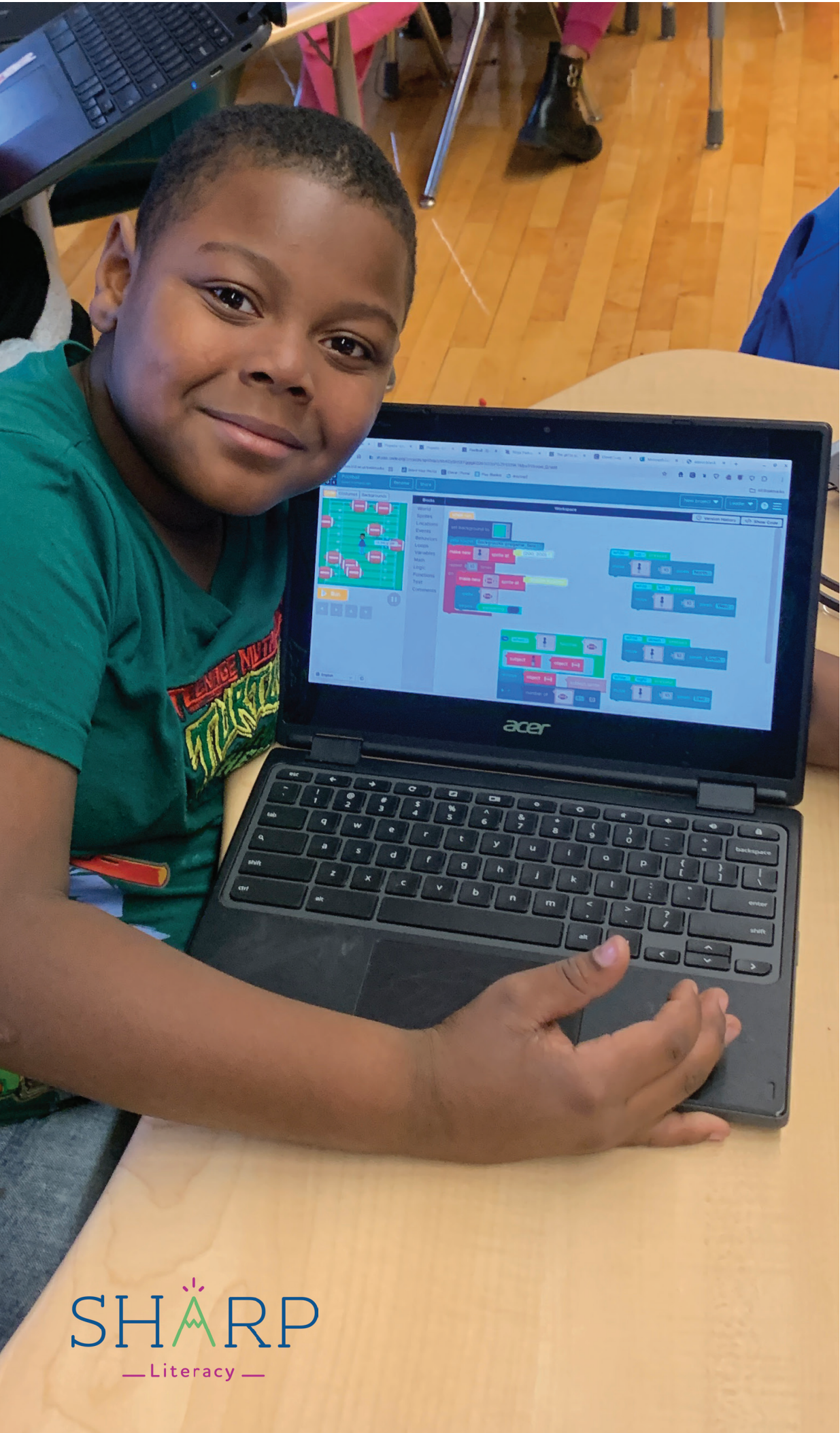


SHARP Literacy 2024-25 Mid-Year Report





Dear SHARP Supporter,

I am happy to share the **2024-25 Mid-Year Report** as the SHARP Team digs into the second half of our school year. In the following pages, you will see the breadth and depth of our program so far this year as well as meaningful insights from students, parents and, educators.

One important distinction: As part of our **three-year Strategic Plan**, we have moved away from separate STEAM and Design Through Code (DTC) programs to singular, streamlined curriculum with three foundational pillars: **Technology Integration, Arts & Design Thinking, and Project-Based Learning**. As part of this change, our 3rd through 5th grade curriculum will be known as the **Upper Elementary Program** (formerly known as DTC). In July, we look forward to sharing our **Year-End Report**, which will include additional data and reflections about this year's programming.

SHARP's approach continues to prioritize engagement, making **complex concepts accessible and exciting** for young learners. Through interactive projects, students learn the practical applications of coding and design thinking, while educators benefit from professional development sessions that provide actionable strategies for their classrooms. This dual impact ensures both students and teachers are **empowered to thrive** in a technology-driven future.

As we progress into the second half of the programmatic year, SHARP remains committed to meeting and exceeding its objectives. By continuously **refining curriculum delivery** and incorporating feedback from students and teachers, we aim to enhance outcomes and **inspire even more young minds** to embrace the possibilities of STEAM education.

Thank you to all our **sponsors, donors, and volunteers** for providing the very best for SHARP students.

With appreciation,



Lynda K. Welsh
President & CEO



Volunteers Opportunities – Design Challenge Judges Needed in February

SHARP is grateful to the hundred of volunteers who dedicate their time to support our students both in the classroom and at fundraising events. We invite you to make a difference by volunteering as a guest judge in one or more of our 4th grade classrooms in February. As a judge, you'll listen to student pitches, ask questions, and score their presentations using an easy-to-follow rubric. The top teams from each school will advance to the **Interschool Design Challenge on March 12 at Fiserv Forum**.

We'd love to have you join us - [sign up here!](#)



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Lower Elementary Program (K - 2nd)

SHARP's K3 through 2nd grade program integrates **Social Emotional Learning (SEL)** with **hands-on, arts-based workshops** that bring STEAM concepts to life! Over the course of four workshops, led by a SHARP educator, **students explore standards-aligned concepts**, ranging from the water cycle to our local pollinators.

Each class offers an **Educational Tour Experience (ETE)** to help extend classroom learning and reduce socioeconomic barriers that traditionally make local field trips prohibitive. Active and engaged learning inspires students to **deepen their understanding and build connections** between different concepts.

