STEM Workforce Development Logic Model

Revised 17 September 2015 to include outcomes from NSF ITEST Solicitation 15-599

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**

- Partnerships
- Cultural Context
- *Project Design*
- *Project Strategies*
- Teacher Professional Development
- STEM Content Development Activities
- STEM Career Development Activities

Educators columns:
- Affective Outcomes
- STEM Content Knowledge
- STEM Content Skills
- Decisions *Planning*
- STEM Career Knowledge
- STEM Career Skills
- Actions *Instruction*
- STEM Pedagogical Knowledge
- STEM Pedagogical Skills

Delivery to Students

Provide students with technology-rich experiences

Common NSF ITEST
STEM Workforce Development Logic Model
v.20150917

Student Dispositions:
- Engagement
- Personal Identity
- Agency
- Beliefs
- Self-Efficacy
- Motivation — Motivation to pursue education
- Interest
- Intentionality
- Empowerment

Student Knowledge:
- STEM Content Knowledge — Knowledge of related content
- STEM Career Knowledge — Awareness of STEM and ICT careers

Student Skills:
- STEM Content Skills — Knowledge of related skills
- STEM Career Skills
- Critical thinking skills

Student Actions:
- In-school STEM Learning Choices
- Informal STEM Learning Choices
- Choices connecting dispositions, knowledge, and skills to the STEM workplace
- Persistence in STEM Learning

Careers:
- STEM Career Choices
- Enter the STEM workforce

Outcomes from ITEST solicitation NSF 15-599 (2015-2016)

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