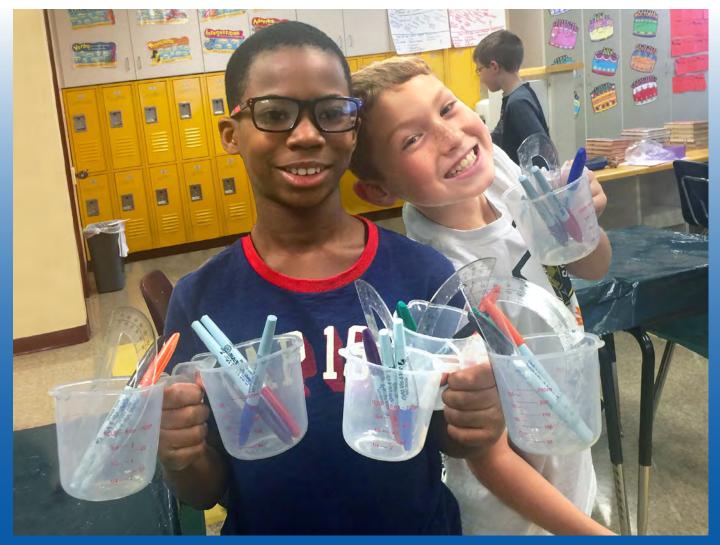


ProExcellentia



Science & Lit Link Up

Fourth graders in Licking Heights are reading into science and discovering hands-on ways to learn about topics in the curriculum. They get to be "leaders in their own learning," says their teacher, which to these young scientists is "awesome." (see story pg. 9)

Martha Holden Jennings Foundation

PRO EXCELLENTIA • ISSUE 1, 2018

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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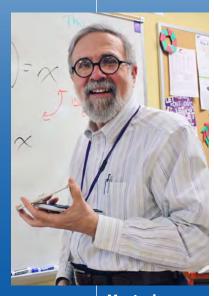
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Explorers Club p. 10



Inquiring Scientists p. 9



Mastering Teaching p. 14

Balanced Literacy Instruction

Black River Local Schools

Students in the Black River Schools have fallen in love with books. Their basal readers have been set aside in favor of hundreds of leveled books that fill floor to ceiling shelves in a dedicated book room.

Curriculum Director Jill Holland Beiser has been working for the past three years to establish a strong literacy framework within the elementary grades in this small, rural district located where Lorain, Medina, and Ashland counties meet.

"If we can get our youngest children to love reading then every teacher they have in future grades benefits, because students will be more likely to pick up books on their own and to be engaged in the text they are reading," says Mrs. Beiser, who received grants from the Jennings Foundation to implement Literacy Collaborative's *Balanced Literacy Framework* in the district. "Ultimately our goal is to create children who *want* to read and children who *want* to write."

Three years ago, Black River Schools set out to create a common, clear vision for literacy instruction at the elementary level. Mrs. Beiser came on board having years of experience implementing the *Balanced Literacy Framework* in another

Teachers learn to be flexible as they implement strategies because students' needs change every year.

district. The Framework provides for layers of instruction—both classroom and intervention—to assure all students achieve literacy success. It is research-based and uses strategies that have been proven to improve reading. Implementing it within Black River, however, would require systemic change.

"We would not have been able to do any of this without the Foundation," says Mrs. Beiser, explaining that funds they received paid for books, classroom resources, and several rounds of staff development for 29 teachers in grades K-5.

The process began in earnest in August, 2016. At that time, all elementary teachers received their first round of professional development from Ohio State University's Literacy Collaborative trainers who worked with them on site at the Black River Education Center. The trainers addressed the essential components of the Literacy Framework: guided reading, interactive read aloud, and writers' workshop. During the following school year, class schedules were revamped to include time every day for guided reading and writing instruction and to make certain struggling readers had access to additional intervention reading time. Mrs. Beiser provided critical in-classroom support to teachers as they began to implement what they learned.

The following August, teachers met for a second round of professional development from the OSU trainers. They were introduced to word study and given a refresher on both guided reading and writer's workshop.

