



MINNESOTA'S K-12 EDUCATION CONNECTION

Lakeville Students Raise Donations for Victims of Hurricanes Harvey, Irma



Lakeville Area Public Schools

Three separate donation drives have been put in place by Lakeville Area Public Schools high school students to help those affected by catastrophic hurricanes Harvey in southeast Texas and Irma in Florida and the Caribbean.

Lakeville North and South high school students from Minnesota Center for Advanced Professional Studies (MNCAPS) and a robotics team from Lakeville South High School called Qbitz have been diligently working to garner donations to offer relief to victims of Harvey and Irma.

Help Comes First

A disaster relief school supply drive titled Help Comes FIRST was started by Qbitz, a six-member FIRST robotics team, to help students in the Houston School District.

"A large focus of robotics and the STEM program is giving back to our community and helping others," said Grace Kosieradzki, Qbitz team member. "Knowing school was about to start, it dawned on our team that the

flood waters and devastation must have destroyed the classroom supplies the kids need for their education. We decided to try to do something to help the problem."

Qbitz was connected with Trial Lawyers Care, a nonprofit organization with which mentor Art Kosieradzki (Grace's father) is affiliated. Grace said they decided to partner with Trial Lawyers Care after learning the organization had experience successfully running a school supply drive and had started their own initiative for Harvey victims.

"We decided to rally our contacts, including the FIRST community, and they would utilize their contacts to collect as many supplies as possible," Grace said.

The group created an Amazon online Wish List of basic items to make it as easy as possible for those wanting to donate. Everything from pens and paper to backpacks and notebooks are needed. Participants can select whatever they would like to donate and then the items will be sent directly to Texas to be sorted and delivered to those in need by a team of volunteers. Grace and the rest of her Qbitz teammates, as well as Art and coach and LSHS STEM teacher Dan Rawley, have been promoting the supply drive ever since.

"It makes me feel really good that I'm able to make a difference despite being so far away," Grace said. "It makes me feel hopeful seeing that everyone can make a difference and all the willingness there is to help out others."

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Young Book Angel Surprises Fellow Students with the Gift of Reading

*Ashley McCray
Shakopee Public Schools
Communications Supervisor*

Children are the gift of life. Even at a young age, they have the ability to evoke an uncandidly amount of compassion for others.

Ava, a Sun Path Elementary student, fits that description perfectly.

Last year, during her second grade year at Sun Path, Ava took it upon herself to care about and share with others; some of them who maybe didn't have access to the same opportunities as others due to financial reasons.

Ava worked with her father, AJ, to help others far beyond what she had originally imagined or planned.

Ava's grandmother, Bel, passed away last year after a five-year battle with cancer.

"As a single mother of five, she was the hero that every kid wanted," said Ava's father, AJ. "She was tough, loving and supportive. Growing up, we didn't have a lot of money. Many times we relied on the generosity of others and programs like the Minnesota Food Pantry and Toys for Tots. Even though we didn't have a ton of material things, we always had love in the house. My mom always preached giving back when we could. She taught us to be appreciative of what we had and to always remember someone else had less."

AJ says his family never went hungry. They always had food and a warm shelter. However, there were tough times.

"We had subtle reminders of our financial struggles," said AJ. "Throughout my child-



hood, I can't remember once being able to order something from the book club. It wasn't something that hugely negatively impacted me, but it was a reminder. When a lot of the other kids received their books, it was another reminder as something we couldn't afford."

AJ says his late-mother always reiterated the importance of education and hard work.

She also pushed him and his siblings to read and stay informed.

She took them to a local library where they would each grab books every other week. Well, as many as they could carry on the walk home.

Those moments have stayed with AJ over the years. He never forgot his upbringing or the values his mother instilled in him every day.

AJ now has three children, including Ava. All of them understand the importance of giving back. They donate items to Toys for Tots every year and contribute to the Minnesota Food Pantry.

One evening, while sitting at the dinner table with her father, Ava had an idea and asked

Continued on Page 4

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Lakeville Students Raise Donations for Hurricane Victims Continued from Page 1



Art said he is inspired by the tenacity of the group.

"This group of kids is amazing. They are 15-years-olds, and what they're working to accomplish is impressive," Art said. "They worked with others in Houston to make sure the list contains exactly what is needed and have a shipping site pre-populated and a group of volunteers in Houston ready to receive, sort and distribute. It's incredible."

MNCAPS students join friendly competition for Harvey and Irma victims

MNCAPS students, which includes juniors and seniors from Lakeville North, Lakeville South and Prior Lake-Savage high schools, are

taking part in a friendly competition to see who can raise the most money for people affected by both Harvey and Irma. The morning set of classes, which is made up Healthcare Pathway 1 and Business Pathway 2, are competing against the afternoon classes, which consists of Business Pathway 1 and Healthcare Pathway 2.

The morning classes are raising money through an everydayhero website, which operates much like GoFundMe except that 100 percent of the donations will be given to the Houston Food Bank — a charity the team chose to support for this project.

"We chose the Houston Food Bank because they work with all populations and will tell us exactly where the money is going, such as the hospitals and shelters. We will know who we helped and where we helped," said Amanda Able, a MNCAPS and Lakeville North senior.

The afternoon MNCAPS students decided to help those impacted by Hurricane

Irma, since, at the time, it was about to barrel through Florida.

"We thought, why don't we step in front of everything and focus on Hurricane Irma victims," said Drake Olson, a MNCAPS and Lakeville North senior. "We saw the writing on the wall and thought we'd be proactive."

The team decided to sell blue rubber bracelets with the phrase "I fought Irma" on them to students and staff from all three high schools. People must donate a minimum of \$5 and there is no maximum. The money will be wired digitally to Direct Relief for Hurricane Irma. Direct Relief staff deliver critical medicine and supplies to the health system as well as respond to other needs across the state as responders enter the recovery phase.

The two teams may be supporting different hurricane regions, but their thoughts on why they're helping all center around making a difference in other people's lives that they don't know.

"It makes me feel triumphant. We know that this money is going to something that won't only change someone's life, but people will have stories about it for years to come," said Ashton Abraham, a MNCAPS and Lakeville South senior. "They are able to say 'I was strong enough,' and we are putting that strength in their hands. It's a great feeling."

"It feels patriotic in a way . . . helping

members of your own country and having the ability to give money back to your own country," said Alex Muma, a MNCAPS and Lakeville North senior.

Olson felt empowered by making real change in the world.

"It's self-empowering. We can affect change in the real world and we can get people to follow us and try to make a positive difference," Olson said. "I just found it eye-opening that we could actually do something like this, a fundraiser that is affecting so many lives. I never thought I'd be able to make this big of difference at this point in my life, and now that I know that I can do it and have done it, I have a new perspective on my life and the world."

And, although the reward of helping others during a devastating time in their lives is the real bonus, the winning team will win a fall party, and the students will earn either a doughnut party if the two teams combined reach \$1,000 in donations or they'll get doughnuts and one casual dress Friday a month if they collect over \$2,000 combined.

[\(952\) 232-2000](http://www.isd194.org)

Book Angel Continued from Page 1

her father for help.

She does chores around the house in order to earn money for her school's book club.

One month after she ordered a book, she told her father she was sad because one of her friends never orders from the book club.

"I explained that it could be due to a bunch of reasons," said AJ. "Maybe she never saw a book she wanted, maybe she got books from somewhere else, maybe she had other interests aside from books . . ."

Ava replied, "no, that's not the reason."

Ava told her father that her classmate didn't buy books because she didn't have the money. To help put a smile on her friend's face, Ava asked her father if she could buy her classmate a book.

