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Performance Standards

for Early Learning STEM

K-12 and Postsecondary Institutions

Effective July 1, 2022

Early Learning STEM Certification

What it means

Early Learning STEM education engages young learners in inquiry processes that promote real-world problem solving and collaboration in social learning contexts, with clear connections to outcomes that support readiness for future levels of learning and work. Cognia's Early Learning STEM Certification Standards provide a set of evaluative criteria that form the foundational elements of a high-quality Early Learning STEM program within a school or system and contain concepts that serve as a roadmap for implementing high-quality Early Learning STEM practices and processes. Additionally, the Early Learning STEM certification process allows Cognia Review Teams to evaluate an institution's Early Learning STEM implementation and provide feedback that validates current practices and informs opportunities for continued improvement.

Keys to Early Learning STEM Learning

In addition to meeting Cognia's Standards and Assurances, a quality Early Learning STEM program is:

- Thoroughly embedded in and supported by the institution
- Defined by clear expectations for Early Learning STEM learning outcomes
- Composed of integrated activities within and beyond the school day
- Focused on performance-based demonstrations of learning

Early Learning STEM Standards

STANDARD 1

Young learners engage in integrated STEM curricula that emphasizes STEM practices and makes connections between the STEM disciplines.

STANDARD 2

Professional staff members design and implement early learning STEM curriculum that encourages hands-on learning through guided inquiry.

STANDARD 3

Leaders engage families in STEM programming through strategic outreach and support for extension of learning beyond the school day.

STANDARD 4

Professional staff members and leaders participate in an ongoing system of early learning STEM-specific professional learning.

STANDARD 5

Leaders engage a diverse network of community partners and stakeholders in order to support and sustain early learning STEM programs and initiatives.

STANDARD 6

Young learners engage both independently and collaboratively in an environment that encourages exploration and finding answers to questions about the real world.

STANDARD 7

Young learners are encouraged and supported to engage in self-directed STEM learning experiences guided by professional staff members who are effective facilitators of learning.

STANDARD 8

Young learners have opportunities to use developmentally appropriate tools for learning, investigating, and creating original works.

STANDARD 9

Young learners demonstrate their learning through ongoing, authentic, performance-based assessments and explanations of their thinking.

STANDARD 10

Young learners demonstrate developmentally appropriate STEM literacy outcomes that prepare them for the next level of STEM learning.

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