

Science, Technology, Engineering and Math (STEM) in Afterschool Survey Results 2011



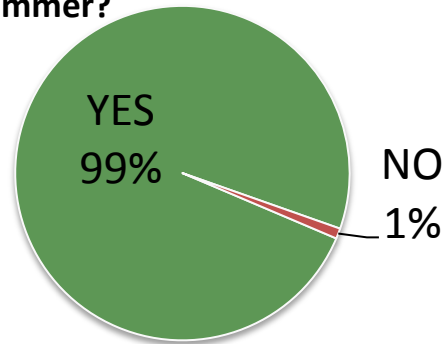
Afterschool Alliance

AFTERSCHOOL FOR ALL

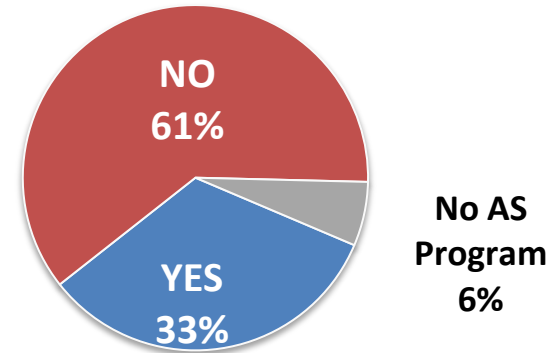
The Afterschool Alliance teamed up with the National AfterSchool Association (NAA) in December 2010- January 2011 to conduct a survey to assess the national state of STEM in afterschool. The survey was distributed widely through a variety of listservs to capture a broad group of stakeholders who are engaged in this space. More than 1,000 afterschool program directors and staff from all over the country, spanning every state except Alaska, responded to the survey. The results from this survey highlight the current state of STEM education in afterschool and offer a glimpse into how STEM learning in this setting can improve, evolve and become even more widespread and sustainable in coming years.

- Afterschool and summer program providers view STEM as a vital component of their programming; however, STEM is not the major focus of the majority of programs.

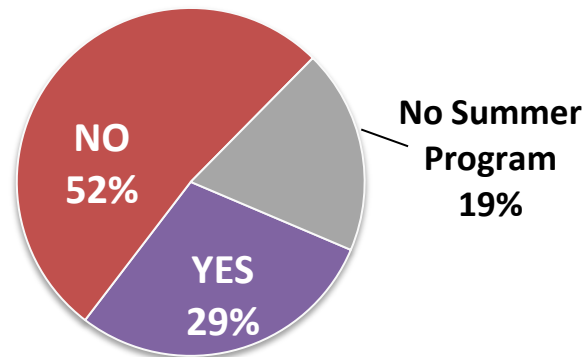
Do you believe it is important to offer STEM programs after school and during the summer?



Do you consider STEM to be the primary focus of your afterschool program?

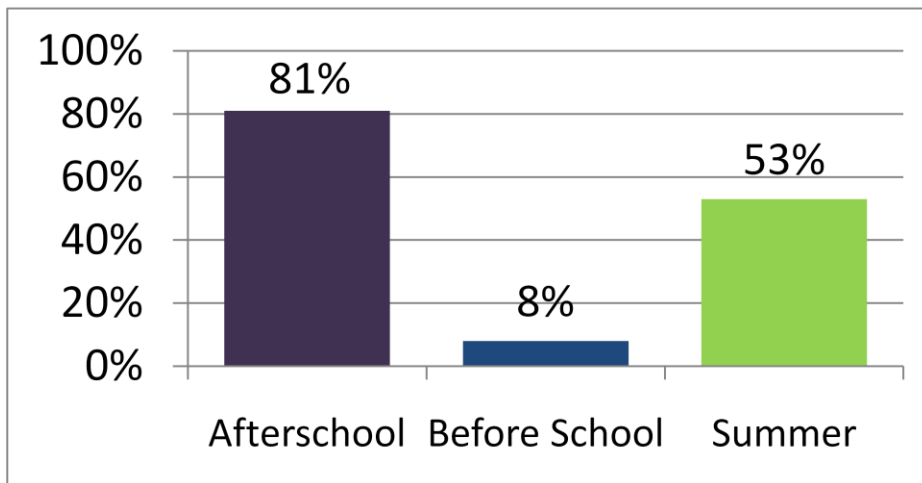


Do you consider STEM to be the primary focus of your summer learning program?

