digital and computer age

Student **appreciation for** the scientific, technical, mathematical, and engineering basis of technological developments

Student **understandings of** the scientific, technical, mathematical, and engineering basis of technological developments

Effective and productive ways to ensure broadening participation

Engaging diverse under-represented populations in STEM programs and careers

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STEM Workforce Development Logic Model
Elements from Guiding Questions (p. 5)
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