



Strategies and Techniques

Choose overall strategies and specific techniques that fit your students, resources, time, and staff. Recognize that you can use multiple strategies at the same time, or use different strategies at different times. Over the course of the year, for example, you may move from less intensive to more intensive programming for STEM.

The most important step is to make STEM an integral part of your ongoing program.

Assess the strategies and techniques below as readily doable, somewhat complex, or challenging from the standpoint of your program, feasibility, and time. Commit to increasing STEM short and long term.

	Readily doable	Somewhat complex	Challenging
Increase Exposure with Everyday Activities			
Provide simple materials such as blocks, boxes, measuring spoons, cups, graph paper, construction paper, scissors, shapes, and puzzles			
Set up activity centers for explorations with varied materials or structured activity kits			
Use STEM vocabulary regularly			
Ask questions to probe for explanations and reasons			
Talk with teachers about school STEM activities and content			
Provide measuring materials such as scales, rulers, tape measures, thermometers and activities for using them			
Provide materials such as clocks, calendars, charts, graphs, weather and seasonal vocabulary			
Provide construction materials such as straws, toothpicks, sticks, tape measures, paper, tape, glue, and string, and create building challenges			
Schedule regular guessing games and mental puzzles			
Create snack committee to handle quantities, nutrition reports, taste surveys, budgets, or other			
Create program of field trips to outdoor sites			
Create program of guest presenters on STEM related jobs			
Schedule visits to museums and science centers			
Obtain copies of textbooks and reading materials to keep available			
Augment library and computer use with STEM-related books, magazines, and websites			
Other			





Strategies and Techniques

	Readily doable	Somewhat complex	Challenging
Connect With School Content			
Know each participant's school, and list names and contacts			
Set up contacts with science, math, and technology teachers in students' schools			
Obtain copies of standards or school goals for STEM			
Work with staff to pinpoint standards to target in the program			
Review activities and projects for ways to include STEM objectives based on standards			
Provide classroom teachers with evidence of students' STEM activities in afterschool			
Ask teachers for recommendations for websites, projects, or other materials			
Include afterschool staff in STEM professional development provided by schools			
Get lists of key vocabulary, terminology, and questions to incorporate			
Target oral vocabulary development for all, with particular attention to English language learners			
Obtain curriculum, textbooks, and other reading and reference materials			
Let teachers know STEM homework projects can be supported in afterschool			
Attend school STEM events, such as science fairs; invite teachers to afterschool STEM presentations and events			
Observe what children are working on for STEM homework; discuss with students and ask for explanations and thoughts			

