

ProExcellentia



Wising Up to Science

Excellent teaching and deep learning are in full force each summer at the B-Wiser Science Camp designed for middle school girls. The campers spend five days on the College of Wooster campus where they experiment in a variety of science-related fields. The hands-on lessons are taught by science teachers from schools throughout the state as well as professors from the college. (see story pgs. 8-9)

Martha Holden Jennings Foundation

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Dedicated to fostering Excellent Teaching and Deep Learning in Ohio's secular schools.

The purpose of the Martha Holden
Jennings Foundation is "to foster the
development of individual capabilities
of young people to the maximum
extent through improving the quality
of teaching in secular primary and
secondary schools" and "to provide a
means for greater accomplishment
on the part of Ohio's teachers by
encouraging creativity in teaching and
bringing greater recognition to the
teaching profession."

<u>Pro Excellentia</u> is published to describe a sampling of those efforts.

We ask that you please share this copy with colleagues who may gain valuable information and ideas from articles covered in this publication.

Mary Kay Binder, Editor

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Real World Experience p. 6



Engaging STEM p. 7



Summer Scholars p. 12



Mastering Math p. 16

Educators Meet for Annual Retreat



Dr. Keels (I.) says the discussions at the retreat helped her understand the issues educators are grappling with as they work to improve schools.







Retreat Speaker Discusses How Attending to Psychological Trauma Improves Student Well-Being and Academic Achievement

Each year the Foundation gathers together a group of Ohio's educational leaders for an end-of-the summer retreat. The event provides an opportunity for these professionals to discuss critical issues in education today under the direction of a renown educational thinker. This summer the speaker, Dr. Micere Keels, Associate Professor in Comparative Human Development at the University of Chicago and the founding Director of the Trauma Responsive Educational Practices Project, addressed *Excellent Teaching and the Developing Brain*.

Psychological trauma is something schools must pay attention to, says Dr. Keels, explaining that dysregulated and disruptive behaviors exhibited by students coping with trauma can overwhelm teachers and schools. Yet, there are many evidence-informed trauma responsive practices shown to be beneficial.

"There is nothing that makes teachers and educators more frustrated than knowing that what they are doing (in terms of discipline, classroom management) is not working but not knowing what to do differently," says Dr. Keels. "That is a helpless feeling. I'm hoping that this retreat is helping these administrators, who are supporting the teachers, learn what they can do differently so that when they go back to their schools they can help relieve that frustration."

Jennings Educator Recognition

Each year the Martha Holden Jennings Foundation recognizes and rewards a group of Ohio's effective teachers by presenting individuals with awards for their work. The honors are bestowed at the Foundation's Educator's Retreat. These professionals are admired by their colleagues, active in their communities, and have made long-standing achievements in their fields. Candidates are nominated by their school administrators, or in the case of the outstanding superintendents, by their school boards, and are selected by a panel of leading educators. The honorees receive cash awards to be used for educational projects of their choice.

educator excellence



The 2019 awardees are (l. to r.): Jennifer Davis, Master
Teacher Award, Benjamin Logan Middle School; Erin Jordan, Kayleigh Gabriel, Samantha Miller, Team Teaching Award, Champion
Central Elementary School; and Kathryn Powers, Ohio Superintendent Outstanding Performance Award, Twinsburg City Schools.
Not pictured: Jeffrey Bracken, Arthur S. Holden Teacher Award for Excellence in Science Education, Westerville North High School; Jon
Vas, George B. Chapman Jr. Teacher Award for Excellence in Mathematics Education, Olmsted Falls High School; and Brittany Cornelius, Team Teaching Award, Champion Central Elementary School.

Teachers Learn How to Use Inquiry to Teach STEAM Content

Heidelberg University/Tiffin City Schools



Lindsay Newlove watches along with her third grade students what happens to wax when a candle burns. The demonstration is designed to help students understand the rock cycle and discover how igneous rock can turn to liquid (magma) when it is heated and then return to igneous rock when it hardens.

Third graders at Krout Elementary School in Tiffin were recently learning about the rock cycle. While introducing the topic, their teachers, Jennifer Gressman and Lindsay Newlove, had many questions:

Here are three different rocks, what do you notice about them?

How do they look? How do they feel? What are things that can happen to a rock?

Asking questions of their students and then offering opportunities for experiential learning is how these educators *now* teach. And neither would revert to the more teacher-directed approach they had practiced for years before.

"Instead of us starting in lecture mode saying, 'Today we are going to learn about the rock cycle. There are three types of rocks, let me tell you about them...' We start with, 'Here are these rocks, what can you tell me about them?" explains Mrs. Gressman, who is a 13 year teaching veteran. "We were spoon feeding these children too much," she continues. "We were constantly telling them everything; whereas if we give them the materials and let them go, they can truly discover on their own."