"I let her know that it was a very generous thought, but one that could prove problematic because one friend might feel bad that Ava is buying books for someone and not everyone," said AJ. "At that point, my daughter turned to me and said 'Ok, let's buy books for the entire class.'"

The dad laughed, but still took his daughter's request seriously.

From that moment, they set out to make it happen.

"We wanted to do something to honor my mom," said AJ. "What better way to do it than to donate to a cause she would be proud of."

Bel's Books was born; a tribute to his late-mother and Ava's grandmother.

Last year, the two started a "Go Fund Me

Page" with a fundraising goal of \$20 for every student in Ava's 2nd grade class. They sent the link to family and friends and ultimately reached their goal in four days.

For the 2016–17 school year, they reached their goal in eleven days.

And, thanks to the generosity of others, they've already reached their goal for the 2017–18 school year.

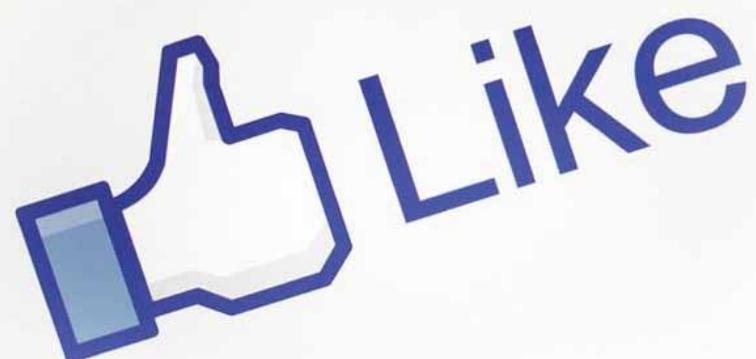
They both say it's amazing to see a small conversation at the dinner table result in more than \$1,000 in donations in two years.

"Everyone is having a blast and I know my mom would have loved it," said AJ. "We appreciate Sun Path for allowing us to help in the past two years and donate this money. It makes us so happy to be able to do this. Last year and this year, we noticed that there were a handful of kids who had never ordered books. It puts a smile on all of our faces, our donors' faces and I'm sure my mother's face."

As Ava works to create her own story of memorable chapters, it gives her and her dad comfort knowing they're taking a few pages from her grandmother's book; the matriarch who created the family tradition of sharing, caring, and, most importantly, bringing joy into the lives of others.

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Pilot Knob STEM Magnet School Named a Green Ribbon School for 2017

LIVEGREEN Supports Low- and No-cost Conservation Efforts



West St. Paul-Mendota Heights-Eagan Area Schools

U.S. Department of Education announced that Pilot Knob STEM Magnet School is among the 2017 U.S. Department of Education Green Ribbon Schools Awardees.

Pilot Knob is the fourth school in District 197 to be named a Green Ribbon School, joining Henry Sibley High School (2016), Garlough Environmental Magnet School (2012) and Heritage Environmental-STEM Magnet School (2013). In addition, District 197 was named a Green Ribbon Schools District Sustainability awardee in 2015.

Pilot Knob is committed to operating its building efficiently, and fully supports all of the initiatives of LIVEGREEN. LIVEGREEN is the district's own sustainability program, which promotes energy-saving and recycling

initiatives throughout all schools and offices. Pilot Knob has a LIVEGREEN Club consisting of third and fourth grade students and a teacher. The team helps implement low-cost or no-cost strategies to reduce energy use, promote recycling and composting, and conserve resources. LIVEGREEN goes beyond a standard energy-reduction program by incorporating right-sizing waste streams, recycling, composting, green cleaners, diesel emissions reduction, paper reduction, behavioral changes, and engineering controls into its initiatives. Through sustainability efforts, Pilot Knob has avoided more than \$17,000 in utility costs since 2009. It tracks resource use in ENERGY STAR Portfolio Manager, and currently has a score of 88.

Since 2009, Pilot Knob has had single-stream recycling schoolwide and organics

collection for lunchroom waste. In collaboration with Dakota County, the school conducted a waste sort in 2014. The results informed the school community of what it was getting right and what it needs work on. To help students avoid confusion, the school has bins labeled with posters and pictures of what goes where. Through a grant provided by Dakota County, Pilot Knob received all new bins in the cafeteria that are user-friendly even for the youngest recyclers. The school has an 80 percent recycling rate.

LIVEGREEN events promoted by the LIVEGREEN Club are scheduled throughout the school year and include MOVEGREEN, Lower the Lights, LIVEGREEN Week, Earth Day and compost sales. LIVEGREEN is always looking for smart, green, and efficient practices to incorporate into the school. The LIVEGREEN Club promotes recycling and composting, water reduction, and energy conservation. Pilot Knob's principal visits every classroom and teaches a lesson about energy conservation and waste reduction. Students are taught how much soap and hand drying paper is necessary and not wasteful. "One, two, three is enough for me" is the slogan that students use when getting paper towels to dry their hands.

Two water-bottle filling stations were installed at the elementary in 2016. The hydration stations deliver a clean water bottle fill and minimize dependency on disposable plastic water-bottles. Teachers and staff also have easy access to a purified water system to fill water bottles. The school has reduced domestic water use by 37 percent over seven years.

Through many activities and partnerships, the district works hard to improve the health and wellness of students and staff. Thanks to a generous grant from C. H. Robinson Worldwide, Inc. and the Let's Move Salad Bars to Schools initiative, Pilot Knob operates a salad bar that features a variety of fruit, vegetable, whole grain, legume, and low-fat dairy options during breakfast and lunch. The school was a HealthierUS Challenge Silver awardee in 2011. All Pilot Knob students spend 90 minutes per week in structured physical education and another 150 minutes at supervised active outdoor recess, unless the temperature is below -10 degrees.

All Pilot Knob students participate weekly in a STEM specialist class where



the curriculum focuses on technologies that improve the environment. Students learn about wind and solar power, and participate in activities that demonstrate how such technologies work to produce clean energy. In the STEM Sparks classes, students select courses that teach about solar power and engineering. Students participate in field trips to Dodge Nature Center, and all Pilot Knob teachers worked with the University of Minnesota on a Monarch Project.

All 408 Pilot Knob students spend time in the school garden planting, tending, and harvesting, and then they enjoy eating the fresh vegetables and herbs. Excess food is donated to a local food shelf. Pilot has an outdoor classroom complete with tables and benches for students and teachers. Behind the school is a wooded area with a trail that teachers use to take students into the woods to explore nature. Students use this area outdoor for science, forestry, and wildlife lessons and activities.

In total across the country, 45 schools, 10 districts, and 8 postsecondary institutions were honored for their innovative efforts to reduce environmental impact and utility costs, improve health and wellness and ensure effective sustainability education.

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Westonka Fourth-Graders Make Memories at Wolf Ridge



Westonka Public Schools

In what has become a rite of passage, Westonka's fourth-grade students, along with a group of staff and parents, spent an exciting week at the Wolf Ridge Environmental Learning Center in Finland, Minnesota. Shirley Hills Primary School students visited Wolf Ridge May 15-19, while Hilltop Primary School fourth-graders made the trip May 22-27.

Students spent the week learning about the environment and had opportunities to participate in a variety of activities, including canoeing, papermaking, fishing, making

dream catchers, wall climbing, making fire with flint, and setting live traps to study small mammals. Other activities included a ropes course, a raptor program, tree study, animal tracking and history.

