

21<sup>ST</sup> CENTURY COMMUNITY LEARNING CENTERS



### Introducing kids to STEM and building employability skills

Science, technology, engineering, and math (STEM) fields are central to today's 21<sup>st</sup> century job market. As part of the goal of ensuring career readiness and helping youth thrive after high school, many 21<sup>st</sup> Century Community Learning Center (21<sup>st</sup> CCLC) programs offer STEM curriculum to help build STEM-specific skills, as well as foundational skills that are acquired through STEM learning, such as problem solving and collaboration. Through STEM curriculum, programs offer students enriching opportunities to participate in hands-on learning activities such as robotics, science experiments, working with 3D printers, and building machines; help to cultivate an interest in STEM; and provide opportunities for STEM career exploration.

### Overview

The longest running program in Indiana, and now operating in nine Michigan City schools, Safe Harbor has adapted to the changing economic environment over the years to focus primarily on STEM programming and other 21<sup>st</sup> century skill development for students in grades K-12. The program works as a feeder system, introducing kids to STEM curriculum starting at an early age that they then continue to build upon as they get older, and by the time students reach middle and high school, they are well equipped to take on more advanced projects. Apart from learning specific STEM skills, Safe Harbor aims to help students develop important life and employability skills through their curriculum, as well as through mentorship with staff members.

### A typical day

Safe Harbor offers programming before and after school. Students can arrive before school from 6 until 8:30 a.m., where they have breakfast, take part in light play early in the morning, and more active play in the later hours. Immediately after school, students return to the program, where they have a snack, and receive homework help and tutoring until 4 p.m. Following that, elementary students have "S.A.F.E. Zones," where they go through three 40 minute enrichment blocks that fit into one of the "S.A.F.E." categories: STEM, Art,

## Safe Harbor

Michigan City, Indiana

716

Average number of students served during the school year

47%

Students from low-income families

### Main funding sources:

- ▶ 21<sup>st</sup> Century Community Learning Centers

Fitness, or Empowerment. Students rotate through the different blocks in their age specific groups, and each week the activities offered for each category rotate to ensure programming diversity. At the middle and high school level, youth voice is the primary driver for the selection of enrichment activities. At the end of the day, elementary school students are picked up, and middle and high school students take the bus home.

## Outcomes

In the 2019-20 school year, 89 percent of K-6<sup>th</sup> grade regular program participants at the Marsh Elementary School site maintained or improved their English language arts (ELA) from fall to spring, and 91 percent maintained or improved their math grade. Teachers reported that 75 percent improved classroom behavior and “getting along well with others.” These results were similar across other elementary, middle, and high school Safe Harbor programs.

## Program characteristics

Safe Harbor, originally geared more toward college and career readiness, has evolved to become primarily a STEM program as these skills have become more central to the job market. Starting in elementary school, students in the program are exposed to age-appropriate STEM curriculum to help build foundational skills in the field. Elementary school students take part in their afterschool manufacturing academies where they learn the basics of engineering and how to use the program’s machinery, such as their laser cutters and 3D printers. Students also practice their problem solving skills using their STEM knowledge, and have designed and produced products using the 3D printers to solve problems from stopping their chairs from squeaking to building protective face shields for healthcare workers. As students progress through the program, they build upon skills developed in the manufacturing academies to take on more advanced STEM projects in middle and high school. For example, because funding only allowed the program to purchase three initial 3D printers, older students learned how to build 3D printers, which they used to enhance the scope of their work within the robotics program. In addition, students at Safe Harbor take part in robotics, and at the