Program Objectives

Objective 1: Integration of Science Concepts through Arts

Students will learn science concepts by active participation in arts-integrated science activities, showing understanding of key science concepts and an increased ability to connect artistic expression with scientific knowledge in classroom discussions.

Objective 2: Development of Critical Thinking and Observation Skills

Students will learn to look closely and make observations while participating in interactive read aloud sessions and social emotional learning (SEL) activities.

Objective 3: Teacher Satisfaction and Professional Development

Teachers will report satisfaction with SHARP's professional development and will feel confident applying the program's methodologies in their daily instruction.

Program Reach

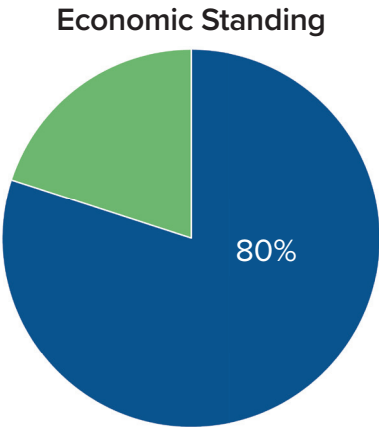
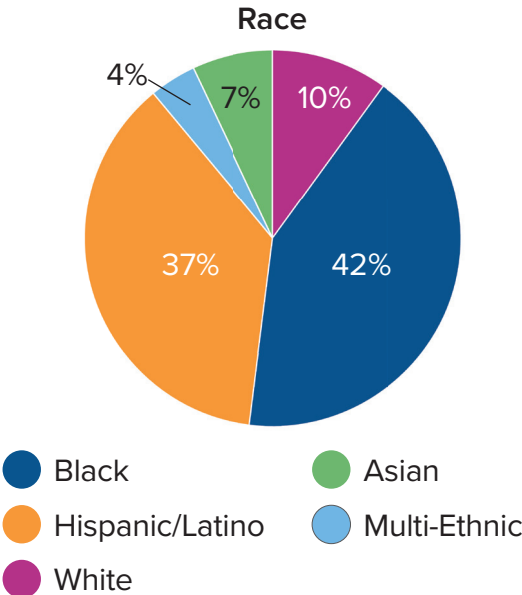
5,353 K3 – 2nd grade students in **42 schools** across Milwaukee, Waukesha, and Racine

Lower Elementary Program (K - 2nd)

2024-2025 Calendar

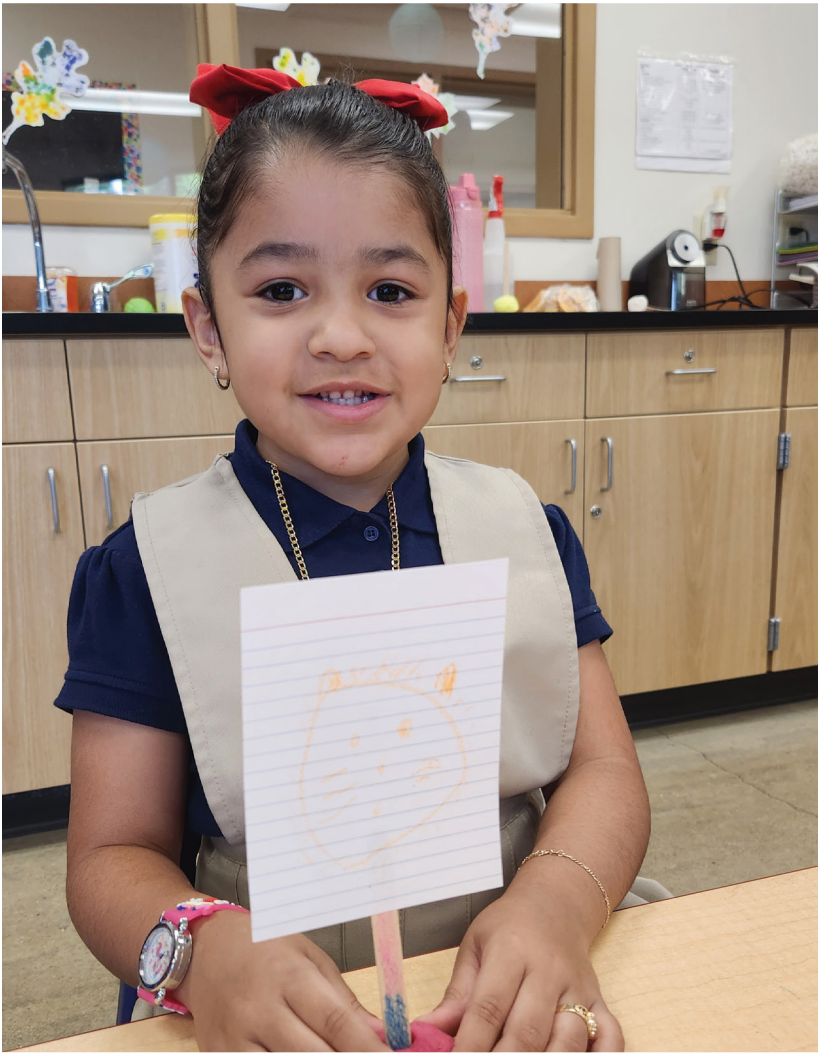
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
K3	PHYSICS - 4 SESSIONS								
K4	ANIMALS - 4 SESSIONS								
K5	PLANTS - 4 SESSIONS								
1st	POLLINATORS - 4 SESSIONS								
2nd	WATER CYCLE - 4 SESSIONS								

SHARP Students At-A-Glance



● Disadvantaged*

*In Wisconsin, a student is considered economically disadvantaged if they meet the income eligibility guidelines for free or reduced-price meals under the National School Lunch Program.



This La Casa de Esperanza student is all smiles as she proudly shows off her art project during a lesson about animals.

K3 Snapshot

Physics

Our youngest learners discover concepts of physical science through play, art, music, movement, and read alouds. By experimenting with items that sink or float, coloring a rainbow, dancing about gravity, or listening to a story about force and motion, students become curious about the fascinating world around them.



The students at St. Thomas Aquinas had a blast learning about what sinks and floats—physics is way more fun when you're getting your hands wet!

Educational Tour Experience



Students explore the wonders of seasonal changes and uncover the physics behind rainbows and gravity. Each visit concludes with an opportunity to meet a live animal from the UEC's Native Wisconsin Animal Room.

