

# AdvancED<sup>®</sup> STEM Standards

for Early Learning

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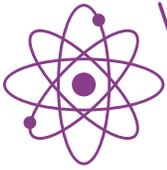


Young children in the Early Learning STEM program have the skills, dispositions for learning, knowledge foundations, and thinking strategies that prepare them to be innovative, creative, and systematic problem-solvers.

The early learning years, spanning birth to age 5, are one of the most critical points of brain development in the human lifespan. It is during this time that young children are naturally inclined to explore, observe, and discover new things each and every day. This is the perfect time to leverage their innate curiosity and support the development of scientific thinking and engineering ingenuity. Engaging young children in the scientific process is optimally achieved through a play-based curriculum with STEM concepts intentionally and richly embedded throughout their entire day.

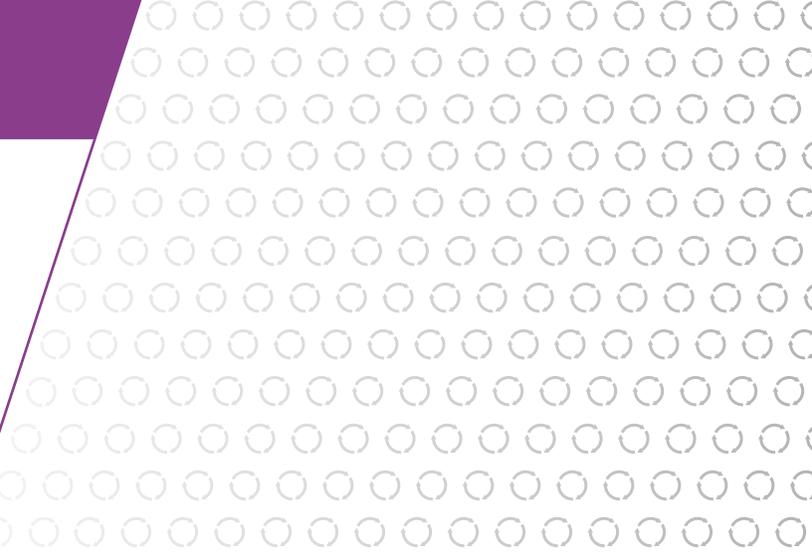
AdvancED's Early Learning STEM Certification provides institutions as well as programs within institutions a research-based framework and criteria from which to assess the quality, rigor and substance of Early Learning STEM programs. Through this certification protocol, institutions and programs build awareness, increase expectations, and demonstrate a commitment and ability to deliver high-quality early learning STEM education.

AdvancED Early Learning STEM Certification is a mark of STEM distinction and excellence for those institutions that are granted the certification. Through valid and reliable processes, tools, and training, AdvancED Early Learning STEM Certification ensures that even the most effective educators and programs continually assess and improve to meet the needs and demands of the real world through education for our youngest learners.



# Early Learning STEM Certification

- Standard 1:** The early learning STEM program provides inclusive STEM learning experiences for children.
- Standard 2:** The leadership and stakeholders develop and protect the STEM culture of inquiry and collaboration.
- Standard 3:** The inquiry-based curriculum integrates the STEM disciplines and addresses all areas of child development.
- Standard 4:** The STEM instructional strategies, materials, and resources promote and expand on children's natural curiosity about the world around them.
- Standard 5:** Children experience STEM learning through developmentally appropriate real-world activities within and beyond the classroom.
- Standard 6:** Children learn independently and collaboratively in an environment that encourages exploration and finding answers to questions about the real world.
- Standard 7:** Children are encouraged and supported to personalize and self-direct their STEM learning experiences.
- Standard 8:** Learning outcomes for children's STEM literacy are defined and measured to prepare children for the next level of STEM learning.
- Standard 9:** Children demonstrate their learning through ongoing, authentic, performance-based assessments and explanations of their thinking.
- Standard 10:** Children have opportunities to use developmentally appropriate technology resources to support inquiry-based learning.
- Standard 11:** Teachers and staff participate in a continuous program of early learning STEM-specific professional learning.
- Standard 12:** The early learning STEM program is supported through integrated and sustained partnerships with business and community stakeholders.



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