Mrs. Gressman and Mrs. Newlove, who frequently co-teach lessons at Krout, were among a group of K-4 Tiffin teachers who participated in a week-long intensive workshop in the summer of 2018 called TEACH-n-STEAM, *Teachers Engaging All Students in Science, Technology, Engineering, Arts, and Math.* Funded by a grant from the Jennings Foundation, the workshop was designed by Heidelberg School of Education assistant professors Dr. Lindsey Haubert and Dr. Stacey Pistorova. Their aim was to promote excellent teaching by helping elementary and middle school teachers develop STEAM-

based content and pedagogical knowledge they need to effectively implement inquiry into their classrooms.

Teachers Learn Through Inquiry Too

Unfortunately, many teachers feel under prepared to teach in the STEAM content areas, explains Dr. Haubert, who has an extensive background in engaging children and teachers in integrative, active learning experiences. Last summer's workshop was designed to address this concern by embedding teachers in content through their own hands-on, inquiry-based experiences, similar to those they would implement back at school. Teachers were also given time to explore their passions, develop their own projects, and reflect on how to adapt this work for their particular students.

Teaching STEAM continued from p. 4

"The idea behind the summer workshop was to let teachers have the same experiential learning experience that they are going to facilitate with their students," says Dr. Pistorova, whose expertise is in curriculum and instruction with a focus on project based learning.

With 19 years of teaching behind her, Mrs. Newlove acknowledges that she felt uneasy at the workshop when put in a situation where answers were not provided:

"We put ourselves in the spot that the students are in, and at first we didn't like it," she admits. "It made me realize that we, too, are used to being told everything. And when it just isn't given to us, we feel uncomfortable."

Yet, Mrs. Newlove now firmly believes the inquiry-based approach is the most effective way to teach. "When students generate questions, they remember it," she remarks. "When *they* discover it, they own it."

Mrs. Gressman and Mrs. Newlove took time to discuss the impact of their inquiry-based style of teaching after an extensive, hands-on lesson where their students discovered what happens to rock when it is heated or cooled. "We are posing questions, trying to get students *thinking* because in the real world, we need engineers, we need innovators, we need people who can think on their own and problem solve," adds Mrs. Gressman. "We are not going to nurture that if we keep giving students the answers."

Tiffin teachers who participated in the 2018 summer workshop formed a professional learning community to extend their professional development experience into the school year. The teachers met monthly to collaborate on lessons and share ideas. Drs. Haubert and Pistorova visited classrooms periodically to support teachers who were implementing methods practiced during the summer.

Mrs. Gressmen explains that during the past year she has learned that not all aspects of a lesson should be planned: "We can have an idea, a direction of where we want go, a standard or objective, but we have to really allow these kids to guide us."

Mrs. Newlove agrees: "You have to have a plan but you have to be willing to veer from that plan if the students' passion leads you in a different way, because ultimately, that's what we want. We want the kids to find their passion."

"It's not about us when we are teaching," exclaims Mrs. Gressman. "Sometimes, we have to step down from the pedestal that we put ourselves on and look at these children and say, 'We're here for them and they have so much to offer.' We just have to pull it out of them."

Dr. Pistorova explains that the TEACH-n-STEAM project contributes to excellent teaching on the pre-service level as well. "We needed field placements for our pre-service students," she remarks, "and these classrooms are quality placements. Our university students can see how to deepen the learning and create experiences beyond what they would traditionally see in a classroom."

The first year of TEACH-n-STEAM revealed the need for more intentional support on art and technology integration into lessons and a second summer professional development workshop was designed for June, 2019. A total of 18 Tiffin K-5 teachers signed on to the program, which includes two music teachers, an art teacher, and a school librarian.

"Our goal is sustainability," says Dr. Haubert, who is very excited to get more Tiffin teachers involved. "The idea that we start small and keep growing."

"I get so excited teaching these lessons," says Mrs. Gressman. "It drives me and this passion is so contagious."

As to how their work will translate into deeper learning, Mrs. Newlove adds: "If we give students these experiences, they will perform better because they will learn how to think for themselves."

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Putting Skills to Work

Bedford High School



Melanie Kirin with her marketing students. "My ultimate goal is to equip students with 21st century skills and help transform them into professional colleagues I would want to work alongside one day."

Im always looking for ways to provide students with real world experience," says Melanie Kirin, Marketing Instructor, Bedford High School. Recently, with a Grant-to-Educators from the Jennings Foundation, she designed the Bearcat Client Consulting & Website project as a fourth quarter assignment for her third year, marketing students. The initiative challenged students to apply the knowledge they learned in an authentic venture with real world clients.

Mrs. Kirin connected her students with two local organizations that were in need of marketing services but were constrained by limited budgets. One, a small catering and event planning business, and the other, a non-profit agency that organizes domestic and overseas mission trips. Both were eager to work with her students to take advantage of their marketing "know how." The students crafted marketing plans, conducted research, and developed "deliverables" that would have a positive impact on their businesses.

