

STEAM

SCIENCE • TECHNOLOGY • ENGINEERING • ARTS • MATH





A growing number of schools around the nation have recognized the need to prepare their students for a rapidly changing world. In response, many have readapted their curriculum to focus more on preparing students in the concepts of science, technology, engineering and math — often referred to as STEM.

Edgewood Middle School in Mounds View takes this approach one step further.

By infusing STEM with an arts component, Edgewood has become the only middle school in the state offering all of its students a standards-based STEAM magnet program.

How does it work?

Research shows students gain a deeper understanding of course material when the concepts are addressed in a variety of content areas. Edgewood's STEAM program offers a number of well-established, highly refined interdisciplinary projects and other standards-based learning activities for students that integrate:

- › Creative expression and problem solving
- › Understanding of relevant societal realities
- › Use of technology and engineering processes
- › Inquiry

STEM approach

Integrates science, technology, engineering and math to design products and solutions.

Most engaging for students who gravitate towards science and math.

Teachers who do not teach science or math are not involved.

STEAM approach

Emphasizes creative problem solving and innovation through language arts, visual arts and performing arts.

Provides new access to science and math for some by tapping creative abilities and expression.

All teachers participate in meaningful whole school involvement.



“ I get to be more creative in my STEAM classes than in my regular classes. ”

Diana Uribe, *student*

Period 8 classes

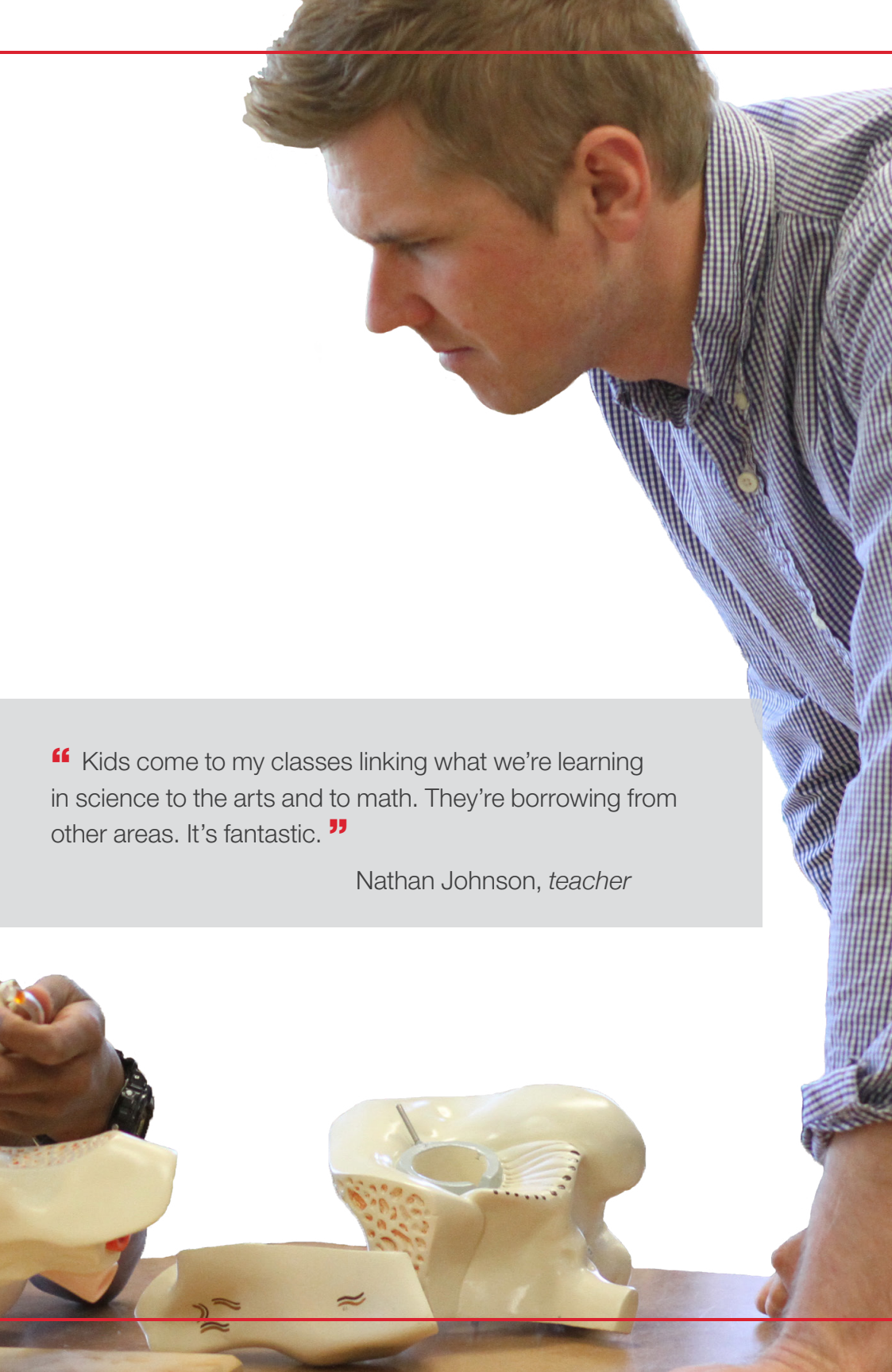
Edgewood offers more than 20 authentic project-based STEAM courses. These classes are created by classroom teachers and incorporate state standards, community partnerships, and a curriculum-related field trip. Longer than typical classes, the 90-minute STEAM courses provide students with greater exposure to content and opportunities that spark creativity and collaboration. In addition, once a week all other Edgewood classes benefit from an extended 90-minute block.