"Making a change to something as profound as a *Balanced Literacy Framework* takes time, Mrs. Beiser explains, "it takes hearing things more than once, and it takes practicing the components even before you know what questions to ask as to the best way to implement them.

"Once you learn the basics," she adds, "then you learn how to finesse the components to get as much 'bang for your buck' as possible. Because every minute in the classroom is precious."



The book room is set up to be userfriendly. Hundreds of titles are leveled and bagged in sets of six, the ideal number for a guided reading group.

This past school year involved additional rounds of on-site training from the OSU professionals intermittently throughout the year. At times they demonstrated strategies, at times they showed teachers how to organize their classrooms. Mrs. Beiser says the district has been fortunate to contract with the same OSU trainers each time, providing needed consistency as the program has developed.

"The Balanced Literacy Framework can be replicated if you provide your teachers with enough professional development," explains Mrs. Beiser. "But you do need an informed administrative team in order to support the work teachers are doing, and our principal is behind this 110 percent."

Mrs. Beiser admits that progress has happened gradually—that they have not made the transition to a balanced literacy program overnight. Yet teachers have already noticed improvements in their students' attitudes about and achievement in reading.

"Change is really hard and this requires a lot of work on the part of the teachers. But one of the nice things about rural districts," she adds, "is there is not a lot of staff turnover. So this professional development will be readily sustained over a long time."

For more information contact:
Mrs. Jill Holland Beiser, jbeiser@blrv.org

PBL Goes Into the Wild

Yellow Springs Exempted Village Schools



PBL Coach Jack Hateret and a group of seventh graders unravel the seine used to catch macro invertebrates in the Little Miami River along their 53-mile bike route. The spoke and wheel display behind them forms a frame for photos that document their trip.

Seventh graders at McKinley Middle School in Yellow Springs start the school year with a three-day, 53-mile bike trek on the Little Miami Scenic Trail. Their route stretches alongside the Little Miami River from Yellow Springs to Loveland in southwest Ohio. Along the way they camp two nights, canoe six miles, hike uphill, test the river's water quality, and visit small towns and historical sites significant to the local area. Two classes have tackled the venture thus far and teachers are in the midst of planning for fall, 2018. Grants from the Jennings Foundation have helped make the trip accessible to all 65-70 seventh graders who begin middle school each year.

"It was really cool to bike that far and to learn so much about the area that we live in," remarks one student thinking back on the adventure several months later. "It was a good bonding experience with our classmates, and I think it brought everyone together."

"It was fun, exciting, and thrilling," comments another, who admits he

enjoyed the experience even though he didn't have a comfortable bike seat. "Biking wasn't that hard," he adds, "but it did hurt a bit."

Into the Wild is an interdisciplinary PBL unit administered by Jack Hatert, Yellow Springs' assistant principal for grades 7-12, and seventh grade science teacher, Becca Eastman. Both educators are thoroughly trained in project-based learning and are always looking for opportunities to create deep, relevant, and memorable lessons for their students.

"Our overarching goal is to provide learning experiences for students that allow them to dive deeply into the curriculum content for their grade level and apply that new knowledge to other facets of their lives," explains Mr. Hatert.

Mr. Hatert, who is also the district's PBL Coach, began his career in Yellow Springs as a seventh grade mathematics teacher but says he became discontent with his job when he found his work focusing on "teaching to the test."

"I got really good at that, so my students always had good test scores," he admits, "but I found myself going home at the end of the day really dissatisfied with what I was doing. It wasn't rewarding.

"When we shifted to project based learning, it reignited a passion in me that was missing. The idea (behind PBL) is that our work actually has meaning; it has life beyond the classroom, where we are solving real world problems. To see students passionate about what they are doing—and not feel like I am just making them learn what they have to learn—is really rewarding."

Curriculum Focus

The concept for *Into the Wild* emerged from a brainstorming session among teachers on the seventh grade team who wanted to create an interdisciplinary PBL unit that focused on an outdoor educational experience. The unit they developed far exceeded expectations and now acts somewhat as a 'rite of passage' for Yellow Springs seventh graders.