"This year completed the 39th trip to Wolf Ridge for Hilltop school," said Hilltop fourth-grade teacher Mindy Barrett. "On Monday, the weather was a bit cloudy and misting on our arrival to Wolf Ridge, but the excitement was in full swing for the week's adventures."

The kids enjoyed using their new rain gear for a couple of misty days and then the

weather turned perfect for the next two days. Students enjoyed classes, great company and amazing food, grown locally at the Wolf Ridge farm.

"Thursday evening brought many emotions as we had our closing ceremonies. The kids were so happy for the week and their experiences but sad to see the adventure come to a close," added Barrett.

The Wolf Ridge experience stays with many students for a lifetime. The trip is often mentioned as a favorite memory of school days and is even noted in some graduation speeches.

"We had a great week at Wolf Ridge," said Shirley Hills fourth-grade teacher Jenny Naslund. The weather for Shirley Hills students was rainy and chilly, but it did not slow them down.

"Wolf Ridge helps science and history come to life for our fourth-graders," said Naslund. "Whether they are learning about the wetlands by walking through the fen, building a windmill to understand renewable energy or learning about the Voyagers by becoming a voyager for an afternoon, Wolf Ridge creates a passion and excitement for learning in our students."

Students and parents at both schools participate in a variety of fundraising activities to help cover the costs of the trip.



Wolf Ridge is a nationally respected and accredited K-12 school and residential learning center. Wolf Ridge educational activities immerse participants in nature exploration, cultural history, outdoor skills, team-building, and personal growth.

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Emerald Ash Borer larvae.

all of the native areas of the state. A few of the common species found on land include Canadian thistle, common buckthorn, wild parsnip, and the two fungal species that cause Dutch elm disease and oak wilt. Another one that folks are becoming aware of is the emerald ash borer.

Every species evolves in its home territory to

have one to several ways to expand its range. They may be windblown, rain splashed, carried by animals, or moved in soil or water. Almost all short-distance spread is through these natural dispersal mechanisms. In their home territory, short distance spread is rarely a problem because the resident plants and animals have evolved to coexist more or less peacefully.

On its own, emerald ash borer will generally move less than four miles a year. But with help from people, it can cover 55 miles per hour in firewood, nursery stock, or personal belongings.

On the flip side, long distance spread is almost always human assisted. Because long distance spread takes the species a long way



Common Buckthorn

from home, the resident plants and animals are not often prepared to cope with their new neighbor. Natural enemies are missing and host species often lack the natural defenses necessary to survive an attack by the introduced species. Once introduced, aggressive species are free to expand their range using their short distance dispersal mechanisms with a competitive advantage over native plant and animals due to the lack of natural enemies.

Minnesota Department of Agriculture:

www.mda.state.mn.us/

USDA: www.usda.gov

Minnesota DNR:

www.dnr.state.mn.us/index.html

Check for invasive species when removing docks and equipment for seasonal storage

The Minnesota Department of Natural Resources is reminding lake property owners to carefully check boats and trailers, docks and lifts, and all other water-related equipment for invasive species when removing equipment for seasonal storage. This is important as new zebra mussel infestations were initially reported by people making end of season inspections of docks, boats and boat lifts.

"These recent confirmations serve as a reminder of the importance of carefully examining all equipment when taking it out of the water," said Heidi Wolf, DNR invasive species unit supervisor.

It's especially important to follow Minnesota's law and keep docks and boat lifts out of the water for at least 21 days before putting them into another body of water. This state law is central to the training DNR-permitted lake service provider businesses receive. Anyone transporting a dock or lift from the adjacent shoreline property to another location for storage or repair may need a permit, to help prevent the spread of aquatic invasive species.



U.S. ED Green Ribbon Schools Applications Due

Minnesota participates in the U.S. Department of Education Green Ribbon Schools program. Schools, districts, and early learning centers seeking nomination must submit an online application by December 1 each year. Applications are reviewed each winter, and winners are announced close to Earth Day each spring.

Contact: John Olson; Science Content Specialist; (651) 582-8673; john.c.olson@state.mn.us

Websites:

- education.state.mn.us/MDE/dse/recog/grn/index.htm
- www2.ed.gov/programs/green-ribbon-schools/index.html

Arbor Day Awards

Each year, the Arbor Day Foundation honors top individuals and organizations involved in exemplary tree planting and environmental practices. Since 1972, the Foundation has presented awards for work at the international, national, state, and community levels to recognize conservation efforts such as tree planting and care, Arbor Day celebrations, education, community projects, and roadside beautification.

Deadline: Nominations due Nov. 3, 2017

Websites: www.arborday.org/programs/awards/categories.cfm

Every Elephant Counts

It is currently estimated that we are losing 96 African elephants a day. We have to do something to reverse this tragedy. So the National Wildlife Federation is asking everyone to use their voice and make a pledge to help protect African elephants. After making the pledge, students ages 9-18 are asked to help find the next big idea that could make a material difference for African elephants.

Deadline: Entries due by November 23, 2017

Websites: www.everyelephantcountscontest.org

Beneath the Waves Youth Making Ripples Film Competition

Students in grades K-12 are invited to submit films of 5 minutes or less on a marine

science topic to the Youth Making Ripples Film Competition. The film's message can focus on an interesting marine topic, a specific marine-related problem or issue, or a call to action for conservation.

Deadline: Submissions due Dec. 5, 2017

Websites: youthmakingripples.org/submit-film

Recycling Is Bigger than the Bin Contest

Calling all K-12 student filmmakers and artists! You are invited to participate in these national recycling awareness poster and video contests. Most of the recycling we see today happens in the blue bin in your house. We recycle our paper, newspapers, aluminum cans, plastic bottles, and steel food cans by placing them in the blue bin and putting it on the curb once a week. That's easy! But what about those things that are "bigger than the bin"—how are those recycled?

Deadline: Entries due December 15, 2017

Websites: www.jason.org/recycling-contest

World of 7 Billion Video Contest

Create a short video – up to 60 seconds – about human population growth that highlights one of the following global challenge topics: Preventing Pollution, Feeding 10 Billion, or Advancing Women and Girls. All videos must include how population growth impacts the issue and at least one idea for a sustainable solution.

Deadline: Submissions due Feb. 22, 2018

Websites: www.worldof7billion.org/student-video-contest

ecoSolution Grants

The Captain Planet Foundation (CPF) awards ecoSolution Grants to support solution-oriented, youth-led projects that result in real environmental outcomes. Projects must be solution-oriented, project-based, performed by youth, and have real environmental outcomes.

Awards range from \$500 to \$2,500

Deadline: Applications are accepted January 16 through July 15 and July 16 through January 15, annually

Websites: www.captainplanetfoundation.org/grants/ecosolution

Project Produce: Fruit and Veggie Grants for Schools

The purpose of Project Produce is to create planned lunchroom activities to showcase and taste fresh vegetables and fruits. Proposed projects must be planned with the intention of offering activities to all students in the school building. Lunchtime-based projects are preferred because they offer access to all students. Grants of \$2,500 are awarded.

Deadline: Applications are accepted year-round

Websites: www.chefannfoundation.org/programs-and-grants/project-produce

From Grass to Glass: McKenzie Gregory Wins Award Teaching Agri-science



*Rockford Middle School
Center for Environmental Studies*

In June of 2017, McKenzie Gregory traveled to Kansas City to attend the National Agriculture in the Classroom Conference where she was honored as Minnesota (MAITC) Agriculture in the Classroom's Outstanding Teacher of the Year. This award is extended to one classroom teacher, who is not an agriculture teacher, and creatively incorporates the importance of agriculture into their curriculum.