"This was an opportunity for my students to get some real world face-to-face

work with a client," says Mrs. Kirin, who worked in the business world for 15 years before becoming a teacher and had plenty technical expertise herself to share with her students. "I can stand up and talk to students about how things should work, but it is much more legitimate when somebody else comes in and says, 'This is what I need and this is why I need it."

With the class divided into two groups, the students were assigned to one of the two clients, who they met with periodically throughout the quarter. After initial consultations, the groups identified similar digital components they wanted to provide to each client: an updated website and the establishment a social media presence that would enhance the organizations' online success. The students were responsible for all aspects of both projects. This included evaluating the functional design requirements with the client; conducting market research; crafting creative content; developing content marketing strategies; and evaluating designs for creative, functional, and system requirements.

grants-toeducators

Mrs. Kirin also connected the students to a technical expert at a local digital marketing firm who helped the students master behind-the-scenes tools required to build and launch a functioning site.

"In the beginning of the year we talked about website content and social media—all the book learning," says Mrs. Kirin.
"Now it was time for me to be hands-off.
I told them, 'You do the work you say you know how to do.'

"As to deeper learning, this project was 100 percent application," she continues. "They were able to develop all the pieces and parts of the sites, establish relationships, work with adults they didn't know, and solicit and accept critical feedback. I was able to step back and watch them act as a digital marketing agency, and they performed fantastically."

Mrs. Kirin mentions a long list of standards the project was designed to address: incorporate multidisciplinary learning; problem solve; create goals and devise strategies to achieve them; refine debate and research skills; and delve deeply into content areas. Developing strong project management skills became an essential aspect of their work. The students scheduled meetings with clients, generated work plans, and were responsible for setting and meeting deadlines. The team structure placed students in designated roles with specific responsibilities allowing them to grow both personally and professionally. Cultivating strong communication skills—both oral and written—was equally as important. Students refined those abilities by making presentations to their clients and writing and editing copy for podcasts, videos, and web pages.

"My job is to prepare them for the real world," Mrs. Kirin adds, "and the Foundation brought the real world to my students. For that, I am very grateful."

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STEM Centers Nurture Independent Learning

Kirkersville Elementary School

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Kindergarten students in Jacob Toy's class use a variety of STEM-related materials to deepen learning in both reading and math.

nserting a plastic key marked with the equation "14 + 2" in the keyhole of a large plastic lock that bears the number 16 is a bit risky for a kindergarten student not knowing what will happen when he turns the key. But watching the lock pop open elicits a smile from ear to ear.

Students in Jacob Toy's kindergarten classroom at Kirkersville Elementary School are engaged "all day every day" in activities that deepen their learning. Mathematics and literacy centers are fully equipped with STEM-related materials that allow students to work on their own or in small groups during center rotations, building independent learning skills in the process.

"Our district has been working to get STEM into regular use within the everyday curriculum," says Mr. Toy, who has taught five years in the Southwest Licking Local Schools located just east of Columbus. "And I am always looking for new, engaging, impactful materials to share with my students."

With a Grant-to-Educators from the Jennings Foundation, Mr. Toy purchased math games, literacy games, and STEM activities that promote collaboration,

teamwork, cooperation, and independence in his inclusion classroom. They also develop critical thinking skills and creativity in the young learners who use them. Many of the activities, Mr. Toy explains, "push students out of their comfort zone," requiring them to problem solve in ways not normally expected in the kindergarten classroom.

"I am able to introduce literacy, math, and STEM concepts in a fun way and make learning meaningful," he remarks.

When using the STEM activities, Mr. Toy adds, the students must reflect on their work and determine if they need to change anything after their first attempt to accomplish a goal.

"They love the STEM centers and we have even extended it with writing to go along with the activities. They love the challenge. I know the students are getting something out of center time; they are building new skills every day."

For more information contact: Mr. Jacob Toy, Kirkersville Elementary School JTOY@laca.org



Girls Wise Up to Science



For one week in June, classrooms and labs in The College of Wooster's state-of-the-art life science center are filled with middle school girls totally engrossed in science. One day's agenda alone involves extracting DNA from samples of their saliva; measuring the metabolism of different size animals; testing the four basic types of chemical reactions; and building models to discover how mass affects acceleration.

The rising 8th graders are participants in the Buckeye Women in Science Engineering, and Research (B-WISER) Institute, a six day residential program that brings together girls interested in science from schools across the state. Each day the campers experiment hands on with topics in biology, chemistry, geology, physics, model robotics, and LEGO robotics. They work collaboratively throughout the week to conduct experiments, hypothesize, collect and analyze data, draw conclusions, and think about how the results relate to everyday life. For many, it is their very first experience working in a laboratory setting.