Curricular projects connected to the unit begin the first day of school and continue throughout the next month. Students engage in lessons connected to health/physical education, math, science, social studies, and art. Assignments touch all subject areas. In health/pe, they learn about target heart rate, apply it to a variety of physical activities, and assess their current personal fitness levels. In social studies they study the Underground Railroad, which flourished in the area in the mid-19th century, and research the history of the small towns they will pass through along the bike trail's path. Planning meals for 70 people for three days challenges students to utilize math skills. And science lessons focus on testing the water quality of the Little Mimi River and analyzing the

continued on p.5

Into the Wild continued from p. 4

impact of both water conditions and availability on area settlements. Endless opportunities in language arts are also embedded in the unit: journal writing; reviewing primary source materials; analyzing components of narrative writing; writing science reports; and interviewing residents who live in the area today.

A Project that Engages **Hearts, Minds, and Bodies**

In addition to developing academic content, teachers prepare students for the unit's physical challenges. Weekly bike rides or "training sessions" begin five weeks before the scheduled trip, allowing students to build their endurance for the 53-mile trek. The voluntary sessions are held after school and are open to students, parents, siblings, and teachers. They start with 8-mile rides that become progressively longer each week.

In keeping with PBL principles, Into the Wild requires students to develop and use a variety of 21st century skills both while preparing for and during the 3-day ride. These include problem-solving, collaborating, and critical and creative thinking. What the teachers have discovered during the past two years, however, is just how much the students grow socially and emotionally during the process. Transition to middle school is often difficult, they remark, but this project acts as an all-inclusive bonding experience. It establishes trust between students and teachers and builds camaraderie among classmates that carries forward throughout the year.

"Seeing how much the students' confidence grows during the trip is also amazing," says Ms. Eastman, who just completed her fourth year of teaching. "Watching them go from, 'There's no way I can go this!' to 'Look at what we did and what we can do!' is pretty incredible.

"That confidence then transfers into other areas of their lives," she continues. Coming into seventh grade many of them are reliant on their parents. After

Trotwood Riverside (235) Payton (35) Oakwo_d - Beavercreek Kettering West Carrollton Bellbrook Centerville antown Carlisle Franklin Springboro (73) Waynesville wn (123) (42) (73)Seventh graders bike from Yellow Oregonia tonroe Lebanon Springs to Love-(741) unit that blends Cowan Lake State Park Fort Ancient State Memorial South rigorous con-Mason tent, community (68) rich experiences (123) Lander students will Blanchester (48) remember for Loveland (28) (132) years to come. Stonelick State Park

Shiloh

land during a PBL partnerships, and

this trip they realize, 'I took a big risk, a big leap, and I now feel more comfortable doing other things in my life.' That to me is the most rewarding part of the experience."

Beyond students and teachers, the project has attracted an outpouring of support from the Yellow Springs community. For instance, the school has received many donated bikes and a local bike shop owner participates on all training trips and inspects and services bikes before and during the ride.

"This project was been very inspiring to our colleagues as well," notes Mr. Hatert. "Many other grade bands are looking at the project we've done and are trying to emulate an experience like this. It's raised the bar and helped them to see that you can think bigger."

"Even though it is a huge investment of our time and energy to plan, the rewarding feelings that come back are worth it 100 times over," Ms. Eastman adds. "A year later students still talk in depth about the water quality indicators they looked at or what it was like to find a macro invertebrate. They can't name them all, but they can tell you how healthy the water is.

Fairborn

"They also reflect on challenges they struggled with and provide advice to the next group of seventh graders. You can tell that it's a memory that is going to stick."

For more information contact: Mr. Jack Hatert McKinley Middle School jhatert@ysschools.org

Summer Music Immersion

It's a really good experience.

Baldwin Wallace - Community Music School

You learn a lot & get better than you already are at playing your instrument.

It's pretty challenging!
You have to work hard consistently to reach your goals.

It turned out to be better than I expected.

I learned to play really beautiful music. I tell my friends,"Don't think you can't do it, because you can!"

