



# **CASE STUDY BRIEF**

Since 2013, the Partnership for 21st Century Learning (P21) has annually designated 21st Century Learning Exemplars based upon exceptional implementation of the <u>Framework for 21st Century Learning</u>.

Each year, P21 has highlighted a cohort of early learning centers, K–12 schools, school districts, and beyond school programs in the U.S. as 21st Century Learning Exemplars. Now that P21 is a network of Battelle for Kids, we are leading together in celebrating the current year of 21st Century Learning Exemplars.

As part of celebrating these awardees, Battelle for Kids and its P21 network provide ways for their stories and impactful practices to be shared with others. This case study brief and those for the other awardees provide powerful insights to guide other school districts, schools, and programs so that every child can experience the best of 21st century learning experiences.



# **Saint Ambrose School** Brunswick, OH

With a strong focus on social, emotional, and behavioral growth for all students, Saint Ambrose School fosters a deep ethos of caring that is woven into the fabric of the STEAM-focused PreK–8 school.

**Grades Served: PreK-8** 

**Enrollment:** 613 Students

Founded in 1959; PreK added in 2008

**Website** 

- Five-Star Step Up to Quality Rating through Ohio Department of Education Office of Early Learning and School Readiness
- STEAM and STEM School status from Ohio STEM Committee of the Ohio STEM Learning Network (OSLN)

# **Saint Ambrose School**

Brunswick, OH

### **STEAM Initiatives and Partnerships**

Saint Ambrose School has several innovative STEM and STEAM initiatives providing directly applicable experiences to their students.

It is one of the only schools in the country, and the sole K–8 school in the state of Ohio, that uses geospatial technology in the classroom. In the school's computer science class, students mapped floodplain locations both in the local Northeast Ohio area and in the broader U.S. With geographic information system maps from the National Oceanic and Atmospheric Administration (NOAA) for nearby Cuyahoga River, students engaged in transdisciplinary problem-solving exercises to creatively propose measures to combat floodplain issues.

Saint Ambrose School also partnered with STEM Accelerated Coding, as part of their program funded by NASA, to design the optimal way to extract water from Mars to place into a robot harnessing solar energy. Teachers received multi-day professional development at the NASA Glenn Research Center and were able to take the design challenge model back to their school and implement the experiments and lesson plans into their classrooms.

Saint Ambrose is a Project Lead the Way school, one of a handful of schools implementing this nationally recognized and cutting-edge engineering curriculum.

College Credit Plus classes are also offered to students in grades 7 and 8, to help them gain college credit without the burden of financial investment otherwise required by parents and families.

## **Character Development and Humanitarian Service**

Tying into their rigorous STEAM efforts, Saint Ambrose School also selects many of their projects through a humanitarian lens.

A school-wide homeless project received recognition at the largest global geospatial event, the Environmental Systems Research Institute's Educational and Users Conference. Students developed an app with geospatial layers that assisted homeless center operators to manage resources.

Students also developed life blankets and hot socks in the school's makerspace, using specialized materials that enhance and a person's own body heat to keep warm during the winter months. More than 50 hot socks and 10 life blankets were distributed to the homeless living under bridges in nearby Cleveland and Akron.







At Saint Ambrose School, students R.E.A.C.H. They are Resilient, Empowered, Accurate, Creative and Harmonious. Compassion for others is hard-wired into the framework of Saint Ambrose School. There are several behavioral growth programs, such as the student-led anti-bullying ministry and the school-wide student mental health training on anxiety and depression surrounding social media. These programs have received special emphasis in the last year to combat stress and ensure students have a safe, caring environment that promotes rather than inhibits learning.

#### **Career Readiness**

Saint Ambrose School has gone above and beyond to not only foster community, business, and higher education partnerships, but also maintain them. Local industry experts are often tapped to serve as guest experts and mentors, as well as advising on best practices to strengthen the school's already strong STEAM initiatives.

One way that Saint Ambrose promotes career readiness is through the Milan Monthly Leadership Series. This program features monthly lunch conversations with successful community, business, and government leaders with the goal of ensuring grade 8 students depart Saint Ambrose School fully prepared to tackle high school and beyond. There is a faith-based component to the series, and invited guests are frequently selected not only for their business and leadership acumen but their virtue and character as well.

Previous speakers have included Cleveland Indians owners, Lawrence and Eva Dolan; an Executive Vice President of Finance for a local college; the CEO of the nationally-recognized University Hospital system; successful alumni from the school; and a nationally ranked high school soccer coach. The students are able to listen and interact with the speakers to not only understand the specific industries and potential future career pathways, but also gain exposure to positive role models.





#### 2019 21ST CENTURY LEARNING EXEMPLARS

Each of the following earned this year's award for its outstanding practices in equipping students with the necessary skills and knowledge for success in college, career, and life:

#### **Early Learning**

The Goddard School Located in Broadview Heights (Broadview, OH)
The Goddard School Located in Simpsonville (Simpsonville, SC)

#### K-12 Schools

Canyon Crest Elementary School (Fontana, CA)
Elon Elementary School (Elon, NC)
EVSC New Tech Institute (Evansville, IN)
Henry Ford Academy: Alameda School for Art + Design (San Antonio, TX)
Kairos Public School Vacaville Academy (Vacaville, CA)
Kensington Elementary School (Waxhaw, NC)
Moreno Valley High School (Moreno Valley, CA)
Saint Ambrose School (Brunswick, OH)
Santiago Charter Middle School (Orange, CA)
Valley View High School (Moreno Valley, CA)
Vineyard STEM Magnet (Ontario, CA)
Vista Heights Middle School (Moreno Valley, CA)
Wolf Springs Elementary School (Overland Park, KS)

#### **Districts**

Lennox School District (Lennox, CA)
Vicksburg Warren School District (Vicksburg, MS)

#### **Beyond School Programs**

Camp Champions (Marble Falls, TX)

<u>Learn more</u> about the 21st Century Learning Exemplars at: <u>bfk.me/p21\_ExemplarProgram</u>