

## **STEM (Science, Technology, Engineering & Math) Learning in Afterschool**

Given our complex and changing world, we need tomorrow's workforce to be equipped to meet our modern challenges. Afterschool programs provide an ideal venue for young people to experience STEM learning because they are hands-on. Science, Technology, Engineering and Math (STEM) are critical topics for all young people to explore to better comprehend and solve problems in the modern world. Students experience real world situations and test out their hypotheses.

Just as people need to be immersed in real-world situations to really learn a language, children and youth need multiple and varied opportunities to explore and tinker with STEM concepts to fully understand and become fluent in these subjects. Additionally, through hands-on science inquiry activities and project-based learning, afterschool programs can spark student interest in STEM. Afterschool STEM activities are highly engaging, based on real-time challenges, and inspire critical thinking and problem solving on the part of students. This is the starting line for a lifetime of problem solving capacity and students who will become productive citizens who have the skills to tackle the careers of the future.

Specifically, afterschool programs can:

- Excite and ignite youth curiosity and exploration of STEM concepts, topics and fields.
- Build competency in highly transferable skills such as observing, questioning, hypothesizing, predicting, planning/investigating, interpreting and communicating.
- Promote awareness and interest in STEM fields for higher education and workforce opportunities.

Right now, some communities don't have access to enough strong STEM opportunities. For all children to prosper, we need to ensure all communities are able to provide high-quality afterschool programs that include STEM learning.