B-WISER was founded in 1990 to provide an exciting summer science experience for rising 8th grade girls, explains Project Director Mary Kilpatrick, who is a retired adjunct professor in chemistry at the college and has been involved with the program for more than a dozen years. It was actually started by a group of middle school teachers who were willing to serve as instructors at an all girls science camp but needed a facility to host

B-WISER Summer Institute - College of Wooster

the event. They were fortunate to connect with The College of Wooster, where B-WISER has been held every year since.

In response to demand, an alumnae camp was created shortly thereafter for rising ninth graders who had participated the previous year. Its curriculum focuses on studies in environmental science, food science, microbiology, computer science, and forensic chemistry. Twenty-nine years later the "spirit" of B-WISER remains the same as it was during year one.

"This process of deep learning gives girls an idea of what science is all about and develops confidence in each girl in her own ability to do science," explains Ms. Kilpatrick.

She expects this boost in confidence will result in more girls pursuing science classes during their educational careers and lead to an increase in women employed in STEM fields.

In 2019, 85 girls participated in the first year B-WISER experience and 32 girls returned for the alumnae camp. For several years, grants from the Martha Holden Jennings Foundation have helped to provide scholarships for low-income students to attend the camp and defray the costs of administration and materials. Instructors at the camp are current or retired female science teachers from districts around the state. They actively engage the girls in experiments they designed and serve as role models of women involved in science-related work.

Cristin Hagans, who teaches high school science in northwest Ohio's Mill-creek-West Unity Schools, served as lead teacher in the biology lab at B-WISER this June. She says the girls love the handson experiments because it allows them to actually *apply* the information they might



Through programming their LEGO robots, girls learn that engineering is an iterative process, says their instructor Beverly Stambaugh: "These are iterations, they are trials, they can always change it. The process gives them an opportunity to think, to be creative, to work as a team."

B-WISER continued from p. 8



Biology instructor Cristin Hagans watches as girls work with lab mice to learn about cellular aerobic respiration. The girls form hypotheses, test variables, and run calculations. "Animal research can get a bad rap," she says, "but there are lots of things you can research with animals that don't hurt the animals and provide information."

learn from standard worksheets in a lab setting. During one such experiment, they investigated the cellular aerobic respiration of mice and hamsters to determine if the size of the rodent affects its oxygen usage. What they ultimately learned is the smaller the organism the higher the metabolism.

"With all females, everyone here is very supportive," she remarks, pointing out how the girls quickly connect with each other as they work together. "Everyone here loves it; the girls can really grow in an atmosphere like this."

Developing Tenacity

"I hope the girls have lots and lots of fun; that's our ultimate goal," says Beverly Stambaugh, a teacher in the Fairborn City Schools who served this summer as lead facilitator in the LEGO robotics session for first year campers." I also want them to learn something new. I gave them a challenge at the beginning of the week and without giving them really much of anything else, I said: 'Solve the problem.' This gives them the opportunity to think, to be creative, to work as a team, and to say, 'Oh, that didn't work, but it's okay. Let's try something else."

"They are developing that grit and perseverance to stick with it even when things are going really, really bad and they can't get things to work," she adds. "These are lifelong skills that they have to know to be successful wherever they go."

During one camp session, girls participating in the alumni camp were treated to a food science lab conducted by a group of women who work for the JM Smucker Company in nearby Orville. Food science, the girls learned, can involve microbiology, chemistry, engineering, and nutrition. These subjects come into play in many ways such as understanding the science behind the foods we eat, making sure our food is safe, and creating new foods.

Full days of hands-on labs at B-WISER are followed up with a variety of science-related activities each evening for both the first year participants and the alumni, hosted by the college's departments of engineering, physics, and chemistry. Women who are successful in science-related fields also meet with the girls each evening to share their career experiences.

While deeper learning is a predictable outcome of the many different lab experiences, B-WISER also contributes markedly to excellent teaching. Assisting the lead instructors in the labs are a half dozen teacher interns, educators who are certified to teach science and are interested in developing more student-centered, inquiry-based teaching methods. In addition, six teachers who previously served as interns, return to further their professional development. Countless students eventually benefit from the trove of scientific experiments, lab organization ideas, problem solving activities, and cooperative learning activities these teachers take back to their classrooms across the state.

With almost 30 years of experience behind them, B-Wiser continues to reach out to young girls who are interested in science; increases their abilities to think, hypothesize, and experiment in a variety of scientific disciplines; and models successful women who have achieved in science careers.

"We have a great, high quality camp," says Ms. Kilpatrick. "And I hope the girls go home confident in their abilities to do science."

For more information contact:

Ms. Mary Kilpatrick, mkilpatrick@wooster.edu

B-WISER INSTRUCTORS

Camp Director - Susan Godez

Biology

Cristin Hagans - Hilltop High School Emily Lundquist - Licking Valley High School

Chemistry

Becky Grimm - Upper Arlington Schools Caitlin Fox - River View High School

Geology

Jill Crone - Budd Elementary School Jordan Robinson - Bridgeport Middle School

Lego Engineering

Beverly Stambaugh - Baker Middle School Michelle Maffe - Bellaire High School

Physics

Dee Leis - Tipp City Schools Elaine Miller - Central Christian School

Robotics

Sandra Frazier - Waggoner Junior High School Jamie Doolos - Weisenborn Junior High School

Teaching to Empower in Math

Summit County Schools



Callan Ruff, second from left, and Kimberly Yoak, center, work together to develop equity, empowerment, and deep learning for their mathematics students.