At the time the award was received, McKenzie taught 5th and 6th grade writing

at Rockford Middle School-Center for Environmental Studies (RMS-CES). Her featured work with agriculture included her exploratory course figuratively titled "From Grass to Glass" in which her students used project based learning to answer the driving question of: "How does milk get from grass to glass?" In the course, students investigate the various process milk takes from dairy production to human consumption. The idea for the course stemmed

from her upbringing on a dairy farm in central Minnesota as well as the common disconnect between students and the world of agriculture. As a culminating experience, students travel to a local dairy farm to find out firsthand how milk production actually works. Students prepare during class sessions leading up to the field trip by learning about the digestive system of dairy cows, how much cows consume and produce, farm to store processes, and nutrition of dairy products. After the field trip students reflect and wrap up their studies through a farming sustainability project, with the overall goal of identifying how dairy farmers practice

stewardship using STEM concepts on their dairy farms. Over the summer months, McKenzie accepted the position of Middle School Agri-Science Teacher and Rockford Middle FFA advisor. Gregory believes the new position is fitting as it allows her to combine her passions of educating students and sharing the values of agriculture.

Rockford Middle School-Center for Environmental Studies is also a STEM Magnet program that focuses on helping students to become innovators, problem solvers, and collaborators through authentic, engaging, hands-on learning experiences. Various opportunities and spaces contribute to the effort of immersing students in environmental studies, including courses such as Project Lead the Way, STEM Literacy, and Agri-Science. Learning spaces such as raised bed gardens, a DNR approved school forest, rain gardens, grape vine gardens, and straw bale gardens located throughout the school campus also enhance learning opportunities. During students' four years at RMS-CES, they also experience well developed partnerships between their school and Baker Near Wilderness Settlement, 4H, the Raptor Center, and Deep Portage.

Exploratory classes, like Gregory's "From Grass to Glass" were developed to give students opportunities to explore difference areas connect to STEM. Course topics

are teacher selected and experience within the courses are connected to STEM academic standards. Exploratory classes range from the secrets of flight to computer coding and reducing carbon footprints and archeology. In one year, each student participate in four different Exploratory courses, each lasting one quarter and taking place one time per week.

While STEM concepts are present in each environmentally related course, staff at RMS-CES also successfully infuse STEM into all of their core classes of language arts, math, science, and social studies. Each grade level, 5 through 8, focuses on a theme based on environmental education and literacy. Gregory reports, "RMS-CES is a special place to come each day because the learning that takes place among students as well as staff happens in an environment where everyone truly cares about one another. Experiences are meaningful and allow for students to grow more than just academically, but through the building of skills and relationships that will outlast their time in the building."

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Alice Smith Celebrates New Garden with Picnic and Dance Party



Emily Buss, Hopkins Public Schools

A courtyard nearly a year in the making, Alice Smith unveiled its new garden space with an outdoor party and special guest chefs from the Hopkins fire and police departments.

After nearly a year of planning and months of hard work, the garden at Alice Smith Elementary is up and running. Under sunny skies, the school held a ribbon-cutting ceremony on Wednesday, May 24, and invited students to tour the new garden and celebrated with a picnic. And now the harvest begins.

The four-bed garden is home to oregano, butternut squash, basil, zucchini, sweet yellow peppers, and more. Principal Jody De St. Hubert said the holes for the garden were dug and a fence erected last fall, but they were waiting until spring to

begin planting. A parent artist sketched the official garden designation sign and students used their artistic skills to color the design. With the help of Boy Scout and Hopkins High School junior Ian Baxter, a new gate and bench were also installed.

"I was looking for an Eagle Scout project and I was told to reach out to an elementary school," Baxter said. "I went to Alice Smith and from second grade on they welcomed me in. So I had a connection with the school and I loved it for the years that I was here. And I wanted to give back."

Baxter, 17, worked with the school's garden club – which includes about 22 students – after school to design the garden beds and decide which vegetables to grow. Shortly before the ribbon-cutting ceremony, kindergarteners got their hands dirty and planted the seeds. Baxter said he's excited to see the garden grow and give students a new learning opportunity.

Throughout the summer, the seedlings began to sprout, and by the end of August, the harvesting began. Cook supervisor for Hopkins Schools and Minnesota School Nutrition Association president Kerry Crawford said salad greens were collected in June, and since the beginning of school, kindergarteners have harvested tomatoes, peppers, potatoes, eggplant, herbs, onions,

and cucumbers. All of these items will be used in the school's kitchen. De St. Hubert said having a garden on school grounds allows students to take pride in their work and also see where their food comes from.

"All of the students will have the opportunity to explore the garden and it will fit right into their curriculum," she added. "The kids who have worked on this are just jazzed. They are super excited to see this garden come to life."

To celebrate the grand opening, the school invited the Hopkins police and fire department to hold a cookout complete with burgers, sweet potato fries, and fresh watermelon. The event doubled as party to celebrate the school reading 1.5 million minutes. A DJ was on hand to get kids and staff alike dancing.

The garden, however, wouldn't have



come to fruition without the generous support from the school community and donations from organizations in and around Hopkins.

[\(952\) 988-4000](http://www.hopkinsschools.org)



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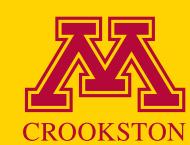
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Science Comes to Life for Afton-Lakeland Fifth Graders



Stillwater Area Public School District

It might just look like a normal fish tank in the corner, but fifth grade students at Afton-Lakeland Elementary will tell you there is a whole lot more going on in their science classroom than meets the eye.

"The big box on top is a grow bed, and a pump is running constantly to pump water into the grow bed," one student explained.

"It uses a bell siphon," added another student. "When the grow bed is full of water the siphon drains and makes a burp sound."

Then it sucks in air instead of water."

The fifth graders are learning about ecosystems and water cycles in a fun and interactive way — by creating their very own self-sustaining aquaponic system to grow fish, herbs and vegetables in their classroom.

The system features a large aquarium with several fish (crayfish are coming soon), a grow bed to house the plants, a full spectrum light to mimic the sun, and filters and a siphon to transfer water and nutrients between the two. While four bluegill sunnies swim

around, a fifth Plecostomus (or sucker fish) goes about cleaning the tank. In the grow bed, herbs like rosemary, basil, sage and thyme are growing along with carrots, potatoes, blackberries, raspberries, ginger, zinnias, and a lone cactus.

"It's an ecosystem where everything helps everything else — the plants, fish, even the bacteria are helping each other. The only input is fish food and water top ups," explained teacher Mike DeRuyck.

The aquaponics system allows fish and plants to grow together in one integrated system. The fish waste provides an organic food source for the plants, and the plants naturally filter the water for the fish. Bacteria are also present, converting ammonia from the fish waste into nitrates to help the plants grow.

It's the perfect environment for students to see science at work firsthand. They're learning about sustaining ecosystems, observing and measuring the plants while they grow, testing water quality and even studying principles of physics and mathematics by considering how the siphons pump water.

"I don't even have to figure out how to weave science lessons into this, it's so easy," DeRuyck said. "Fifth grade science is focused on earth science and life science, and this just fits perfectly."



Students helped develop the plans for an aquaponics system several years ago, and it made its first appearance in his classroom last year. He's added more components for students this year, and is hoping to receive a grant to grow the system even bigger in years to come.

"I like it because it's very interactive and fun," said Izzy Siefert, a fifth grade student. "I really like the fish! I look at it and it is always so interesting."