> I am definitely going to miss it-I really don't want to leave!

Those are the comments of two rising fifth grade campers who just spent their first week away from home at Baldwin Wallace's annual Summer Band Camp. The boys took a short break from their final rehearsal to share their thoughts about the experience. Thinking back on the week, they realized several things: practice sessions were longer and more challenging than they are back at school; through persistence they became more accomplished musicians; they made new friends from schools far beyond their own neighborhoods; and they not only survived but even flourished during their first time away from home.

The boys, both students at Campus International School in Cleveland, are



Middle school band students practice "Activity March" composed by Harold Bennett for a final, end-ofcamp concert.

among 22 young musicians from Cleveland Municipal schools who received a scholarship to attend the band camp through a partnership with the Martha Holden Jennings Foundation. Each year BW works directly with music teachers in the Cleveland schools to identify potential campers. Some are required to write an essay explaining why they should be considered for the award. Once accepted, these talented students join close to 300 additional brass, woodwind, and percussion players, as well as a group of musical theater students, in grades 4-9 who fill out the total camp enrollment. The program is held on the Baldwin Wallace campus in Berea where students sleep in dorms, rehearse in the Kulas Musical Arts Building, and sample a bit of residential college life.

"I love bringing together students from throughout northeast Ohio and the region to meet each other through music,"

says Adam Sheldon, Director, Community Music School at Baldwin Wallace, who has administered the Summer Music Program for the past three years. (The week prior to band camp, Mr. Sheldon coordinated the 2018 String/Piano Camp, which attracted 220 musicians, 24 of whom were scholarship students from CMSD.)

Mr. Sheldon describes the band camp's educational component as "intense." Students are taught the value of concentration and dedication to perfecting their skills. Daily practice includes two to three full band rehearsals as well as 90 minutes of sectional work. To give students a break, social and recreational activities are mixed in throughout the day, which stretches from 7:30 am to 9:00 pm. Campers come into the program with varying abilities; yet Mr. Sheldon says all must have at least one school year's worth of playing experience behind them.

Deep Learning

Each student auditions the first day of camp. Those results form the baseline for instruction and progress is assessed individually with each camper receiving several evaluations throughout the week. They all go home with a detailed analysis of their progression from Monday to Friday as well as notes and strategies to work on during the school year. Because most students return to camp year after year, Mr. Sheldon uploads these evaluations into a database so he can track student advancement over time.

continued on p. 6

Music Immersion continued from p. 5

A Rigorous Agenda

Students showcase their newly refined skills in a final concert, which they perform for their families the last day of camp.

"The educational output is our main goal," says Mr. Sheldon, remarking that the practice schedule is challenging for some who have never played so much in their lives. "We obviously want them to grow as individual artists and musicians." Ideally, students leave the program feeling more confident in their own playing abilities and in their competence to lead others at their schools.

"We hope this becomes the spark for them to continue to use music as a tool or life strategy to ground themselves in something they can own, have, and do," he adds.

In addition to advancing the campers' artistic skills, Mr. Sheldon views the summer program as an opportunity to create community within a diverse group of students. He wants to teach them respect for themselves and their peers and how to learn from each other.

"This camp has opened me up to learning how to marry folks with different backgrounds and to celebrate diversity and that's among staff as well as students."

Camp instructors, 120 in total for both camps, hail from schools throughout northern Ohio. (Lead conductors for both band and string camps are noted in the box above right.) The staff roster rotates from year to year to expose students to a variety of teaching styles. Each year, current BW music education students also serve as assistants. They work directly with the conductors, getting further pre-service experience.

A summer music program, such as the 2018 Strings and Band camps, has been operating at BW for 80 years. The Jennings Foundation has supported Cleveland students in that venture for the past 14 years. This partnership continues to enhance the growth and development of young musicians in Cleveland who otherwise might not have that opportunity.

"What we hope to do in a very short time here is move students miles in terms of their learning," notes Mr. Sheldon. "Because we provide a very intense experience with experts in the field who teach here, we know we can further the students' development when they are on campus. We use every resource we have from an expert standpoint and then infuse that into the summer school program."