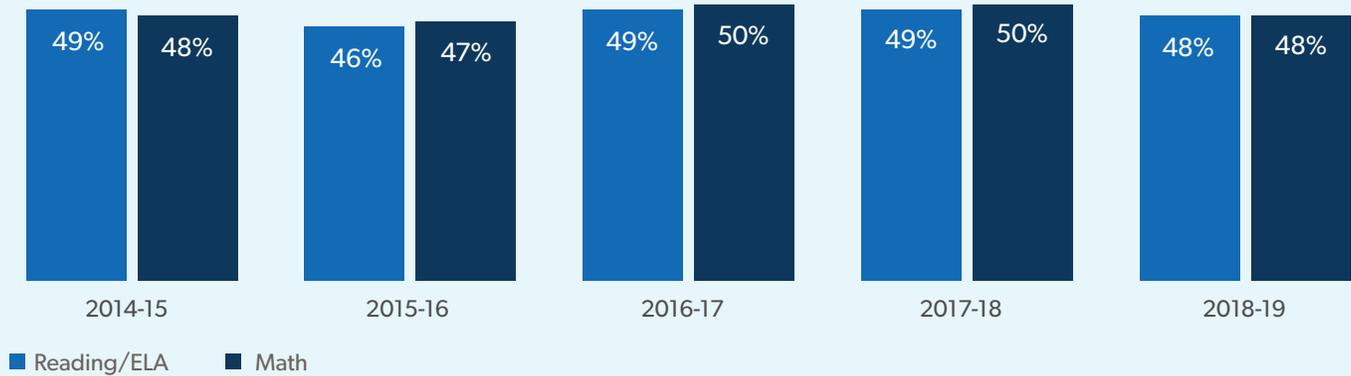
## 21<sup>st</sup> Century Community Learning Centers

21<sup>st</sup> CCLC is the only federal funding source dedicated exclusively to supporting local afterschool, before-school, and summer learning programs. Since its inception in 1994, the program has supported school and community based organization partnerships that provide a safe and supervised environment for youth, while inspiring students to learn through hands-on learning and other enrichment activities, find new areas of interest, and connect with positive adult mentors, as well as providing supports to their families. Today, 21<sup>st</sup> CCLC programs serve students attending high-poverty, low-performing schools.

Read [\*Two Decades of 21<sup>st</sup> Century Community Learning Centers: Providing afterschool and summer opportunities to millions of young people and families\*](#) to learn more.

## Department of Education annual performance reports have shown students in 21<sup>st</sup> CCLC programs are making consistent gains in math and reading

*% of regularly attending 21<sup>st</sup> CCLC students improving in their math or reading grades*



high school level, have the opportunity to put their skills to use in the community. In one instance, the city of Laporte paid Safe Harbor students to build electrical panels for the city. Safe Harbor took this opportunity to create a peer-to-peer mentoring model, where each new group of students who learn how to build electrical panels then go on to teach a new cohort of students.

Along with the STEM-focused curriculum, Safe Harbor helps students in developing critical thinking skills, teamwork, confidence, and communication skills through their curriculum by intentionally designing projects that require these skills, as well as through emphasizing relationship building. One way Safe Harbor fosters relationships is by running small group mentoring sessions at the end of the day. This helps maintain consistency for students, allows for opportunities for one-on-one and small group conversations, and helps build deeper and more meaningful relationships.

### Program history

Safe Harbor started in 1999 and is the longest running afterschool program in the state of Indiana. It was started in collaboration with the mayor at the time, who heard about 21<sup>st</sup> CCLC while at a conference in DC. The mayor brought the idea back to Michigan City, and a team of community members then got together and wrote the grant for cohort one. Since then, Safe Harbor has expanded to nine Michigan City schools. From the beginning, Michigan City has taken the approach that afterschool programs were not secondary to the school day, but a primary stakeholder in student education and family support.

### Recommendations

- ▶ Introduce kids to STEM curriculum starting at a young age. It helps build confidence in the material, spark an interest in the field, and helps kids develop important skills such as problem solving.
- ▶ Make programming relevant and engaging, and provide opportunities for kids to put their STEM skills to real and practical use. That's what keeps older youth coming back.
- ▶ Overall, emphasize relationships between staff and students, and always treat your program as an important part of the learning process, not just an afterthought.