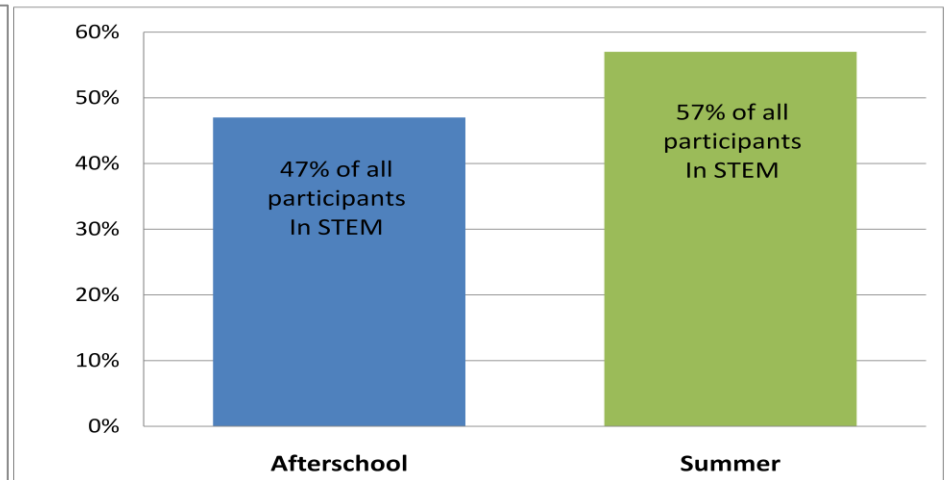


- STEM learning takes place in a variety of arenas and is being offered to all age groups, but even more children could get involved.

When do you offer STEM learning opportunities in your program?



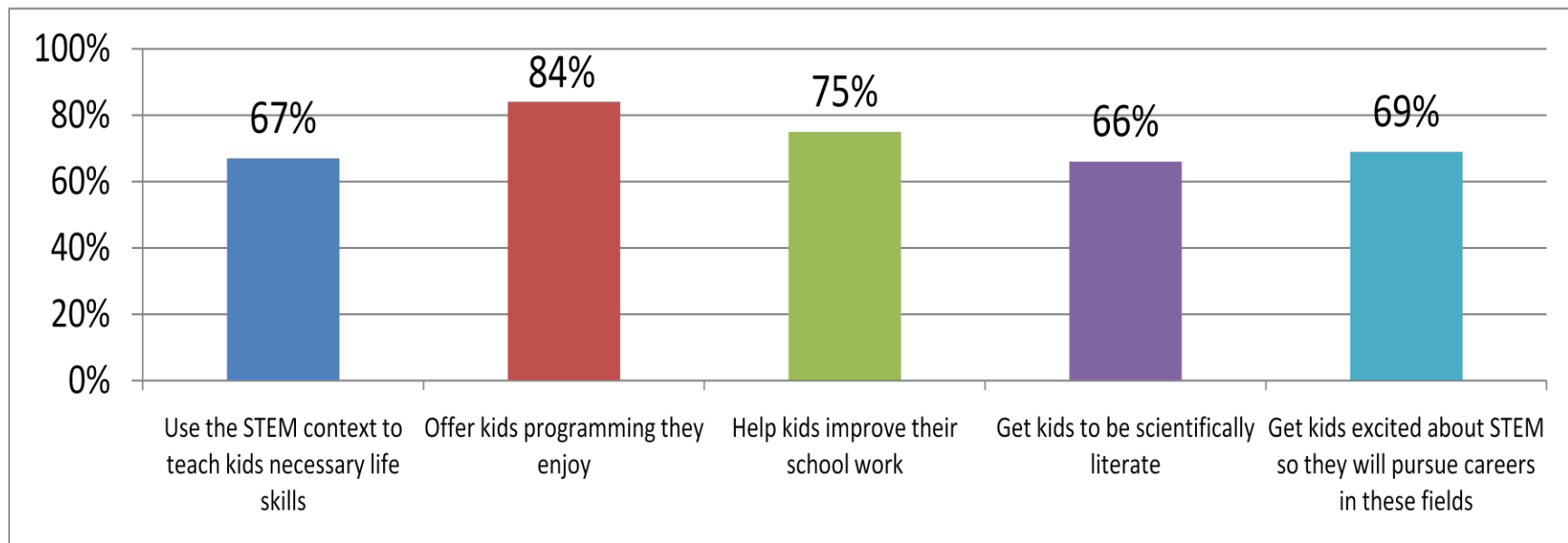
Percentage of children regularly participating in afterschool and summer learning programs who also participate in programs' STEM activities.