For more information contact: Mr. Adam Sheldon Baldwin Wallace University Conservatory of Music asheldon@bw.edu

Lead Conductors 2018 Summer Music Camps

String Camp

Kacy Albright - Director of Orchestra, Firestone High School, Akron School of the Arts

Sally McFadden - Retired Public School Educator, Youth Orchestra Conductor, Nashville, TN

David Pope - Director of Orchestras, Elyria City Schools

Band Camp

Mr. Tom Chiera - Director of Bands, Norton High School

Dr. Katherine Ferguson - Director of Bands, Firestone High School, Akron School of the Arts

Mr. Bobby Selvaggio - Director of Jazz Studies, Kent State University



In addition to teaching specific music skills, BW's Summer Music programs cultivate cultural and emotional intelligence, teach good craftsmanship, develop workplace skills, and encourage children to conquer their fear and take risks.

Project Game Board

Shelby Middle School

grants-toeducators



Mr. Clark says
Project Game
Board gives him
an appreciation
for all the different ways his students are smart:
"It gives them a
chance to display
what they are
good at and walk
out of the classroom with a sense
of accomplishment."

In a former 20th century wood shop classroom, Steven Clark teaches 21st century design and engineering skills to two classes of middle school students in Shelby, Ohio. His goal is to introduce teens to skills they can sharpen in future vocational education classes that could translate into good paying jobs in the future.

As the middle school STEAM teacher, Mr. Clark developed a semester-long elective course called *Evolution of Gaming*,



which requires students to research the history of games from ancient times to current day. Afterwards, their hands-on assignment is to work with gaming software and manufacturing technology to design and produce original video games and board games to share with classmates. Through the experience, they learn each step of the manufacturing process from the design phase to final production.

"This class allows every student who might learn in a different way a chance to shine," explains Mr. Clark. "I have some very artistic students who never get to show it because they are required to write a paper or complete a mathematical problem. Here, they actually get to make a product. It's amazing."

Mr. Clark, who also teaches STEAM classes at the high school, is thankful to the Jennings Foundation for awarding him grants that have allowed him to

integrate manufacturing technology into the classroom. Students use the equipment daily to create game boards and playing pieces with professional-looking results. An X-Carve router is often running in the back of the classroom carving out game boards designed on the computer. These can take anywhere from 30 minutes to three hours to complete. In addition, students learn to program a 3D printer to produce game board pieces with accuracy, precision, and dimension.

"These projects allow students to take charge of their learning. They are able to think and do for themselves; just a little bit of guidance is all they need," Mr. Clark explains. "My ultimate goal is to create a FabLAb where we can really dive into topics. These projects give students a chance to do something rather than just read about it."

For more information contact: Mr. Steven Clark, Shelby City Schools clark.steve@shelbyk12.org

Students Grow in Reading, Writing, and Science grants-toeducators



Ms. Ankerman has seen her students' interest in science peak by introducing topics through nonfiction literature and following up with hands-on experiments.



In Jordan Ankerman's fourth grade classroom science and literacy often go hand in hand. Through inquiry-based lessons, her students conduct a variety of hands-on science experiments while also reading and writing about the topics they study.

Ms. Ankerman learned strategies to blend the two subjects during a yearlong professional development program drawing upon the book *Inquiring Scientists, Inquiring Readers: Using Nonfiction to Promote Science Literacy* by Jessica Fries-Gaither and Terry Shiverdecker. Research-based and teacher-friendly, the book explains how inquiry can engage students in reading nonfiction texts, discussing important science concepts, and writing both to develop their understanding and to share information.

"The first year I taught science was really hard," admits Ms. Ankerman, who just completed her third year of teaching in the Licking Heights School District, just east of Columbus. "We had a textbook, but I didn't feel like the students were really learning, so I tried to find other things to do."

Ms. Ankerman applied for a Grant-to-Educators from the Jennings Foundation to purchase materials for experiments outlined in *Inquiring Scientists*, *Inquiring Readers* as well as a library of nonfiction literature that coincides with each topic.