Educators in Summit County are working to develop equity, empowerment, and deep learning in mathematics. They are designing lessons that are richer and more meaningful to their students. They are reflecting on their own practice, connecting with colleagues, collaborating with a math specialist, and enacting changes in their teaching designed to boost students' confidence in their own mathematical abilities.

"Culturally speaking, mathematics has always been seen as this 'bad guy,'" explains Kimberly Yoak, Mathematics Specialist, Summit Mathematics Education Enterprise. "As educators we cringe at that, because it doesn't have to be that way."

With funding from the Jennings
Foundaiton, Dr. Yoak is working with six
districts in Summit County to change that
perception in classrooms from kindergarten through high school. Through *Teaching*to Empower in Mathematics she designed
a professional development program that
combines book studies, online workshops and discussions, and co-teaching
classroom experiences for mathematics teachers in Cuyahoga Falls, Hudson,
Kent, Stow-Munroe Falls, Tallmadge, and
Woodridge. These districts make up the

Six District Educational Compact, which provides shared programs and services to students, teachers, and administrators within the Compact each year.

"We know from both narrative data, and lots and lots of anecdotal data, that students often feel disenfranchised, marginalized, in mathematics," Dr. Yoak says, explaining that too often only a few students have "mathematical status" within a classroom.

"We want to create classrooms where all students have the same mathematical opportunities, where all students feel empowered as mathematicians, as mathematics learners."

Historically, educators have taught math at a very surface level, and traditional teacher-directed instruction impedes deep learning, Dr. Yoak adds. "We routinely see evidence in state test scores, as well as narratives from teachers and parents, that many of the students in these six districts are not learning mathematics at deep levels and are not developing positive mathematical identities." This project is a means to disrupt this cycle and allow all students to achieve in an area vitally important for future success.

While recruiting participants, Dr. Yoak relied on each district's curriculum director to reach out to teachers who were willing to make a personal commitment to the program's goals. She expected each to meet one of two criteria: 1) they already are strong practitioners in the areas of equity, empowerment, and deep learning and would serve as models to colleagues, or 2) they are willing to engage in self reflection and make a shift, or think about making a shift, in their practice.

"Honestly, we have teachers involved who are at every different point along the continuum as to what they are doing in their practice," remarks Dr. Yoak. "The wonderful thing is that they are all willing to be self reflective, to be self critical, and to challenge themselves."

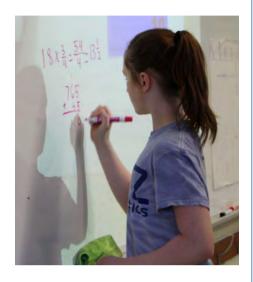
Adding Administrator Support

At the onset, 13 teachers and an equal number of administrators signed on. "The administrators are really key and in some ways a unique element to this program," she adds. "We want them to participate because they are a way to spread what we are doing beyond individual classrooms. Also, we know that when teachers are taking risks to make

Teaching to Empower continued from p. 11

changes in their practice, they need support from their administrators. They need someone who is in favor of what they are thinking about and of the different things they are trying in their classrooms."

The first step in the program, which began in January 2019 and will stretch into the 2019-2020 school year and beyond, was to engage participants in book studies specific to the three themes: equity, empowerment, and deep learning. Teachers in elementary and middle school grades read The Impact of Identity in K-8 Mathematics by Julia Aguirre and Karen Mayfield-Ingram; while high school teachers explored Catalyzing Change in High School Mathematics: Initiating Critical Conversations by the National Council for the Teachers of Mathematics. Dr. Yoak facilitated video discussions with grade band teachers within the Compact as they read various chapters in the books. Teachers and administrators also connected with colleagues during two full day workshops and through online discussions.



"I was a reading teacher before I was an intervention specialist so math has always been an area of weakness for me," admits Callan Ruff, a fifth grade teacher at East Woods Elementary School in Hudson, who participated in the experience as a way to fine tune her skills. "You are working not only with colleagues in your building and your district but with so many people from surrounding districts



who may be teaching the same thing as you. It is interesting and fun to compare lessons and practices."

On-site Consultation

An essential aspect of the program is the component that allows Dr. Yoak to visit each participant's classroom several times to observe and co-teach lessons. She makes on-the-spot suggestions that often lead to immediate shifts in practice. "It is often those little subtle pieces of instruction that make the biggest difference," she explains.