- As is the case with most learning after school and in the summer time, the majority of children benefitting from STEM offerings are in elementary school, yet many programs do serve middle- and high-schoolers as well.
- The findings revealed a wide range in the average time programs spent on STEM activities; however the median number of hours spent per week on STEM activities provided a more manageable picture with medians of four hours for afterschool programs and six hours for summer learning programs. The most common was two hours per week during the school year and four hours per week during the summer.

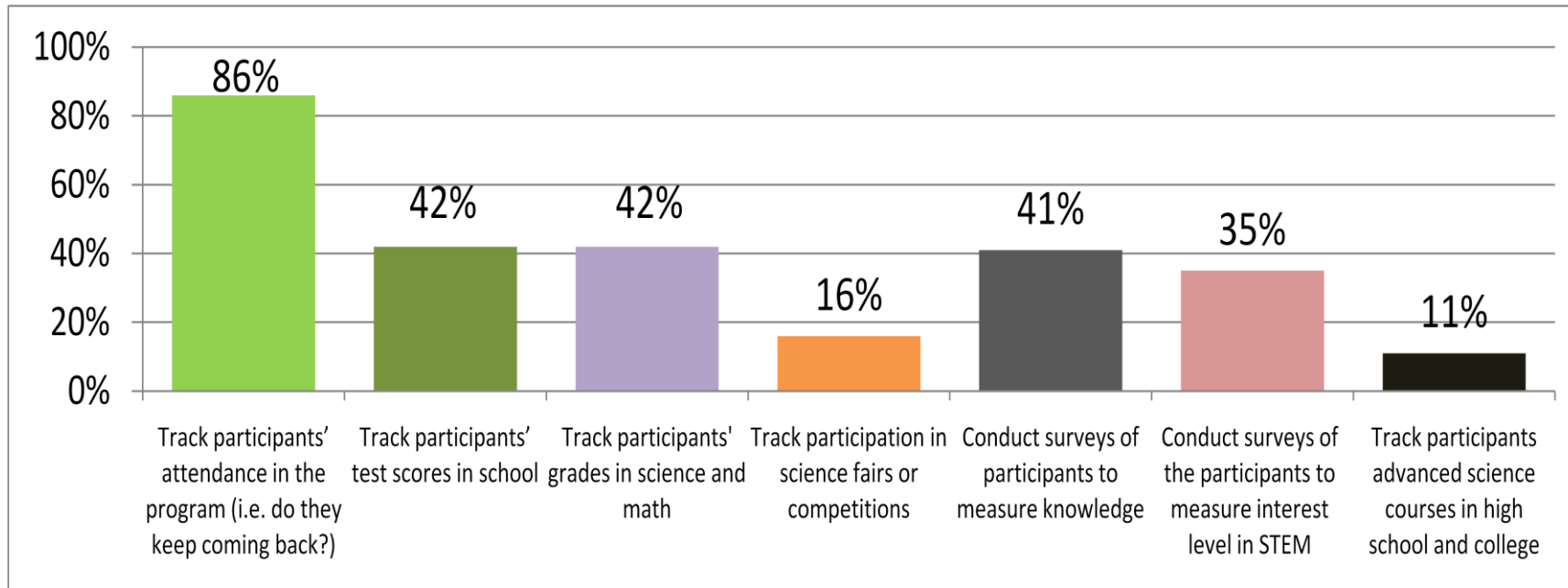
- Programs have a variety of goals for their STEM offerings but the measurements of success do not always reflect those goals.
 - The majority of program providers (84 percent) claim that a main goal of their STEM program is to “offer kids programming they enjoy,” while 75 percent say the goal is to help kids improve their school work. A large number of respondents also say that they aim to get kids excited about STEM so they will pursue careers in these fields (69 percent) and get kids to be scientifically literate (66 percent).

What are your goals for offering STEM programs after school and during the summer? (Check all that apply)



- However, impact assessment appears to be done primarily through tracking attendance (i.e. do they keep coming back) and tracking test scores and grades in school. Fewer track participants' interest in STEM and participation in other STEM-related activities such as science fairs or pursuing additional science courses.