“*SHARP lessons are inclusive, allowing every student to participate and connect with the material. Providing different perspectives on grade-level curriculum content makes learning more meaningful and memorable for students.*

-Ms. M., Teacher

K4 Snapshot

Animals

September 2024 – January 2025

Students learn about the difference between living and nonliving things, animal communication methods, habitats, adaptations, and shelters. Curiosity is sparked through activities such as listening to whale songs, designing a home for a favorite animal, and taking virtual journeys to the desert with a camel, the rainforest with a toucan, and the coral reef with a sea turtle.

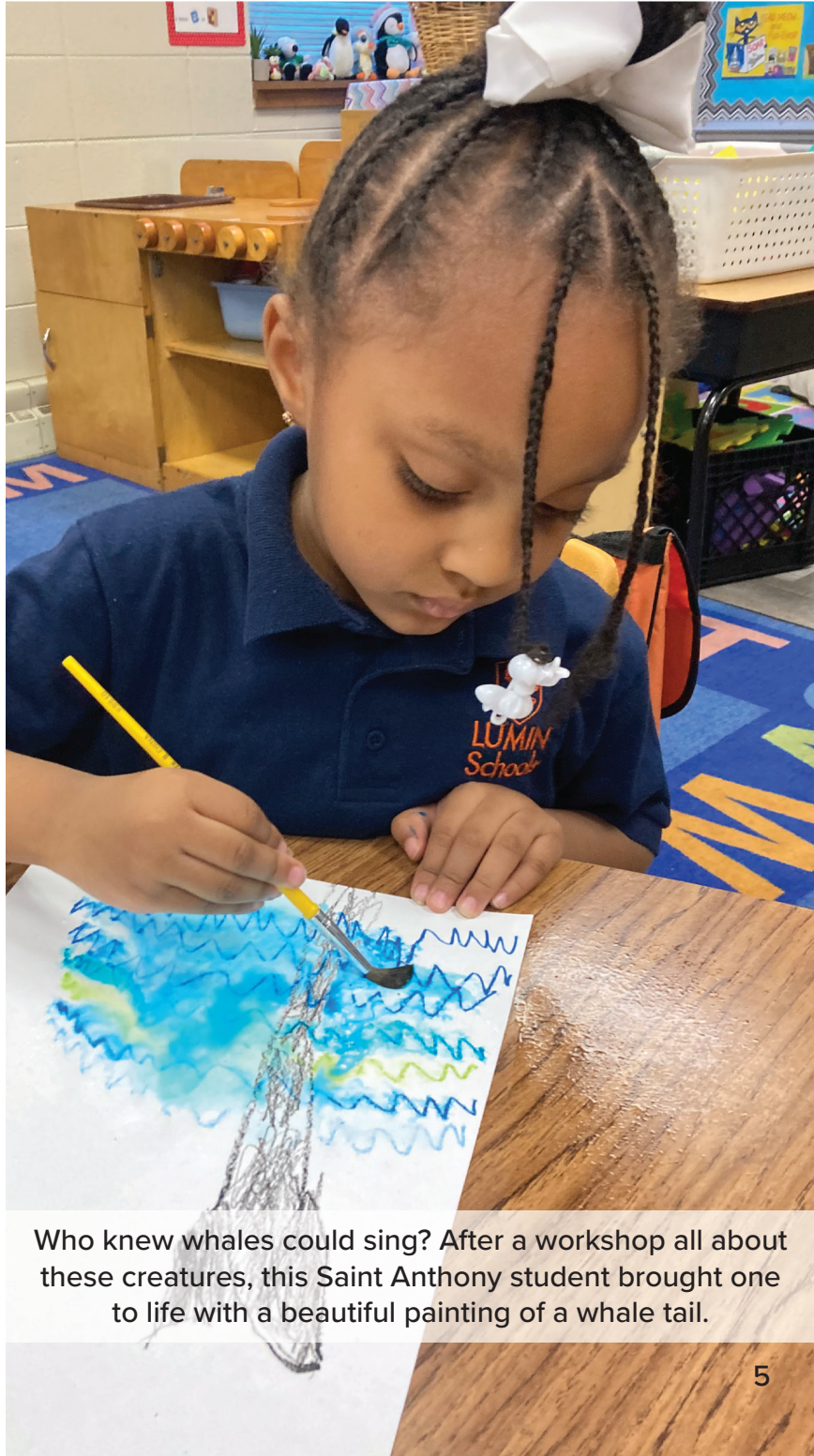
Educational Tour Experience



During the winter, students learn about hibernation, migration and adaptation to colder weather. In the spring, students go on an African Safari to see some of the largest animals in Africa. The Zoo also offers a “Zoo to You” tour in-class at each school.

I absolutely love this program and look forward to it every year! My kids get so excited! Being able to go to the zoo as a real-life connection to what we were learning was just icing on the cake!