After each classroom visit, Dr. Yoak "reflects" on the teacher's work in a Google file that is shared exclusively between her and the classroom teacher. "I write those reflections in the form of "I notice...' or 'I wonder...,' she explains. "We are trying to get students to notice and wonder in mathematics so it makes sense to do so with our professionals, too." When teachers respond to Dr. Yoak's comments, they contribute to an ongoing conversation about their practice.

"The time we spend together in classrooms is absolutely vital," Dr. Yoak affirms when thinking of the most important features of the professional development program. "We can provide in services and workshops with teachers all in one room and they can be great, but we don't necessarily know how it effects change in practice and student learning. But when we are in the classroom, that's where it is happening. That's where deep learning is taking place and that's where we can make the changes that are going to be the most salient."

Dr. Yoak views the first full year of the program as a pilot project hoping it will expand as time goes forward. This fall, the participants will continue with workshops, sharing, and setting new goals for the upcoming school year. By spring 2020, those involved expect to see gains in state test data for students whose teachers have participated.

"We are working to change students' mind sets about themselves as mathematics learners," Dr. Yoak says. "We want all students to leave our doors believing they are capable of learning, doing, and using mathematics, and thinking mathematically. And it is done through practices that promote deeper, not superficial, learning."

For more information contact:

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Summer Reading Enrichment

Cleveland Metropolitan Schools

The summer scholars who attend Freedom School in Cleveland will return to school in the fall with a group of new friends, a stocked personal library, and a newfound confidence that they have the ability to make a positive difference in themselves, their families, and their community. For six weeks their schedule is filled with intensive reading/discussion sessions; interactive art and STEM lessons; and daily cooperative and selfesteem-building activities. Together, they are designed to enhance their reading abilities, develop critical thinking skills, and promote reading as a tool for academic achievement, character development, and personal enrichment.

Freedom School is a national program that was created by The Children's Defense Fund under the leadership of Marian Wright Edelman in 1993. It operates at numerous sites throughout the country with a common goal: curb summer learning loss and work to close the achievement gap that exists between underprivileged children and their peers. The local site was funded in part by a grant from the Jennings Foundation.

"The main focus of the program is not necessarily to teach our scholars *how* to read, but it is to plant a seed within them to *enjoy* reading," explains Rev. Edmund Wilson, Director, Youth Ministries & Community Engagement at Olivet Institutional Baptist Church in Cleveland's inner city, where the program was held this summer Monday thru Friday, from 9:30 am-4:30 pm. (Most scholars live in the neighborhood and attend grades K-8 at nearby Cleveland Metropolitan schools.)

"We want the scholars to know that reading is their superpower," Rev. Wilson emphasizes. "If they can master reading, then there is nothing they cannot do.

"If they understand the importance of reading and really grow to love and enjoy it, it will carry them through anything they might want to do in life."

Each day of Freedom School is structured similarly. Scholars are met at the door with a welcoming cheer and are treated to breakfast provided by the Cleveland Food Bank. After clean up the whole group meets in a circle for "Harambee," a Kiswashili word that means, "let's pull together." The next several minutes are filled with loud and energetic chants, dance, and motivational singing aimed at releasing pent up energy and group bonding. As Harambee winds down, a moment of silence and a general "wellness" check helps prepare everyone for the day.

"Harambee is a high energy portion of the day," explains Rev. Wilson, "It gives scholars a chance to burn off some early morning energy so when they break up into their integrated reading classes they are ready to focus."

Guest Read Aloud

While still together, the scholars are treated to a read aloud by a member of the community who selects a favorite book to share with the group. A short discussion typically follows. Afterwards, the scholars break up into their leveled reading groups where they will spend the next 2½ hours immersed in reading.



Teacher Intern Chelbi Graham, a recent graduate of John Carroll University who while be a first grade teacher in the fall, says her love for children sparked her interest in working at Freedom School. "I was looking for any opportunity to prepare me for the education world. And I fell in love with this program."



Summer Reading continued from p. 12



Scholars meet as a large group first thing in the morning and then again for afternoon activities. In between, they spend 150 minutes immersed in an intense reading curriculum.

The scholars are divided into sections according to grade level: K-2; 3-5; and 6-8, with no more than 10 scholars in each group. In their individual classes, they read and discuss specific books that focus on a new theme each week: the difference they can make in themselves, their families, their community, their country, and their world. They follow a curriculum designed by the Children's Defense Fund. Titles are carefully chosen to reflect circumstances and situations familiar to these children.

A student intern, who attends a national training program in the spring, leads each class, encouraging and facilitating discussion among the scholars about topics explored in the books. The interns also engage the children in activities designed to apply these themes to their everyday lives. Most interns are college-age students who are majoring in education or social services or simply have a love for working with children.

"The groups are small so the interns really have an opportunity to engage the scholars in deep conversations about the books and to help them to see them-

selves in the book," says Rev. Wilson, who believes the childrens' interest in reading is piqued because they identify with characters or circumstances in the stories. "They listen more, they are more attentive, they get involved with the dialogue, and they learn to ask probing questions to find out more about the characters or content," he remarks. "Again, it helps to plant that seeds so the children want to become better, more frequent readers."