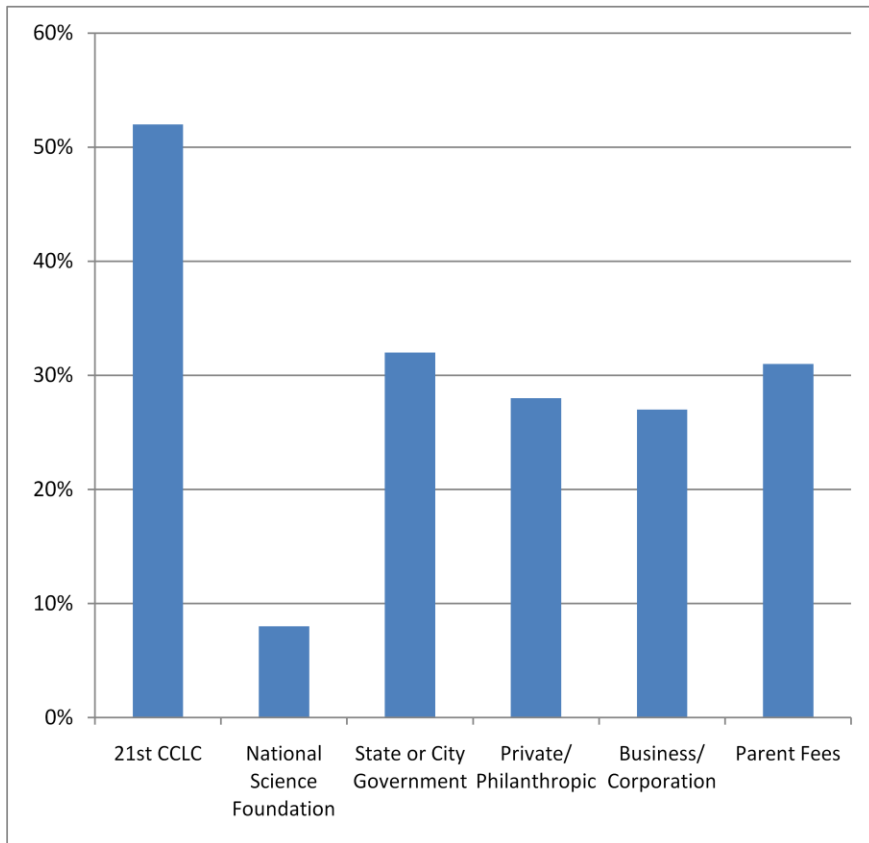
How do you measure whether you have met your goals for offering the STEM program? (Check all that apply)



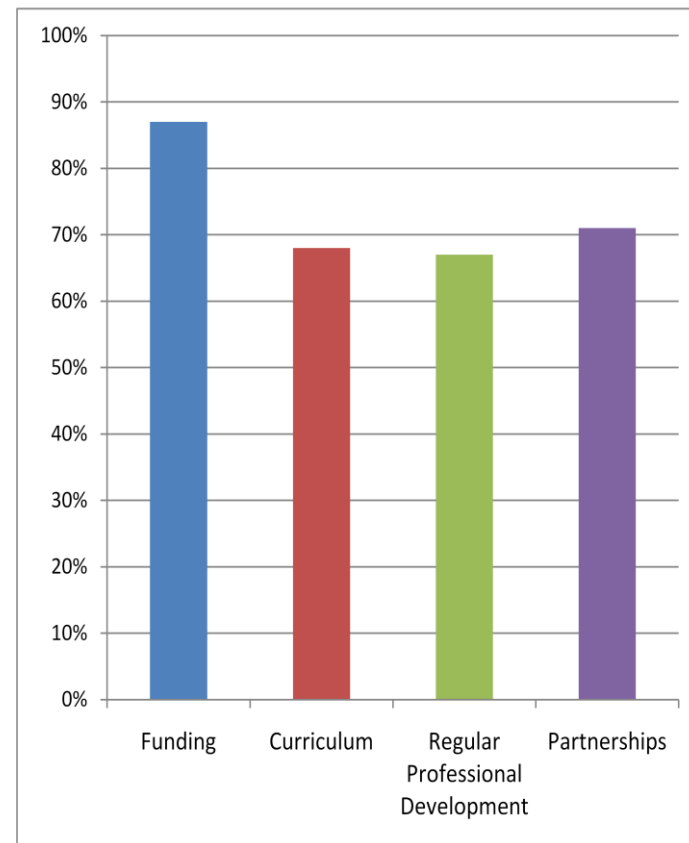
- The meaning of STEM learning varies from program to program with a wide swath of STEM activities appearing among the programs surveyed. It is difficult to easily categorize the types of STEM offerings in the afterschool space.
 - sPrograms spend a lot of their STEM learning time focusing on homework help, specifically in mathematics and to a lesser degree in science. But it is unclear whether this support is merely providing the time to do homework or if it involves making the connections to bring these topics alive. Programs also offer activities such as robotics, rocketry, engineering, computer science and some cooking and gardening.
 - A majority of program providers (85 percent) responded that their program addresses Math, with Geology/Earth Science (63 percent), Engineering (53 percent) and Biology (51 percent) appearing as other popular STEM fields which are addressed after school and in the summer. Chemistry and Physics (both 43 percent) were less popular with program providers.