The purpose of integrating nonfiction texts into science instruction is to provide an authentic context for literacy instruction and to create a curiosity for science concepts that can't easily be investigated directly, explains Ms. Ankerman. In the classroom, she adds, it gets her students engaged.

At the start of the school year, Ms. Ankerman organized her curriculum into four units: "Scientists Like Me", "Beach Erosion", "Let's Dig" (a study of fossils), and "Minds on Matter." Each unit combines inquiry-based experiments with related literacy activities. For example, during the unit "Beach Erosion" students work to answer the question: How do erosion, deposition, and weather affect an environment? The reading list for this topic includes Adventures in Sand by David Baird, Cracking Up: A Story about Erosion by Jacqui Bailey, and A Rock is Lively by Dianna Hutts Aston. Lessons

require students to observe different kinds of rocks—igneous, metamorphic and sedimentary—and contemplate the origins of sand. The students create a beach scene in plastic containers, add "waves" to the container, then observe and collect data to discover how waves affect the topography of the beach.

"Every unit has a nonfiction picture book that goes along with it that connects to the topic better than a textbook can," explains Ms. Ankerman. "To the students, it's just like reading a story."

Ms. Ankerman acknowledges that designing the science/literacy units took a lot of work on her part, but it has been well worth the effort.

"The students really enjoy it," she remarks after having just completed the beach erosion simulation. "Now they get excited about *anything* we do in science." Best of all, she says, "They are growing as readers and writers as their science content knowledge grows, too."

For more information contact: Ms. Jordan Ankerman Licking Heights West Elementary School jankerman@lhschools.org

Club Explores Science

Orchard Middle School / Solon

grants-toeducators

Once a week, the 25 members of Orchard Middle School's Explorers Club meet for an hour and 20 minutes after school in Susan Benedict's science classroom. Time flies as they care for animals, construct simple circuits, design and build paper roller coasters, or investigate how the angle of the sun affects the temperature on Earth. Each session, club members explore these and other topics embedded in the fifth grade science curriculum, yet they go far beyond lessons covered in class.

"My push is to take them to a deeper level of understanding of the curriculum," explains Mrs. Benedict, who received a Grant-to-Educators from the Jennings Foundation to establish the club and "explore grade appropriate content with a twist."

Mrs. Benedict designed the club for students not typically interested in science and engineering related activities.

"I was looking for kids who did not have being a scientist or engineer on their radar, maybe did not even have going to college on their radar."

Mrs. Benedict explains that the school offers many opportunities for those students, such as Science Olympiad, robotics competitions, and an environmental club. "We wanted kids who didn't have a niche yet in that direction, who if we said it was a science club, they would not have signed up." She believed she could ignite an interest within these students if they had a chance to explore concepts in hands-on ways not possible in the classroom setting.

Attracting club members was not as difficult as she might have expected. At the start of the school year, she asked teachers to nominate those who fit the above description and were not committed to other after school activities. Students completed an application and with their teacher's recommendation were able to join.

The Explorers Club's yearlong agenda is filled with projects based on the fifth grade science curriculum. One of the first assignments was to build a habitat for a living animal (among their choices were a Hermann tortoise, bearded dragon, Bess beetles, fat-tailed gecko, millipedes, and a green anole) and then assume responsibility for that animal throughout the year.

"As a scientist you have to be a little bit curious, and next week we have to make these habitats 'rock'," Mrs. Benedict tells the students while introducing them to the different animals. Their next task, she explains, is to research what their animal's home should look like and what it needs to survive. Caring for their animal presents many problem solving challenges as the students evaluate their habitat at the start of each club session to be sure it is meeting the needs of the animal in their charge.

As the school year progresses, club activities align with topics covered in class: life sciences, force and motion, sound and light, and space. Every project is hands-on, deepening the students' understanding and prompting them to take some of their excitement back to the classroom.

"My understanding of deep learning is that we are getting kids to understand what they are learning as opposed to regurgitating," Mrs. Benedict explains. "And this is deep learning.