*-K4 Teacher at
St. Thomas Aquinas*

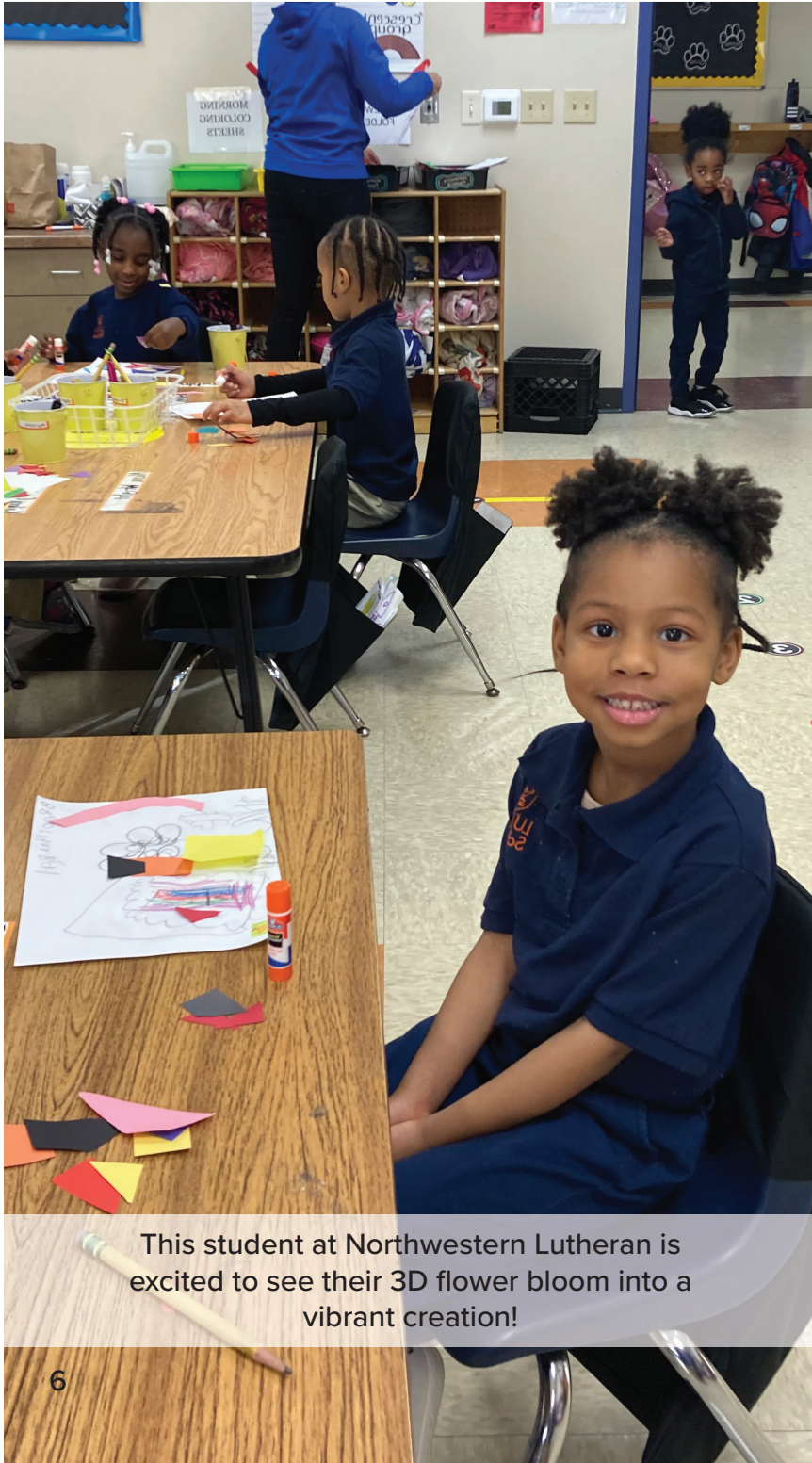


Who knew whales could sing? After a workshop all about these creatures, this Saint Anthony student brought one to life with a beautiful painting of a whale tail.

K5 Snapshot

Plants

Students trace the journey of a seed to a plant, exploring how plants grow and change through the seasons while making personal connections. Through read alouds, observations, and hands-on art activities, student knowledges grows like the very plants they are studying. Workshop highlights include creating magic tree sculptures, 3D flowers, and a collaborative classroom lollipop tree mural.



Educational Tour Experience



Students learn about the importance of plants through hands-on art and exploration, while viewing the garden's collection of outdoor sculptures.

I was entranced to see one student adding all the parts of a plant to his tree sculpture - roots, stem, branches, leaves, apples, a squirrel hollow hole and falling leaves! The students just GLOW with excitement. They are so dialed in!

-SHARP Educator at Greater Holy Temple Christian Academy

This student at Northwestern Lutheran is excited to see their 3D flower bloom into a vibrant creation!

1st Grade Snapshot

Pollinators

Students explore the fascinating world of pollinators, with a focus on honeybees and their crucial role as the planet's greatest pollinators. Through hands-on activities, students learn about honeybee anatomy, communication methods, and the various jobs they perform in the colony. In addition to fostering environmental awareness, students participate in collaborative activities like the waggle dance and create scientific bee sculptures to deepen their understanding.

Educational Tour Experience



Students will be buzzing while they learn about pollination and many animals involved. During their visit, students make discoveries using their five senses and through drawing. In the Tropical Dome, students search for plants that need pollinators to continue their plant's life cycle.

“

One of the lessons talks at length about the many different jobs that bees can hold within their hive. It slowly morphed into a discussion of different jobs that grown-ups can have. Children were happy and comfortable discussing their own personal dreams about what they would like to be when they grow up.

*-SHARP Educator at
Messmer Saint Mary*

”

After learning about honeybees, this St. Roman student shows off his buzzing masterpiece—a bee-utiful sculpture!

2nd Grade Snapshot

Water Cycle

This course incorporates arts, singing, and movement to help the water cycle concepts flow. Students explore the water cycle through engaging activities such as creating “me”teorologist sculptures with weather report drawings, collaborating on mixed media water cycle diagrams, performing a water cycle song, and learning the three states of water dance.



Students from St. Rafael explore the vibrant fish on display at Discovery World during their ETE.