Course titles include:

- › Robotics
- › Photography
- › Design & Modeling
- › Reducing your Carbon Footprint
- › Organic Gardening
- › Exploring your Favorite Foods
- › Forensics

Browse an online portfolio of ongoing STEAM projects at www.edgewoodsteam.com





“ Kids come to my classes linking what we’re learning in science to the arts and to math. They’re borrowing from other areas. It’s fantastic. ”

Nathan Johnson, *teacher*

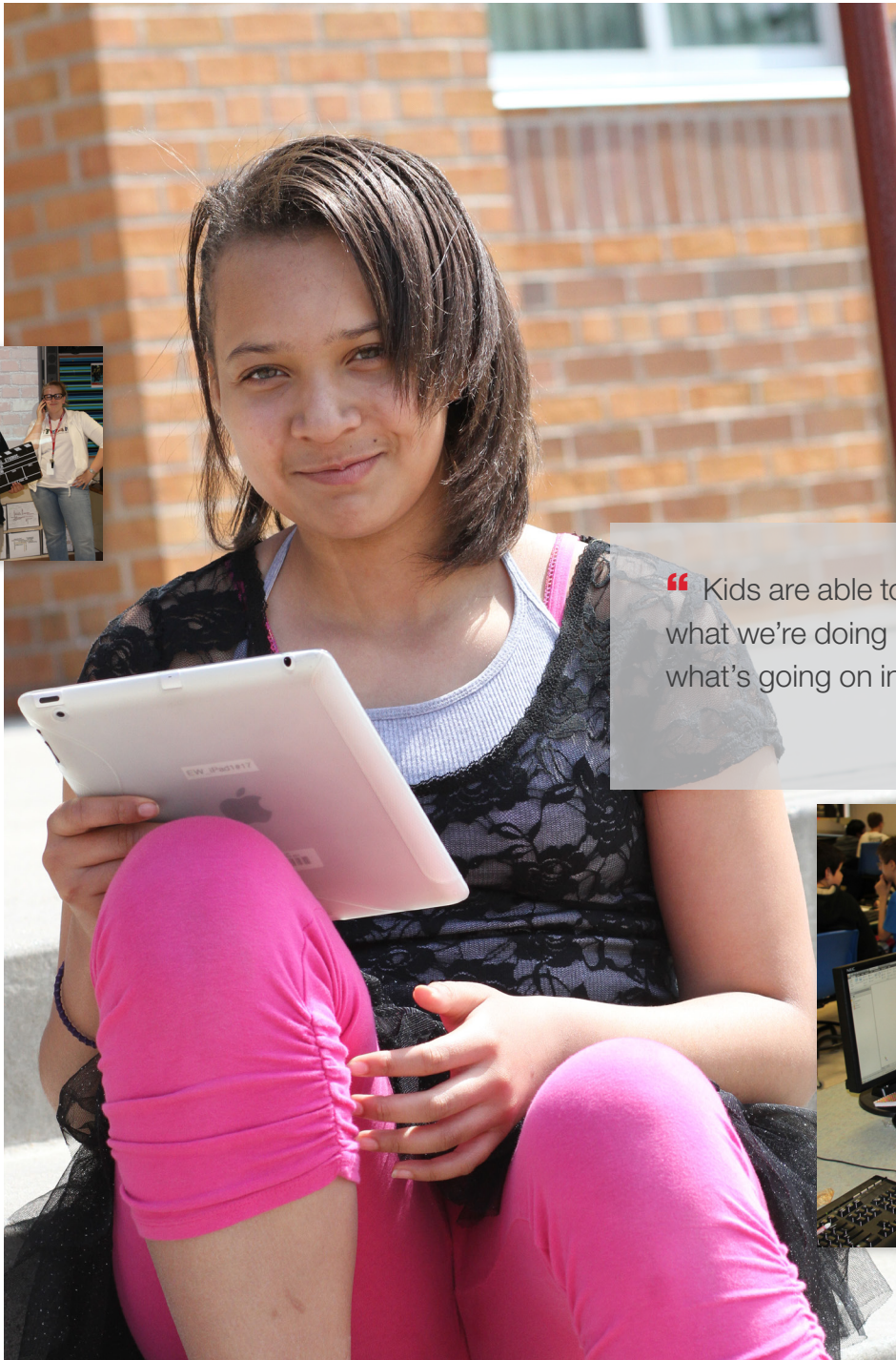
Real-world value

Bringing classroom concepts to life, the STEAM curriculum also features hands-on field trips and community connection experiences. Drawing on the talents of local companies and organizations, Edgewood provides a robust program with real-world value for students.

Current partnerships include:

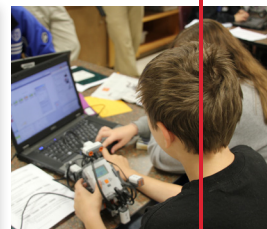
- › Partnership with DNR to develop school forest
- › Century College Fab Lab
- › Visiting artists
- › Germanic American Institute





“ Kids are able to see the connection between what we’re doing in the classroom as well as what’s going on in the community. ”

Monica Pihlaja, *teacher*



Who can participate?

Resident students

All resident students in grades six, seven and eight who live within the school's boundaries can attend the school and participate in the STEAM program.