Nurturing Excellent Teaching

At the end of each week, the children are given a copy of the book or books they've read to keep, which helps them create a personal library at home.

Rev. Wilson believes the enthusiasm and dedication of the interns contributes greatly to the program's success. "This work can be draining physically and emotionally," he explains. "Our interns are committed to the cause, the scholars, and the rest of the team. They went through extensive training and work long hours. They come in everyday with energy that lasts from the beginning to the end. It shows the scholars that they really care."

Afternoon activities at Freedom School vary by the day yet all are filled with interactive lessons either in art, dance, poetry writing, or STEM-related subjects.

Each day concludes with 15 minutes of "Drop Everything And Read." It applies to everyone in the building—scholars, interns, program administrators, visitors—and any type of reading material is allowed. What the scholars learn from DEAR is that reading is for everyone.

"I love seeing the scholars learning and growing," remarks Shrmayne Seller, the site coordinator for the program who makes sure each day of Freedom School operates smoothly.

"I want them to realize that no matter how young they are, they have the power to make a difference, that they can grow despite circumstances that may be keeping them from doing so outside of Freedom School.

"And that's one of the reasons we call them scholars," she adds. "Because we want them to know that we already look at them as brilliant!"

For more information contact: Rev. Edmund Wilson Olivet Institutional Baptist Church edmundwilsoniii@yahoo.com

Students Tune-In to Music Education

Cleveland Institute of Music

Fourth grade students at Longfellow Elementary School in Eastlake are eager for class to begin. Sitting on the floor, their faces light up as they hear the introductory music and their instructor for the day appears on the screen in front of them.

"Hello students and welcome to the Cleveland Institute of Music (CIM). My name is Mrs. Mandujano and I am coming to you *live* today from our studios in Cleveland, Ohio. Today we are going to be talking about a family of instruments that I like to call the Wonderful Woodwinds..."

The following class session is filled with expert instruction and professional demonstrations designed to acquaint students with the piccolo, flute, oboe, English horn, clarinet, and bassoon. Students learned a brief history of the woodwind instruments, their similarities and differences, and how they vary in the sounds they make from very high to very low pitches. Professional musicians and conservatory students currently studying at CIM demonstrate how the instruments are played and answer the students' questions through two-way videoconferencing technology.

With a grant from the Martha Holden Jennings Foundation, CIM instructors reached more than 600 students in grades one through four at five Ohio elementary schools this past school year. The schools are located between 15 and 180 miles from Cleveland's University Circle where the Institute is situated.

Teachers are able to work with CIM staff and instructors to elevate the quality of their curriculum without leaving their classrooms, explains Heather Mandujano, Virtual Learning Education Coordinator, who directs the Public School Project. It allows students to "attend" a live performance and learn from specialized instructional techniques that they otherwise might not be able to experience.

CIM has also designed a Dalcroze Eurhythmics class for younger students,



Through videoconferencing, instructors from the Cleveland Institute of Music deliver specialized music classes to students in five school districts from northeast to central Ohio. These fourth graders in Eastlake are learning about woodwind instruments through direct instruction and short musical performances by CIM musicians.

which music teachers can access online. This format allows teachers flexibility to present the lessons on their own schedule, progress at their own rate, and tailor each session to the individual classes they teach.

By receiving specialized, ongoing instruction from CIM's top quality instructors, participating students will learn new skills specific to their age group and will become more engaged with their music program, explains Mrs. Mandujano. As a result, their attitudes toward their music classes should be more positive and their over all performance should improve.

Mrs. Mandujano meets with individual classroom teachers at the start of the project to set them up for success. She also schedules regular in person or virtual meetings to actively guide them throughout the project and provide expertise in tying the supplemental instruction to the existing curriculum.

Michael Clements, Longfellow's music teacher who has worked in concert with CIM musicians through distance learning for several years, further explains the benefit for students.

"This program allows us to have access to specialized musicians in specific areas. Today a live professional flute player performed for the students. I am not a professional flute player, she knows much more about the flute than I do."

During the Q & A session, one student noticed how the flutist nodded her head as she played a short piece and was wondering why. Another was interested in her particular flute, why did she have a metal instrument instead of a wooden one?

Mr. Clements says the students are intrigued by the interactivity of the two-way technology and really enjoy learning from a different teacher.

For more information contact: Mrs. Heather Young Mandujano Heather.Young@cim.edu

Jennings Action Research Fellows

"The more reflective you are, the more effective you are."

SARA WILLIAMSON-MORSE Intervention Specialist, Madison Local Schools 2019 Jennings Action Research Fellow

Each year, a group of highly dedicated teachers who attend the annual Educator's Institute in the fall choose to continue on to participate in the Foundation's *Jennings Action Research Fellows* program. During the year-long experience, they deepen their skills while developing a specific project they are passionate about for their school with the support and camaraderie of a strong cohort of fellow educators.