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The Academy for Sciences and Agriculture

*Becky Meyer, Executive Director
AFSA High School*

The Academy for Sciences & Agriculture was founded as a public charter school in 2001 by the Minnesota Agricultural Education Leadership Council (MAELC). It began as a 9-12 high school with 41 students that year and now has 380 students in grades 5-12. Students from 22 different Minnesota school districts attend AFSA this year.

AFSA's mission is to engage all students in academically rigorous, student-centered learning experiences and leadership opportunities within a science and agricultural context. All students in grades 7-12 are members of the local, state and national FFA Organization and all students are required to take Agricultural Education classes each year. To that end, AFSA specializes in courses offered in the areas of Plant Science, Food Science, Animal Science, Environmental Science, Leadership, and courses in Power, Structure, and Technical Programs such as Engineering and Metals and Welding. AFSA Ag instructors also teach two 4 credit college courses: Animal Science and Plant Propagation.

Students are exposed to a wide variety of content areas and unique experiences with hands on and practical learning applications

such as Supervised Agricultural Experience Programs which afford all students the motivation to conduct a learning activity that is relevant to their goals. This differentiated approach allows any student to be innovative, progressively thinking, and invested in their learning experience. As an example, AFSA's rooftop boasts about a dozen raised planters, all built by the Construction classes, and the school's landscaping is done by the Landscaping class. Floriculture class makes the boutonnieres and centerpieces for special events.

One of the great things about AFSA is the state-of-the-art 2000 square foot greenhouse that is located on the school grounds. Like many FFA programs and school greenhouses, AFSA holds an Annual plant sale every spring around Mother's Day Weekend. Plants sown and grown by students are sold to the public as a fundraiser for the AFSA FFA Chapter. What is very unique about AFSA's greenhouse is the custom-built hydroponic vegetable production system that it houses. Hydroponic food production is an emerging agricultural technology that utilizes nutrient rich water to grow vegetables in the absence of soil.

AFSA's Greenhouse has two separate hydroponic systems; one system is for



growing lettuce and other is for growing cucumbers, green beans, and tomatoes. The hydroponic system can produce over 750 heads of lettuce and up to 54 cucumber, green bean, and tomato plants at a time. All of the produce is sold to the school lunch program. There is a lot of buy-in from AFSA students with the hydroponic system, because students are able to grow, harvest, and consume the produce from it. AFSA's greenhouse acts as a learning laboratory, where suburban students are able to study hydroponic food production.

Our FFA affiliation allows us to provide additional opportunities experiential learning such as the agriscience fair where we consistently have projects that earn national recognition. Students participate in a variety of Career Development Events at the local, regional, state and national levels. At AFSA, we believe that a successful agricultural education program and school depends on a strong sense of responsibility and community. We dedicate two full days each school year to farm and community service where all students are expected to engage in projects that help the greater good including a community garden.

Our signature event is the National FFA Science Fair. All students in grades 5-12 are required to complete an original science fair project each year. The high school hosts two judging events, where up to 40 judges from local businesses, community organizations and universities volunteer to work with the students. Over 250 projects are judged, each project meets with three different judges, and an average score is calculated. Students who score in the top of their categories move

on to state competition.

Our local FFA Alumni coordinates a Potato Hug which, not only serves as a fundraiser, but it is primarily a chance for students to sell wares that they have produced during their Supervised Agricultural Experience program (SAE) and truly experience being an entrepreneur. Students work on various projects including beekeeping, woodworking, home baked foods, and other DIY projects. Two of the most successful

students were two young women who borrowed money from their moms and purchased glass planters and bowls at a discount store. They planted succulents. They sold out their entire inventory in about two hours

during the Potato Hug. In tracking their expenses and receipts, they found that they had each earned over \$150 in profit!

Over one third of AFSA graduates go on to post-secondary training in an agriculture related field. AFSA's purpose is to provide agricultural literacy for urban and suburban students, letting them know about careers they may not have learned about at any other school in the metro area. AFSA's students are prepared to move into training and careers in the science, business and technology of agriculture.

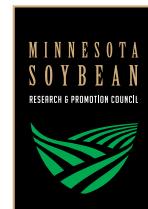
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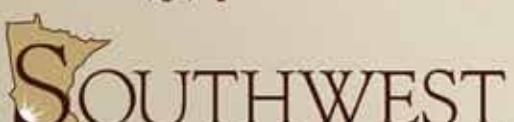
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University Gala Interactive Dinner
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- FFA Members are invited to participate in many Career Development Events (CDE's) at SMSU, sponsored by RALCO Nutrition
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Bailey Elementary School Named 2017 National Blue Ribbon School



South Washington County Schools

South Washington County Schools is proud to announce that Bailey Elementary School has been selected by the U.S. Department of Education as a 2017 National Blue Ribbon School. The highly selective honor was only given to 342 schools nationwide in 2017.

Bailey was recognized for meeting the program's exemplary high performing school's standards, meaning the school was among Minnesota's highest performing schools as measured by state assessments or nationally normed tests. It is the first school to be recognized with the honor in District 833 since the program was created in 1982.

"I am extremely proud of the students, staff and families who make Bailey such an outstanding school. It is an honor to be recognized for our efforts to ensure every student

is meeting our high academic standards," said Candy Hofstad, Principal of Bailey Elementary School.

The National Blue Ribbon Schools Program honors public and private elementary, middle and high schools where students achieve very high learning standards or are making notable improvements in closing the achievement gap.

Gordon Bailey Elementary School strives to meet the needs of ALL students. Our school consists of 600 Pre-k -5th grade students and 100 staff members. At Bailey we cultivate caring relationships between staff, students, and families to increase student achievement. We teach students how to work hard, respect others and make everyone feel like they belong.

Quality instruction and building a solid foundation in the areas of literacy and math are always in the forefront of our planning. Building this foundation is necessary for students to be successful in other academic areas throughout their school careers. We also use data to identify students who may need remediation and/or enrichment. Close collaboration with colleagues is vital to the success of students.

Bailey staff focus on personalized instruction which is also part of our District 833 Strategic Plan. We strive to engage, motivate, and empower each student through personal instruction creating shared ownership of learn-



ing. One way we provide this type of instruction is utilizing project based learning opportunities for our students. Allowing students to work in small groups and cooperatively with peers prepares them for the future.

In addition to our emphasis on personalized instruction, Bailey Elementary also ensures a safe and inclusive environment for staff, students and families. Building relationships is an important aspect of creating a positive climate. Our focus on relationships has reminded the staff "WHY" we do what we do

each and every day. It's all about the students. We ignite a passion for lifelong learning.

Representatives from Bailey Elementary School will be honored at an awards ceremony in Washington, D.C. on Nov. 6 and 7.

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Roger Ebnet is a 2017 Educator of Excellence



ing opportunities.

"Roger's ability to get gain the funds to provide unforgettable experiences to his students and others in the community is rare," MREA Executive Director Fred Nolan said. "He's a teacher who's truly invested in his community and the return has been high."

In 2013, Ebnet led the way to receive a \$10,000 gift from a major retail store that brought celebrity visits by former NFL star Donald Driver, Gold Medalist Gabby Douglas (among others), and a concert by Country music superstar Luke Bryan. In years since, he helped raise \$25,000 to improve the local baseball fields, and twice rallied folks to win a contest netting \$50,000 over two years.

"My community has given me so much," Ebnet said. "I feel an obligation to use my skills and talents to help it remain the thriving community that I want it to be."

When the town announced it would no longer organize a long-standing community event known as "Kid Day," he took over and "Kid Day" continues.