"We don't necessarily want to turn all these kids into engineers and scientists, but we want them to know that it's a possibility for them," she adds. "By the end of the school year I hope they are thinking: 'Science and engineering are pretty nifty, and I can do either one of them if I want to."

For more information contact: Mrs. Susan Benedict Orchard Middle School susanbenedict@solonboe.org







Students in the Explorers Club have to problem solve each week to determine how to keep their animal alive in habitats they have created and that remain in the classroom year round.



"Shakespeare was Never Meant to be Read"

Edison High School/Great Lakes Theater

For one week in March, students at Edison High School in Milan, Ohio, come out of their shells. Some act, some question, some observe, some entertain, while others take on roles very different from themselves. Prompted by actors from Great Lakes Theater, the students spend a week delving into classical literature and discover a lot about themselves in the process.

After organizing a successful program last year, English teachers Jen Wobser and Chris Ceccoli scheduled a weeklong residency program with four teams of actors from Great Lakes Theater this spring that touched all students in grades 9-12. Each day was filled with activities designed to bring classical literature to life. Students studied Shakespeare's Romeo & Juliet, Julius Caesar, and Macbeth and Arthur Miller's The Crucible in grade level bands. They watched and analyzed passages performed by the professionals and acted out scenes themselves.

"Shakespeare was never meant to be read; it was meant to be performed on stage," explains Mr. Ceccoli, adding that "it makes a world of difference" to students to see a play acted in front of them rather than reading it in a book.

"The initial reluctance and resentment students associate with reading classical literature turns into a true sense of appreciation and understanding," he continues. "This enriches the students' experiences and at the same time I know it's made me a better teacher in my approach to Shakespeare."

"It's one thing to read and discuss the rhetorical strategies, but it's another thing to see it and to be moved by it." adds Mrs. Wobser. "You can see those light bulb moments on the students' faces. Those moments can't be planned; they are authentic."

For five days, the actors work in English classrooms not only to help students better understand a particular play, but to get them to open up about how the themes relate to their own lives.

grants-toeducators

"The actors present a hundreds-yearold play in a way students can understand. They get many students to open up and share personal and deep attitudes and feelings," Mrs. Wobser remarks.

After acting out a scene, Luke Brett, who has worked with the in-school program for four years, explores the characters' motives and desires with students. "Most of our lessons are about what *they* think," he explains. "The reason I love doing this is because there is no one right answer. Ultimately, I hope they learn to trust their own thinking power more."

Excitement embedded in the residency program continues at Edison weeks after the actors leave. The teachers designed a competition that challenges all students to produce a personal interpretation of the play they studied. Students choose how they want to complete the assignment either through music, video, acting, or an artistic rendering. The best of each class is presented at a school-wide Festival where the most outstanding work is selected by the entire student body. For two years the teachers have been impressed with the results.

"Sometimes being a good teacher is about throwing ideas out there and then getting out of the way," says Mr. Ceccoli. "That's something this project has enabled us to do. We threw these ideas in front of our students, watched them run with it, and take us down avenues we never envisioned. It's powerful and it's lasting. Their experience with Shakespeare is much more impactful through this effort than with anything we have ever done in the past."

For more information contact: Mrs. Jen Wobser jwobser@edisonchargers.org



Actors with Great
Lakes Theater recreate Act IV, Scene
II and III from
Shakespeare's
Julius Caesar for a
classroom of tenth
graders. Following
their performance,
they discuss with
students about
how the play's
themes are universal and still have
relevance today.

New Makerspace Challenges All to Think Outside the Box

Woodland Elementary School/Stow

At Woodland Elementary School in Stow, Ohio, teachers and administrators transformed an unused classroom into a STEAM makerspace where students in grades K-4 build, create, problem solve, and in general, work hard and have fun while learning.

Principal Marylou Muckelroy calls it, "controlled chaos," yet she knows students are engaged, on task, making and correcting mistakes, and thinking outside the box.