In the spring, the Fellows gather to share the results of their research with colleagues.

"The number one characteristic that stands out among Jennings Fellows is their curiosity," remarks Dr. Daniel Keenan, the Foundation's Executive Director, at the 2019 spring gathering held at Kent State University. "We want students to be curious, and these teachers model that."

"This program is a great opportunity for teachers to reflect and grow as educators," says Angela Smith, Superintendent, Madison Local Schools, who attended the final event along with two teachers from her district. Those teachers examined whether

educator excellence

or not the implementation of bereavement groups for students who have experienced loss will improve the classroom environment. "By picking a subject they are *really* invested in and studying its impact on education, these teachers can only help our students become more successful."

Among other topics researched by Jennings Action Research Fellows during the past school year are:

- Can direct instruction on organizational skills improve student mastery
- The impact of teaching mindfulness strategies on 3rd graders
- How to increase student engagement in the writing process through conferencing

"Teachers by their very nature are reflective," comments Christo Lehmann, a computer science teacher at Garfield Heights High School who examined the life outcomes of students from the class of 2010 for his research project. "I would encourage anyone to take this opportunity to investigate something important to them as an educator and to their classroom."

2019 FELLOWS RECIPIENTS

HEATHER BUZINSK

Canton Local Schools

HILLARY RIOS MOLLY STREATOR

Clearview Local Schools

SUSAN WAGNER

East Palestine City Schools

NATALIE SOTO-BURKE

Elyria City Schools

CHRISTOPHER LEHMANN

Garfield Heights City Schools

ELIZABETH KASLER DENISE MAST

JENNIFER SCHAEFFER Louisville City Schools

TARA SOEDERSTROM

SARA WILLIAMSON-MORSE
Madison Local Schools

KRISTINA WANER

Mayfield City Schools

JENNIFER STEELE-REHBERG

Shelby City Schools

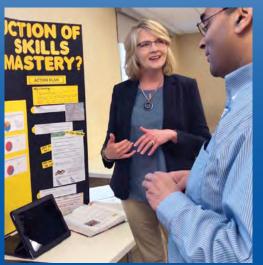
SARA PALMISON

Wellington Exempted Village Schools

LYNNE SHIELDS

West Geauga City Schools





2019 Jennings Action Research Fellows meet with colleagues to share the results of their individual research projects.



Jennings Summer Mathematics Institutes

Ethan is creating a fenced-in section for his new garden. He wants the garden to be 24 square feet to fit all of the plants he needs to grow. How many different ways can he make the garden? How much fence does he need for each different design? What is the largest amount of fence he would need? What is the smallest? He has only one gate, so all parts of the garden must be connected.

"What might students do when working on this problem?"

That's the question Dr. Jeffry Wanko posed to teachers attending the Jennings Summer Mathematics Institute. The teachers examined the problem from the perspective of their students and discussed the different ways they believe their fourth and fifth graders would try to figure it out. They manipulated colored tiles in a variety of designs, discussed mathematical formulas, and discovered how area and perimeter are affected by changing the placement of the tiles.

"Our goal is to examine perimeter in an active way so the teachers can learn how students might explore using a manipulative," explains Dr. Wanko, Associate Provost and Professor, Department of Teacher Education at Miami University, who has led the summer sessions for several years. Dr. Wanko hopes teachers become more at ease using problem solving to teach math through the work they do at the institutes.





Foundation sponsors two Mathematics Institutes to re-energize Ohio's mathematics teachers. Separate two-day sessions for teachers in grades 4-5 and 6-8 are filled with practical strategies teachers can incorporate immediately into their lessons when they return to school in the fall.

Each summer, the

news & notes



www.mhjf.org

We have launched a new website at the same address. You can find information on our various grant programs and initiatives, apply for a grant, or read our blog, which highlights examples of excellent teaching and deep learning taking place in schools throughout Ohio with Foundation support.

Veteran Ohio educator, Paul Cynkar has joined the Jennings Foundation as an evaluator. Mr. Cynkar began his career as a third grade teacher in Athens. An interest in administration soon led him to roles as principal, first of West Muskingum Middle School in Zanesville and then of Worthington Middle School in Worthington, where he also served ten years as assistant superintendent. For the past 11 years, Mr. Cynkar has worked as Chief Operating Officer for Battelle for Kids in Columbus.

Mr. Cynkar holds a Bachelor of Arts degree from Marietta College and a Master of Education from Ohio University. His educational career includes post graduate coursework in educational administration, and educational leadership and policy.

Mr. Cynkar's varied experience will be an asset to the Foundation as he works to evaluate grants in central Ohio.

The Jennings Educator Institute will be held this fall on October 19, November 2, and November 16, at Otterbein University for teachers in central Ohio. See **www.mhjf.org** for more information.