"It is easy to see that Roger Ebnet demonstrates excellence in the classroom, in the district, and the community," Benson Public Schools Superintendent Dennis Laumeyer said. "Roger has selflessly worked to improve his school and community. He truly embodies the positive characteristics of a rural educator of excellence."

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[\(320\) 842-2717](http://www.benson.k12.mn.us)



Great teachers are the key to great classrooms. But even the best teachers understand the power of having great resources available to help them. Roger Ebnet of Northside Elementary School in Benson, Minnesota, brings the two together in helping to make his school and community a great place to learn and live.

For nearly 30 years Ebnet has invested in the individual success of each of his second grade students and the community they all live in.

Each year he organizes a "Country School" where students spend a day in an old country school in town, complete with everyone dressing the part. Another day is set aside for grandparents to come to school with their grandkids. All year long he operates a classroom store where students can purchase items as a reward for earning points for academic and social successes.

MREA honors Ebnet as a 2017 Educator of Excellence for his commitment to community partnerships and going beyond the classroom to give students an engaging learn-

Angela Hartman is a 2017 Educator of Excellence



Creating opportunities where there are few or – even none – is one way to describe the passion and vision of Underwood educator Angela Hartman.

Underwood Principal John Hamann ranks Hartman in the top 1 percent of teachers he has worked with in 28 years of administration. "Angela has done a remarkable job in building our Business Department into a jewel of the school," he said.

MREA honors Hartman as a 2017 Educator of Excellence for her ongoing commitment to help Underwood create the World's Best Work Force and give students unexpected opportunities that will serve them well throughout their lives.

As a business teacher, Angela believes it is her job to equip students for the workforce. For her this has meant restructuring the courses available at the school. She established courses for students to gain professional computer skills, do career research and planning, and learn personal finance and economics. The latter doubles as college credit for students.

"Personally earning enough graduate credits in Personal Finance and Economics to qualify to offer these classes to our students was a large undertaking, but incredibly fulfilling," Hartman said. "It's been amazing to see students from this little town transfer their credits to colleges all over the country!"

In those college level courses, along with two other teachers offering college credit, she began experimenting with iPads as part of the curriculum. The success of the trial led the school to implement a 1:1 iPad initiative for all students from 10th to 12th graders.

Hartman also serves the school by running the school website and serving on multiple committees. She also took the lead to create non-sport extracurricular activities for students to grow and gain new experiences. This includes starting a chapter of the Business Professionals of America. She has seen nine members advance to nationals and has had three students place in the top 10 nationally.

"Leaders like Mrs. Hartman, who continually look for ways to create path for students to learn, are such a valuable part of our rural schools," MREA Executive Director Fred Nolan said. "She's focused on creating future-ready students to the benefit of employers across the nation."

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[\(218\) 826-6101](http://underwood.k12.mn.us)



Normandale Hills Elementary School Named a 2017–2018 Minnesota School of Excellence

Bloomington Public School District



The Minnesota School of Excellence Program promotes excellence through a rigorous evaluation process that showcases dynamic schools of the 21st century. Established by the Minnesota Elementary School Principals' Association (MESPA), the program is recognized by the Minnesota Department of Education, as well as the National Association of Elementary School Principals, and was nominated for the Brock International Prize in Education—which "recognizes particular innovations and achievements in the field of education."

The Minnesota School of Excellence Program was established in 1986, combining the findings of current research on effective schooling with the practical on-site experience of working principals and education staff. It

offers a comprehensive school improvement process that results in student learning growth. This school improvement process focuses on six national standards and involves a systematic self-study, development of a school improvement plan, and implementation of the plan based on demonstrated results. Since the program's inception, 197 schools have earned Minnesota School of Excellence validation. The validation remains effective for seven years, at which point schools may choose to reapply for validation.

Normandale Hills Elementary School has approximately 500 students and is located within the Bloomington Public School (BPS) District. The mission statement of Normandale Hills states: We are committed to maximizing individual excellence by developing capable, ethical children with a passion for learning using innovative, quality programs and fostering a sense of community. Collectively, all students, staff, and families are guided by three expectations: Be Respectful, Be Responsible, and Be Safe.

"The School of Excellence (SOE) journey gave Normandale Hills Elementary the opportunity to conduct an in-depth audit of our school," Dr. Andrew Vollmuth, principal of Normandale Hills. "This comprehensive study validating many areas of strength but also gave us several areas for continued growth. In the spirit of continuous improvement, process improvements were identified for each area in need of attention and then implemented. It is our hope the SOE process will be a springboard for continued school improvement for years to come."

Some examples of Normandale Hill's partnerships between staff, families, and the community include the Festival of Learning and Reading Education Assistance Dogs (R.E.A.D.). The Festival of Learning is an all-school cross-curricular cultural study takes place over a two-month span and culminates in an evening of exhibition that highlights the academic, artistic, and musical achievements of our students to their families. Each year the focus of Festival of Learning is on a different continent, and over the course of their six years of study at Norman-

dale Hills, each student will have visited all six populated continents in their learning.

"The Normandale Hills' School of Excellence team approached the SOE process as a journey and worked hard in collaboration with one another in order to ensure our findings were accurate," said Vollmuth. "Of equal importance was our attention to ensure the areas of continued improvement we identified were meaningful and implemented with high-fidelity. This took longer than originally expected but we believe the end result has the potential to have a more profound impact on Normandale Hills due to the time, energy, and attention to detail we put into this endeavor throughout the journey."

Information courtesy of the Minnesota Elementary School Principals' Association (MESPA)

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Gatewood Book Buddies Program Fosters Love of Reading at any Age



Hopkins Public Schools

The start of the 2017–18 school year signaled the end of the Book Buddies summer reading program, but the fun of reading for Gatewood students is just beginning.

Summer for members of the Gatewood Elementary Book Buddies program was spent chasing far-off adventures, saving planets, and finding the true meaning of courage inside the

pages of some of their favorite books. But as the beginning of the school year takes shape, the summer program wraps up.

The summer reading program has been a staple offering at Gatewood for years. When Gifted & Talented educator Sarah Ham retired in 2011, Gator mom Katy Tessman couldn't let the program discontinue. She has been spearheading the summer program ever since.

"Reading has always been a priority in our household," she said. "Everyone has a book that they are reading. And most nights I read aloud to the boys, Louis and Maxwell, so the three of us have a book we're reading together."

During a celebration on Friday, Sept. 9, Book Buddies participants got together to make bookmarks, create stories of their own, and re-read pages of their summer favorites. Tessman said reading during the summer is just as crucial as reading during the school year, if not more.

"Many children, especially struggling readers, forget some of what they've learned or slip out of practice during the summer months," she said. "It is important children continue reading over the summer."

Each summer the Book Buddies have their choice of 30 books, all of which are grouped into five categories. Students select one book from each category and read a total of five books over the summer. Each category has about two to three books to choose from. This empowers students to choose books that they will want to read, Tessman said, and become lifelong readers.

"As my sons have gotten older," Tessman says, "books have changed from picture books to chapter books to young adult novels. But one thing has stayed the same; we read every night."

Tips for Encouraging Young Readers:

- Empower your child to choose the books they want to read
- Set aside time for reading
- Have a special cozy reading nook, perhaps a hammock outdoors
- Start a book group with friends and meet at the beach or playground to discuss the books
- Read aloud to your child, or read to each other, this is a great thing to do during a long car trip
- Discuss the books with family at meal times
- Do an activity and/or eat a snack just like the characters in the books
- Write book reviews or recommendations to friends
- Always have books with you

[\(952\) 988-4000](http://www.hopkinsschools.org)



Apply for a Grant



AIAA Foundation Classroom Grant Program

The AIAA Foundation Classroom Grant program promotes aerospace education activities in classrooms from kindergarten through grade 12. The program encourages development of innovative aerospace activities within the prescribed curriculum. Funds are considered for the following materials needed for an activity: aerospace technology, biological and physical research, earth science, human exploration and development, space science, classroom mathematics or science demonstration kits, classroom science supplies, kindergarten through grade 12 mathematics and science software, mathematics manipulative materials, supplies for making flying objects, and supplies for robotics programs.