Magnet school for non-resident students

Although Mounds View Public Schools offers a STEAM curriculum at Chippewa Middle School and Highview Middle School, only Edgewood Middle School hosts a STEAM-based magnet program enrolling students from other school districts that comprise the Northwest Suburban Integration School District — a new collaborative partner with Mounds View Public Schools. Its member districts include Anoka-Hennepin, Brooklyn Center, Buffalo, Elk River, Fridley, Osseo and Rockford.

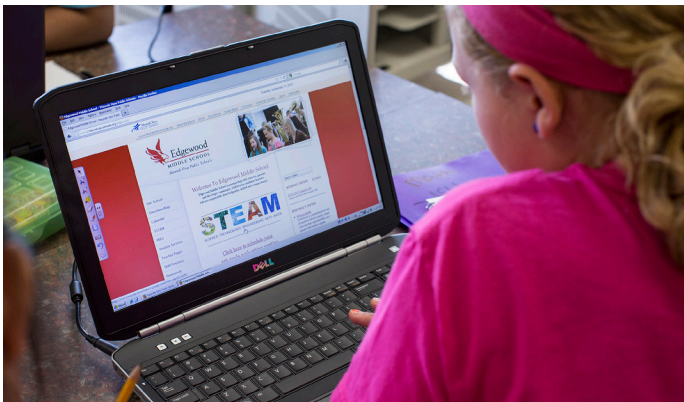
Non-residents from these districts can apply for Edgewood enrollment by visiting www.nws.k12.mn.us or by calling 763-450-1303.

Non-residents from other school districts can inquire about additional openings by visiting www.moundsvIEWSchools.org/enrollment.asp or by calling Mounds View Public Schools at 651-621-6013.

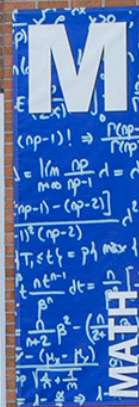
Learn more



Watch a brief STEAM video: [YouTube.com/moundviewschools](https://www.youtube.com/moundviewschools)



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“ You can see it and feel it when you enter the building. This school is different. There’s something special happening here. ”

Heather Brown, *parent*