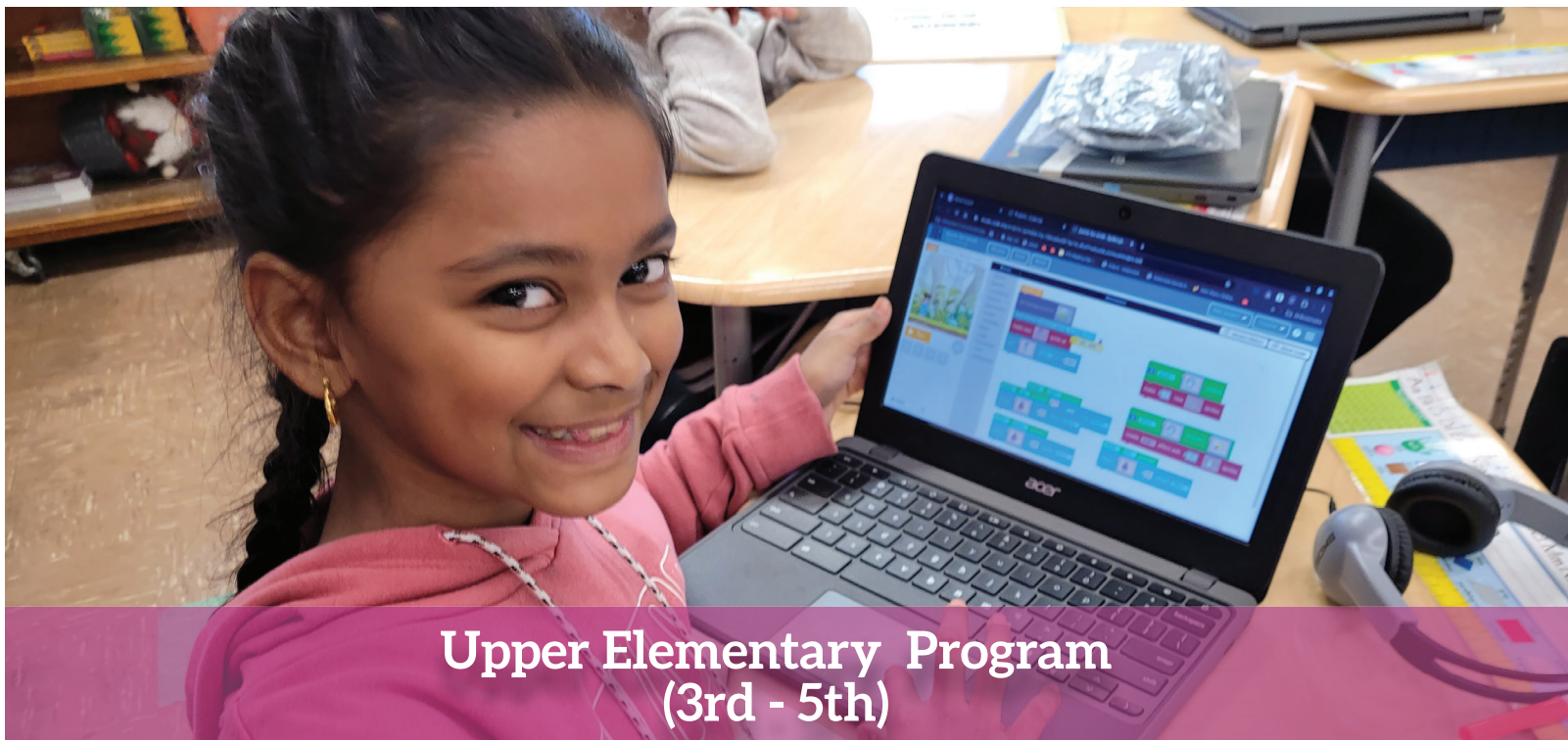
Educational Tour Experience



Students will be water cycle experts after their visit. Highlights include touching a cloud, learning about water habitats (including Wisconsin's in the Great Lakes), and visualizing how important water is to our city.

The students really enjoyed the program and referenced the things they learned during the program throughout the rest of the school year. We were able to connect SHARP learning to lessons and projects we were already doing in class.

*-Teacher at
Metcalfe Elementary*



Upper Elementary Program (3rd - 5th)

SHARP Literacy's **Upper Elementary Program**, formerly known as Design Through Code (DTC), delivers a standards-aligned curriculum for 3rd-5th graders, integrating **coding, computer science, and physical computing**. The program equips students with critical skills to solve **real-world challenges** through technology. Through hands-on activities and interactive projects, students are introduced to **computational thinking, engineering, and design**—topics rarely explored in under-resourced school communities.

In addition to technical knowledge, SHARP fosters a **systematic approach to problem-solving**, encouraging students to develop efficient solutions and apply computational thinking to real-world issues. Project-based learning **promotes collaboration, communication, and teamwork**, ensuring students gain practical, transferable skills. By emphasizing the societal relevance of coding and computer science, SHARP inspires young learners to become **active contributors** to our ever-evolving technological landscape, setting them up for future success in a digital world. Like our Lower Elementary Program, each class offers an **Educational Tour Experience (ETE)** to help extend classroom learning and reduce socioeconomic barriers that traditionally make local field trips prohibitive. Active and engaged learning inspires students to deepen their understanding and build connections between different concepts.

Program Objectives

Our program results will be shared in the Year-End Report.

Objective 1: Proficiency in Curricular Concepts

- Goal: 65% of students demonstrate proficiency in coding activities and projects.
- Goal: 70% of students correctly define key curricular concepts.

Objective 2: Academic Grit and Passion for STEAM

- Goal: 70% of students complete projects and activities successfully, demonstrating persistence.
- Goal: 75% of students express increased interest and confidence in STEAM subjects.

Objective 3: Collaboration Skills

- Goal: 75% of students exhibit strong collaboration skills as observed by teachers and SHARP educators.

Objective 4: Teacher Satisfaction and Applicability

- Goal: 80% of teachers report satisfaction with SHARP's professional development.
- Goal: 80% of teachers find SHARP's instructional strategies applicable in their classrooms.

Upper Elementary Program (3rd - 5th)

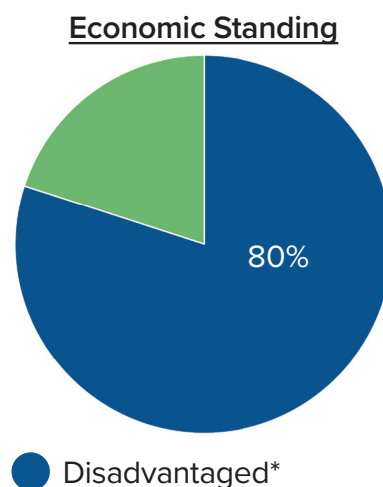
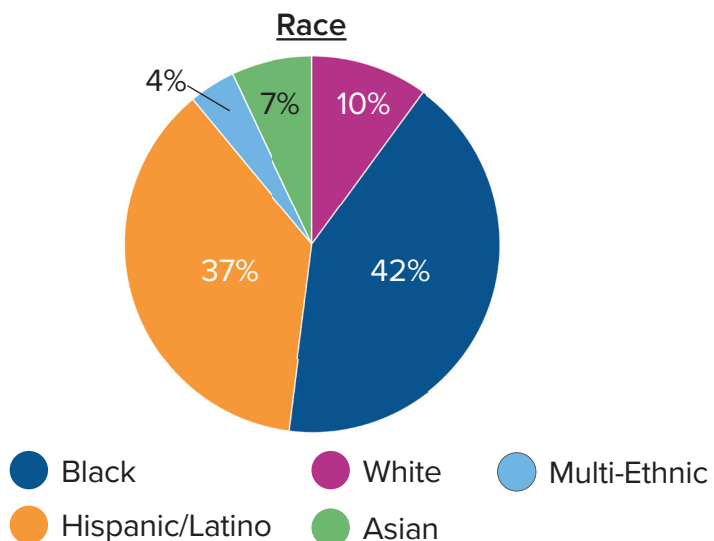
Program Reach

2,735 3rd – 5th grade students in **22 schools** across Milwaukee, Waukesha, and Racine.

2024-2025 Calendar



SHARP Students At-A-Glance



*In Wisconsin, a student is considered economically disadvantaged if they meet the income eligibility guidelines for free or reduced-price meals under the National School Lunch Program.