Grants up to \$250 are awarded

Deadline: Applications are accepted October 1, 2017 through January 5, 2018

Website: www.aiaa.org/Secondary.aspx?id=4184

Voya Foundation Grants

The Voya Foundation supports nonprofit organizations addressing a variety of community needs and resources. The foundation maintains the following two giving priorities:

- Financial literacy: The Voya Foundation is especially interested in programming that provides financial literacy curriculum to grades 9 through 12 students focused on navigating major financial milestones including student debt, credit, home ownership, financial products and services, financial capability, and family needs.
- Science, technology, engineering, and mathematics (STEM) education: The foundation is committed to supporting and improving programs that help prepare youth for the twenty-first century workforce and provide experiential STEM learning opportunities for children in kindergarten through grade eight. Grants of \$2,500 and greater are awarded.

Deadline: Applications are due December 1, 2017

Website: corporate.voya.com/corporate-responsibility/investing-communities/voya-foundation-grants

Music Education Grants

The Guitar Center offers grants that support music education projects and programs. The company believes that music inspires creativity and personal expression, builds self-esteem, and teaches cooperation and team building from playing music together.

Deadline: Applications are accepted year-round

Website: www.guitarcenter.com/pages/corporate-giving

Amber Brown Grant

The Society of Children's Book Writers and Illustrators (SCBWI) offers the Amber Brown Grant to commemorate author Paula Danziger. The grant is awarded annually to one school and includes a visit by a children's book author or illustrator to encourage children and youth to read and connect them with creative influences.

Deadline: Applications are accepted November 1 through April 15, annually

Website: www.scbwi.org/awards/grants/amber-brown-grant

Baseball Tomorrow Fund Grants

The Baseball Tomorrow Fund is a joint initiative of Major League Baseball and the Major League Baseball Players Association. The goal of the Baseball Tomorrow Fund is to increase youth participation in baseball and softball by awarding grants to schools and school districts, municipalities, and qualified nonprofit groups that are involved in youth baseball or softball.

Deadline: Applications are due January 1, April 1, July 1, and October 1, annually

Website: web.mlbcommunity.org/programs/baseball_tomorrow_fund.jsp?content=about

Funds for Fuel Up to Play 60

Fuel Up to Play 60 is a national in-school initiative to promote healthy eating and 60 minutes of physical activity daily to help encourage today's youth to lead healthier lives. The funding program provides grants to public and private schools to support Fuel Up to Play 60 projects and activities.

Grants up to \$4,000 per school per school year are awarded

Deadline: Applications are due November 1, 2017

Website: www.fueluptoplay60.com/funding/general-information

Autism Spectrum Disorder: Communication Problems in Children



How does ASD affect communication?

The word “autism” has its origin in the Greek word “autos,” which means “self.” Children with ASD are often self-absorbed and seem to exist in a private world in which they have limited ability to successfully communicate and interact with others. Children with ASD may have difficulty developing language skills and understanding what others say to them. They also often have difficulty communicating nonverbally, such as through hand gestures, eye contact, and facial expressions.

Repetitive or rigid language. Often, children with ASD who can speak will say things that have no meaning or that do not relate to the conversations they are having with others. For example, a child may count from one to five repeatedly amid a conversation that is not related to numbers. Or a child may continuously repeat words he or she has heard—a condition called echolalia. Immediate echolalia occurs when the child repeats words someone has just said. For example, the child may respond to a question by asking the same question. In delayed echolalia, the child repeats words heard at an earlier time. The child may say “Do you want something to drink?” whenever he or she asks for a drink. Some children with ASD speak in a high-pitched or sing-song voice or use robot-like

speech. Other children may use stock phrases to start a conversation.

Narrow interests and exceptional abilities.

Some children may be able to deliver an in-depth monologue about a topic that holds their interest, even though they may not be able to carry on a two-way conversation about the same topic. Others may have musical talents or an advanced ability to count and do math calculations. Approximately 10 percent of children with ASD show “savant” skills, or extremely high abilities in specific areas, such as memorization, calendar calculation, music, or math.

Uneven language development. Many children with ASD develop some speech and language skills, but not to a normal level of ability, and their progress is usually uneven. For example, they may develop a strong vocabulary in a particular area of interest very quickly. Many children have good memories for information just heard or seen. Some may be able to read words before age five, but may not comprehend what they have read. They often do not respond to the speech of others and may not respond to their own names. As a result, these children are sometimes mistakenly thought to have a hearing problem.

Poor nonverbal conversation skills. Children with ASD are often unable to use gestures—such as pointing to an object—to give meaning

to their speech. They often avoid eye contact, which can make them seem rude, uninterested, or inattentive. Without meaningful gestures or other nonverbal skills to enhance their oral language skills, many children with ASD become frustrated in their attempts to make their feelings, thoughts, and needs known. They may act out their frustrations through vocal outbursts or other inappropriate behaviors.

Teaching children with ASD to improve their communication skills is essential for helping them reach their full potential. There are many different approaches, but the best treatment program begins early, during the preschool years, and is tailored to the child’s age and interests. It should address both the child’s behavior and communication skills and offer regular reinforcement of positive actions. Most children with ASD respond well to highly structured, specialized programs. Parents or primary caregivers, as well as other family members, should be involved in the treatment program so that it becomes part of the child’s daily life.

From the U.S. Department of Health and Human Services

To read the entire article go to:

www.nidcd.nih.gov/health/autism-spectrum-disorder-communication-problems-children

What is autism spectrum disorder?

Autism spectrum disorder (ASD) is a developmental disability that can cause significant social, communication, and behavioral challenges. The term “spectrum” refers to the wide range of symptoms, skills, and levels of impairment that people with ASD can have.

ASD affects people in different ways and can range from mild to severe. People with ASD share some symptoms, such as difficulties with social interaction, but there are differences in when the symptoms start, how severe they are, the number of symptoms, and whether other problems are present. The symptoms and their severity can change over time.

The signs of ASD begin in early childhood, usually in the first 2 years of life, although a small minority of children may show hints of future problems within the first year of life.

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PRACTICE MAKES PERFECT

Traveling with your child with special needs can seem intimidating. Navigating MSP Airport helps ease the anxiety with free, monthly practice runs through the airport.