- While additional funding for STEM activities is a common request, survey respondents also noted other needs that would help them offer STEM programming.
 - The STEM practitioners surveyed cite a number of funding sources for their programs, but by far the most prevalent funding source is the federal 21st Century Community Learning Centers program. Only a small percentage of respondents report accessing funds from the National Science Foundation.
 - Eighty-seven percent of providers surveyed cited increased funding as a resource that would help them provide higher-quality STEM offerings, while nearly equal percentages of providers stated that curriculum materials, professional development opportunities and expanded partnerships would help improve program quality.

Which of the following funding sources do you access to offer your STEM programming? (Check all that apply)

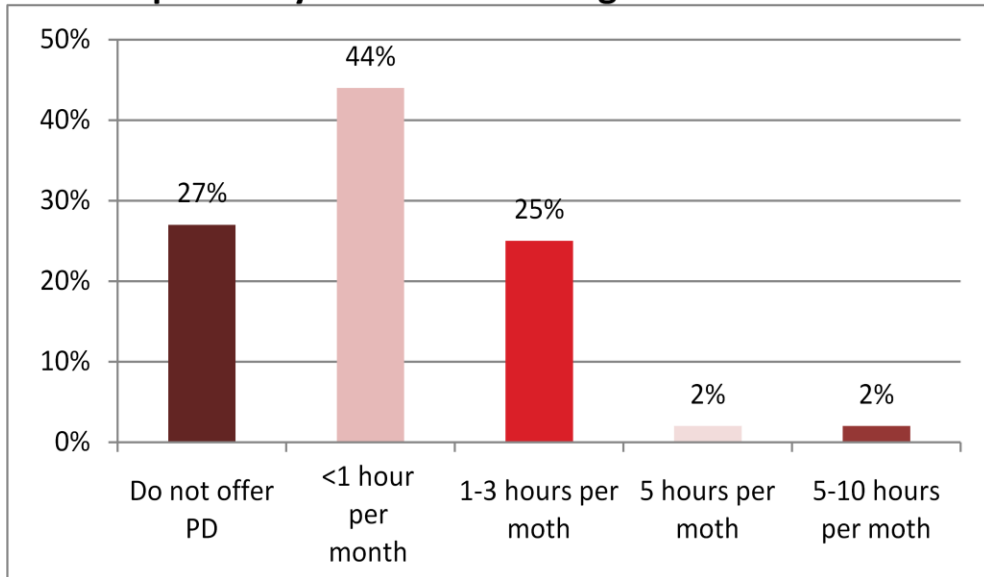


What resources would help you offer high quality STEM programs? (Check all that apply)



- Improving access to professional development opportunities and engaging additional STEM partners are two clear needs.
 - Nearly a quarter of the programs surveyed offer no STEM content professional development for staff and nearly half offer less than one hour per month of staff professional development. However, 68 percent of programs acknowledge that providing more professional development is a major way to improve their STEM programming for 2011.
 - Programs currently engage a variety of partners to offer their STEM programming—school teachers (48 percent) and colleges (40 percent) are the top two, while science centers and businesses come in next (30 percent). Only a small minority (14 percent) partner with a federal lab or agency, and almost a quarter have no external partners for their STEM programs.

On average, how often do you (or your staff) receive professional development to provide your STEM offerings?



Which of the following partners do you engage to offer your STEM programming? (Check all that apply)