What's new this year?

- **New supplies:** Students in the 4th and 5th grade programs were given special books to utilize throughout workshops. In addition, they were given project portfolios to help guide them through the process creating their coding prototype/ project.
- **Spanish curriculum:** Our 3rd grade materials have been translated into Spanish to better support ESL students.
- **Hands-on experience:** This fall, in-person, professional development workshops were offered to classroom teachers. They had the opportunity to participate in the 3rd grade curriculum creating their video games. They also worked on designing a unique yarn painting.
- **New partnership:** MATC is hosting a Video Game Expo for 3rd graders in late January and will partner with Discovery World this spring to create a tailored learning experience for the 3rd grade curriculum.

3rd Grade Snapshot

Code & Design

September 2024 – January 2025

In our Code & Design program, students are introduced into video game design fundamentals—including algorithms, sequencing, loops, debugging, and events—through Code.org lessons. Using Sprite Lab, they design games with custom themes, characters, and backgrounds, bringing their creative visions to life through block coding.

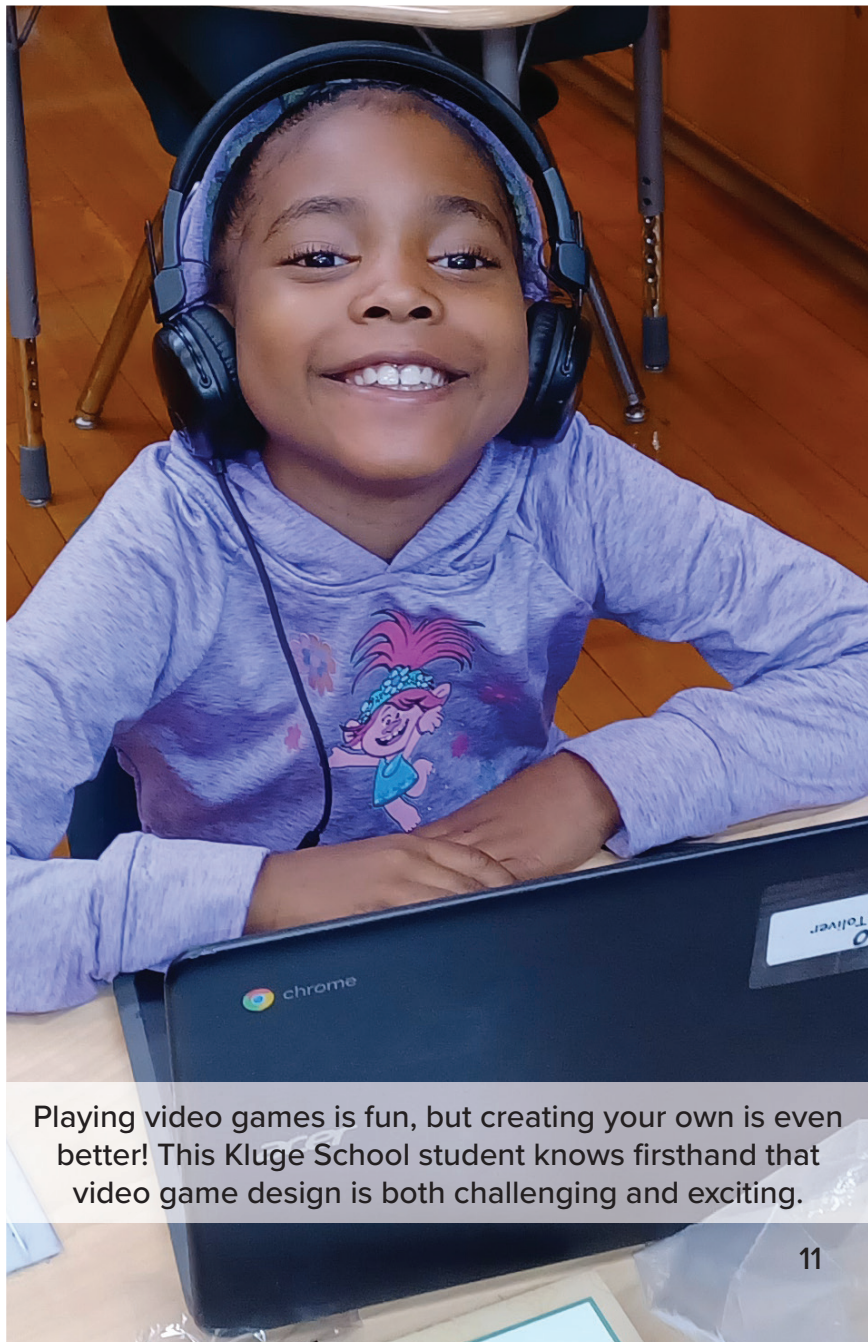
To help reinforce concepts, students follow a SHARP-created Video Game Design Notebook that outlines daily goals and step-by-step project guidance. This tool supports vocabulary practice, divides the project into manageable tasks, and enables teachers to assist students effectively, even when workshops were missed.

Educational Tour Experience



Using LEGO® robots, students will program to move and capture an object, building upon their understanding of how code can be used to create movement and actions – solving problems in the real world.

“SHARP workshops are a huge asset. As a parent, I am glad my daughter’s school is part of the program. The look of pure joy on her face when she gets past a hard level is priceless! She is also proud to help her teammates when they struggle—she feels like a superhero!”
-Beth P., Parent



Playing video games is fun, but creating your own is even better! This Kluge School student knows firsthand that video game design is both challenging and exciting.

4th Grade Snapshot

Code & Build

September 2024 – March 2025

Building on fundamentals learned in the 3rd Grade Code & Design Program, students tackle intermediate coding challenges on Code.org, including algorithms, loops, and debugging. The primary focus of the program is for students to work as teams to identify community problems, design tech-based solutions, build physical prototypes, and create digital renderings of their designs.

Milwaukee area professionals volunteer at key checkpoints, providing expertise and judging final presentations. The program culminates in a Design Challenge, where teams pitched their innovative ideas to guest judges. Winners from each school advance to the Interschool Design Challenge at Fiserv Forum on March 12, where they'll showcase their solutions to a panel of judges.

Educational Tour Experience



STEM Center

Students dive into the engineering design process before being challenged to build a mini golf hole for a community park, all while taking in MSOE's innovative STEM Center and campus. The mini golf hole will be designed so a robotic golf club can score a hole in one!