A partnership between the Metropolitan Airports Commission, the Autism Society of Minnesota, and Fraser, this program will allow you to:

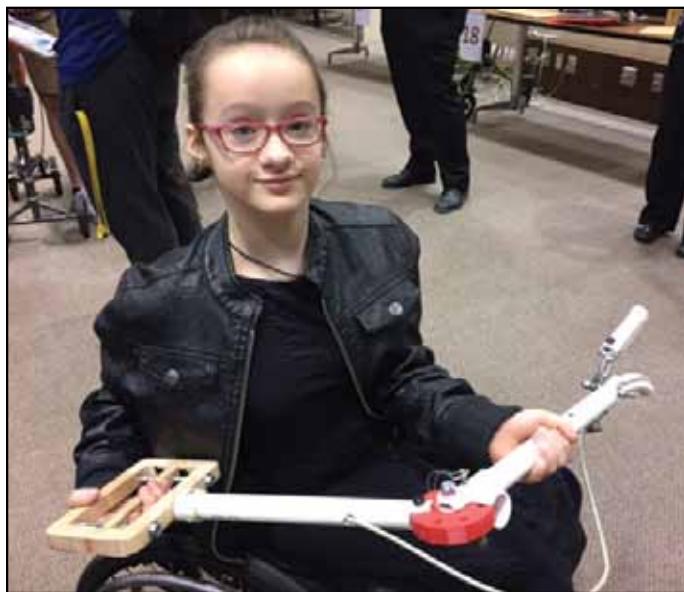
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INTERNATIONAL AIRPORT

Students Design Products to Meet Clients' Needs for 13th Annual Design Challenge



Ashley McCray
Shakopee Public Schools

Shakopee students recently participated in a very exciting venture known as the Inclusive Engineering Project.

The groups took on the challenge to take part in the development of accessible products for students with physical disabilities.

The project — funded by the Shakopee Educational Endowment Foundation (SEEF)

grant — included our engineering classes at East and West Junior High over the last several months.

The Inclusive Engineering Project provided unique learning experiences for students in both general and special education.

The Introduction to Engineering (IED) classes from East and West Junior High created a tangible product for their selected target group.

For the project, the target group was defined as a student

with a physical impairment.

Students had to do the following:

- Learn about physical impairments and how they impact individuals across multiple settings
- Apply real-world problem solving strategies by researching, planning, and designing a prototype
- Demonstrate communication skills

within their target group to evaluate and modify prototype

- Develop a final product for a real life target group

This year's challenge was based on adaptive devices for Shakopee elementary and junior high students with special needs.

West Junior High School students — Levi Pieper, Kyle Martin, and Adam Hasseals created a device called the "Extendo Grabber."

It will help Mathei Ridlon, a 10-year-old 5th grade student at Sun Path, reach high objects.

"She wanted to be able to reach things in high places," said Mathei's mother, Dana. "The devices you can buy on the market, they're not good enough. You can't lift heavy objects or semi-heavy objects from a high spot. They fall. And, if they're weird shapes, like a can, they fall on top of you. Mathei wanted something that would allow her to get books off the shelf or cereal from a top shelf or reach things at school."

"It's impressive," said Mathei's father, Gregg. The students have a great level of professionalism for 9th graders. I work in the engineering field and these kids have it together."

Another group created the "labD Adaptive Tray Device."

It will provide arm support for Sun Path

3rd grade student, Lex, when he uses his iPad for an extended period of time.

All of the students who participated in the design challenge had nine weeks to brainstorm, research and create a project to meet the criteria. Throughout the process, volunteer engineers, former engineering students, and teachers reviewed each project to determine how well students integrated the design process when solving the design challenge problem.

All of their work culminated on May 10 and May 11 when they took part in the Engineering Technology Fair at Hennepin Tech. They received preliminary feedback, presented their devices, and their clients demonstrated the products.

[\(952\) 496-5000](http://www.shakopee.k12.mn.us)



PACER stands for Parent Advocacy Coalition for Educational Rights

Our mission is to expand opportunities and enhance the quality of life of children and young adults with disabilities and their families, based on the concept of **parents helping parents**.



With individual assistance, workshops, materials for parents and professionals, and leadership in securing a free and appropriate public education for all children, PACER's work affects and encourages families **across the nation**.

Learn more about the work of PACER, access information and resources, and find out more about upcoming events at:

WWW.PACER.ORG | 952-838-9000

this is what autism can feel like
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Repetitive behavior can be one sign of autism. There's no medicine to treat the symptom, only understanding. At Fraser, we help parents cope and children achieve. Learn more about autism at fraser.org.

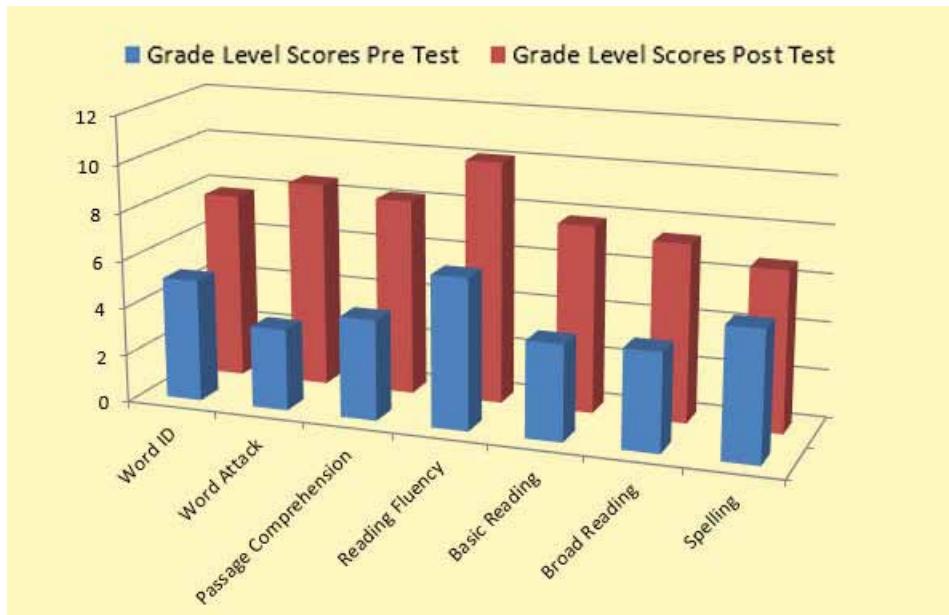


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WILDD

Wisconsin Institute for Learning Disabilities/Dyslexia, Inc.



WILDD Achieves Results!

Improved Reading Skills

WILDD can increase reading skills by one grade level in 6 months.

Increased Math Skills

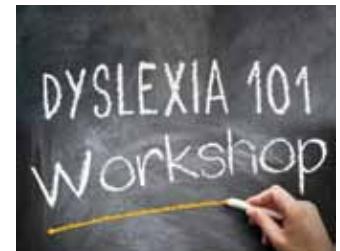
98% of students with math deficiencies show a positive progression in test scores within 6 months.

Increased Self-confidence

After just a few months of WILDD instruction, parents often notice a dramatic increase in their students' self-confidence.

The Wisconsin Institute for Learning Disabilities/Dyslexia (WILDD) offers proven, research-based academic therapy programs that empower individuals of all ages who struggle in reading, spelling, written expression, or math.

We can help you overcome your obstacles and have WILDD success!



Free Consultations

We are always available to meet with potential clients, free of charge, to discuss their unique needs and to talk about their struggles. We believe in providing as much access to our professional consultant as needed to get all your questions answered.

WILDD Global™ Distance Learning Academic Therapy

A distance-learning program gives WILDD clients direct access to a certified WILDD instructor whether they are at home, work, school, or on vacation.

Diagnostic Services

WILDD's psycho-educational evaluations follow the most current diagnostic processes, using up-to-date, highly reliable standardized assessment tools and procedures to help identify learning strengths and weaknesses, and if appropriate, to diagnose a specific disability, including dyslexia.

CLASS™ Teacher Training

WILDD does teacher training throughout the United States. As part of our mission to reach as many students as possible, school partnerships are a key component to your school's success. Contact us to find out more about our affordable Teacher Training Program for your district.

Dyslexia 101 Workshops

WILDD invites you to Dyslexia 101, a mini workshop designed to help unravel the mysteries surrounding dyslexia. This workshop has been designed for anyone interested in learning more about this learning disability.

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