“
Maria came into 4th grade as a quiet and reserved student, often struggling with English. It quickly became clear that through the hands-on project, Maria not only learned to collaborate, but she shared her excitement about what her team had accomplished. SHARP helps students feel seen and heard and is invaluable for providing opportunities that are schools often cannot provide.
”

-Ms. L., Teacher



Students get hands-on at the MSOE STEM Center, diving into Lego® blocks to construct their golf course!

5th Grade Snapshot

Code & Circuits

February 2025 – May 2025

Using the BBC micro:bit, students construct circuit-based prototypes, completing projects such as illuminating LEDs, activating buzzers, and controlling other circuit aspects.

The program culminates in a transportation-themed group project, where students design, build, and code circuit-based prototypes. Using a SHARP-created Engineering Notebook, students are guided through circuit diagrams, coding exercises, and project milestones, which make the learning process accessible and structured. Students gather foundational knowledge of coding and circuit-building principles that can serve as a steppingstone for future educational opportunities in coding and technology.

Educational Tour Experience

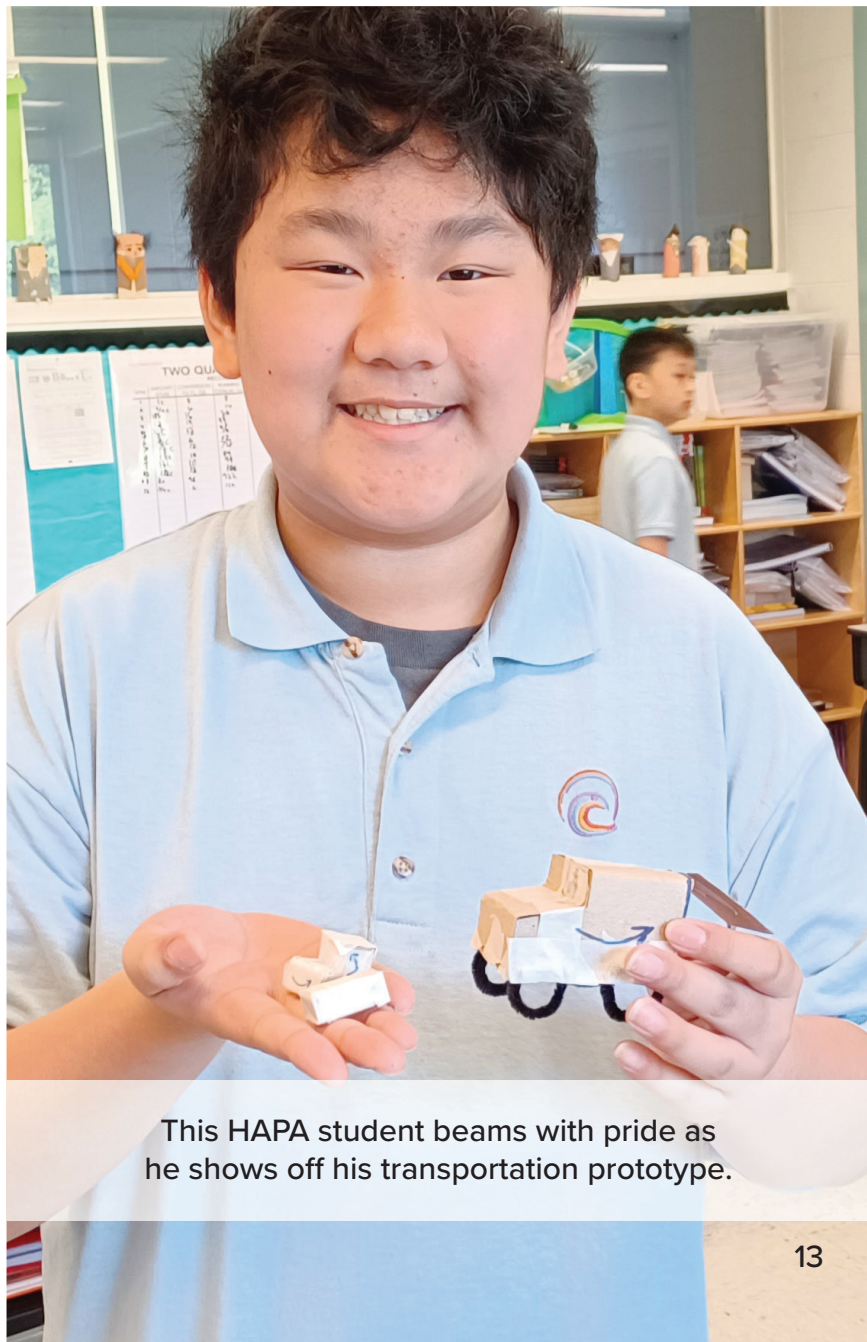


STEM Center

Joined by MSOE professors, students learn how to code LEGO® robots to drive through a maze, drawing connections between how the same technology is used for navigation in self-driving cars. Then, they are challenged to code a self-driving car that will safely stop for pedestrians.

“It’s incredible to see how SHARP’s Code & Circuit program impacts students like Miguel, a 5th grader in my class. Miguel has always been curious, but he often struggled when things didn’t go as planned. This program provided him with a unique opportunity to develop not only technical skills but also perseverance and emotional resilience.”

- Ms. J., Teacher



This HAPA student beams with pride as he shows off his transportation prototype.



Other Initiatives

Professional Development

SHARP's Professional Development series uses the ADDIE Model (Analyze, Design, Develop, Implement and Evaluate) to equip educators with **curricular concepts, teaching strategies, and social emotional learning (SEL) techniques** that can apply in their classrooms. This Fall, SHARP hosted two sessions as part of our **SHARP'en Up** series:

Session 1 – Resiliency Through the Arts

“Art the SHARP way” is a dynamic approach that goes beyond traditional projects. It harnesses the **transformative power of the arts** to inspire a passion for learning, deepen students' understanding of core concepts and strengthen teachers' ability to meet the diverse needs of their students. In this session, they created abstract and realistic small yarn paintings by placing yarn on transfer paper. Teachers enjoyed learning different ways to **integrate art and art language** throughout the school day and felt that this would help encourage artistic abilities.

Session 2 – Coding across Disciplines

Teachers from all disciplines became the student, experiencing the 3rd grade Code & Design program first-hand with the BBC micro:bit. By getting teachers in the driver's seat, we aimed to demystify unfamiliar terms and **reduce anxiety around technology**. Many were surprised by how quickly they grasped coding concepts and began to consider how they could incorporate skills like **algorithmic thinking and block coding** in their own classroom.

Most notably, 100% of teachers in both students felt this training helped them gain new instructional strategies and would recommend this program to their colleagues.

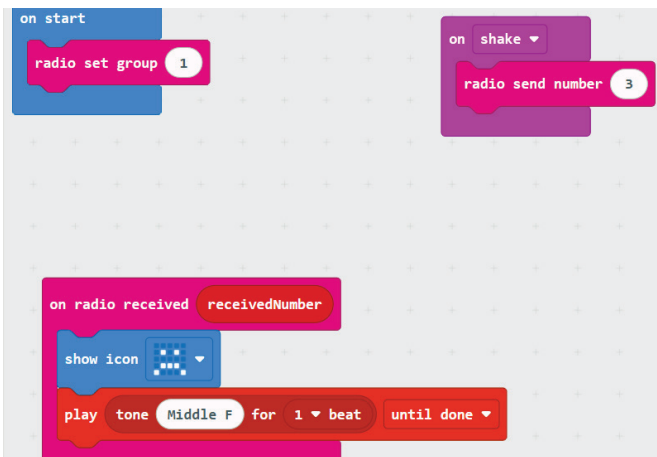
“Reading With” Programs

SHARP's reading programs aim to foster a love of learning and reading in young students by connecting them with college athletes from local universities. Through partnerships with **Marquette University and UW-Milwaukee**, student-athletes visit classrooms in Milwaukee for reading, mentoring and community building. These programs provide students with **positive role models** and enhance their reading skills, while fostering a **deeper sense of connection** within their classroom and to their communities. We are grateful to the **Golden Eagles and Panthers** for taking the time throughout the school year to make our students feel so special.

Glossary of Terms

Below is a glossary of key coding terms used in this report, designed to help explain the concepts and technical skills our students develop through SHARP's STEAM programming. **STEAM Education** is an approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points to guide student inquiry, dialogue and critical thinking.

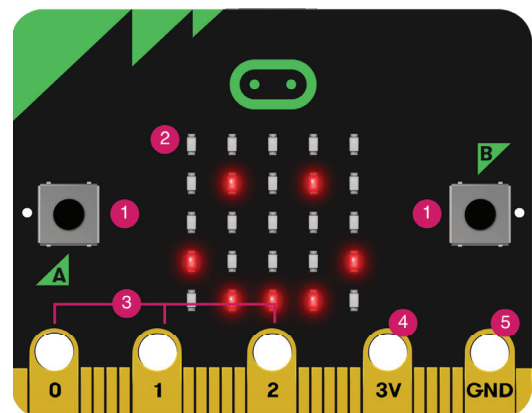
1. **Algorithm** – a list of steps to complete a task
2. **Block coding** – a beginner-friendly method of coding that uses graphical blocks to represent code concepts. Instead of writing complex lines of code, young learners can drag and drop these blocks to form sequences and create programs. Each block is designed to perform a specific function and can be connected with others like pieces of a puzzle to build something
5. **Debugging** – finding and fixing problems in code
6. **Events** – an action that causes something to happen. For example, when students push the up key ↑ on their keyboard it will make their video game character move north
7. **Loops** - An action that repeats over and over again. In coding, students use loop blocks to reduce the number of code blocks needed
8. **Micro:bit** – pocket-sized computer that helps children learn coding and programming. It includes an LED light display, buttons, sensors, and many input/output features



Sample of block coding

```
1 radio.onReceivedNumber(function (receivedNumber) {
2   basic.showIcon(IconNames.Sad)
3   music.play(music.tonePlayable(349, music.beat(BeatFraction.Whole)), music.
4 })
5 input.onGesture(Gesture.Shake, function () {
6   radio.sendNumber(3)
7 })
8 radio.setGroup(1)
9
```

Sample line of code



Micro:bit sample

3. **Buzzer** – a small audio output device
4. **Code.org** - Code.org® is an education innovation nonprofit dedicated to the vision that every student in every school has the opportunity to learn computer science and artificial intelligence as part of their core K-12 education
9. **Sequence** – order that commands are executed by a computer
10. **Sprite** – 2D image or animation that is used to represent a character, object, or effect in a game or scene
11. **Sprite Lab** – a block-based coding program provided by Code.org where students can create games and animals using interactive sprites

Thank You from the SHARP Team

SHARP sincerely thanks our **Board, partner schools, supporters and volunteers** for helping make the first half of the 2024-2025 a success! If you have questions about this report or our programming, please contact **Colleen Grimes, Director of Operations & Development**, at colleen@sharpliteracy.org or 414-410-3204.

Our Team

Lynda K. Welsh

President/CEO

lynda@sharpliteracy.org

Lauren Farina

Director of Innovation & Technology

lauren@sharpliteracy.org

Colleen Grimes

Director of Operations & Development

colleen@sharpliteracy.org

Melissa Mursch-Rodriguez

Program Manager

melissamr@sharpliteracy.org

Nandini Sinha

Chief Innovation Officer

nandini@sharpliteracy.org

Tamela Smith

Vice President of Programs & Partnerships

tamela@sharpliteracy.org

Melissa Streeter

Development & Marketing Manager

melissa@sharpliteracy.org

Stay connected with SHARP!

Follow us on our social media channels to stay up-to-date.



Volunteer Opportunities at SHARP

The success of our programming would not be possible without the generous support of involved community members.

Here's how you can help:

Become a Design Challenge Judge

Between January – March, SHARP asks local community members to serve as a guest judge in one of our 4th grade classrooms. As a judge, you'll listen to student pitches, engage with the students by asking questions, and score their presentations using an easy-to-follow rubric. The top teams selected will advance to the Interschool Design Challenge on March 12 at Fiserv Forum.

Support our Development Team at one of our fundraising events

SHARP has three special fundraising events each year: A Novel Event in the fall, Unwrapped Waukesha in February and Unwrapped MKE in May. We welcome volunteers to help us with event logistics before, during and after the event.

Coach our students on their public speaking skills

As part of our 5th grade program, Code and Circuits, volunteers are invited into the classroom to provide feedback on each student's public speaking and presentation skills.

To learn more about volunteer opportunities at SHARP, contact Colleen Grimes, Director of Operations & Development, at colleen@sharpliteracy.org or 414-410-3204



At SHARP Literacy our mission is to partners with educators to foster a love of learning and brighten children's futures through innovative STEAM-based experiential programs.