"This is our way of intertwining our curriculum with technology," says Nicole Marconi, who finds ways to use materials in the makerspace once a week to reinforce what she is covering in her fourth grade curriculum. Recently her students created 10-second, stop-motion videos to interpret a chapter from Peter Brown's The Wild Robot, a novel they read in a global read aloud. The students' challenge was to use Stickbots, small poseable figures, and a green screen to create scenes, which they photographed and recorded on iPads to share with their classmates.

"This task requires them to be a team player," says Mrs. Marconi, adding that students worked in groups of four to five to complete the activity. "They had to





Fourth grade teacher Nicole Marconi looks on as students create a scene from The Wild Robot using Stickbots. During a morning session in the school's new makerspace, they will photograph almost 100 different scenes to ultimately create a 10-second video to show their classmates.

pick one chapter from 80 chapters in the book, have conversations, compromise, bring in props from home, and create a scene together." She gave students an all-important opportunity to "tinker" with the materials a day in advance to familiarize themselves with what they had to work with.

"That exploring time is critical," says Mrs. Marconi. "It allows them to make mistakes and learn from them. If I had set boundaries right away, they would have done exactly as I said, followed all my rules with no imagination or creativity."

While not totally new to the school, the makerspace was significantly expanded this year with a grant from the Martha Holden Jennings Foundation. Materials that had been stored in classrooms throughout the building were moved to a dedicated location, which

they call the E4 Zone, alongside new resources purchased with grant funds.

"We were looking to really expand the materials we had for students to explore," explains Mrs. Muckelroy, pointing to the shelves of books, manipulatives, games, and technological equipment to create learning opportunities that would be difficult to replicate with standard classroom supplies.

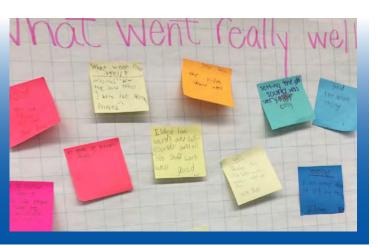
"What I tell teachers is, 'Take a standard, think outside the box, and give it a shot."

After receiving the grant, Mrs. Muckleroy formed a committee with a representative from each grade level, as well as music, art, and phys ed, to recommend age-appropriate materials to meet the needs of all 280 children

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New Makerspace continued from p. 12

Students spent a day "tinkering" with technology prior to engaging in their assigned task. First they analyzed what went well and what didn't during their trial run.



in the building. "It was very important to have everyone on the committee," she remarks. "Fourth grade will use the materials in very different ways than first grade. It was also great to bounce ideas off each other."

With a list of materials in mind, they developed a "plan of action" to describe possible activities for each of Woodland's five grade levels. Kindergartners could explore magnetics and observe how a substance dissolves in water. First graders might create structures with K'nex that can balance an object while moving across the floor. After reading the Three Little Pigs, second graders could build structures out of sticks, straws, and Lego bricks and test which has more staying power. Third graders might investigate "What Makes Machines Work" by using K'nex to build structures and then design simple machines on computers using CAD. They could actually produce their products on a 3D printer. Finally, by operating cameras and sound equipment, fourth graders could gather news, write scripts, and record morning announcements. All activities would require students to reflect on their work in journals and review their work with peers.

These are just samples of curricular connections teachers imagined they could do in the makerspace. Several months into the school year, many are independently coming up with ideas of their own.

Importance of Professional Development

Mrs. Muckelroy knew from the start that some teachers might be hesitant to take time away from classroom lessons to incorporate makerspace projects into the curriculum. She planned several professional development sessions to let them experiment with the materials themselves. By increasing their comfort level, teachers would get excited about the possibilities these potential projects would hold for their students.

"Some teachers have jumped in feet first—others were a little hesitant," she explains. "But for our first year, we have made some really big strides."

"It can be intimidating there's no doubt about it," says Mrs. Marconi, who



was more than willing to take materials home to play with, test, and discover how they could enhance her classroom lessons. "The more comfortable you are with the materials the better you will get at using them." To encourage teachers further, a district technology coordinator is available several days a week to work directly with teachers and students in the space. Parent volunteers have also been trained to help out, adding another adult to the mix to lend extra hands when students need help.

"My advice to other teachers is to try it," says Mrs. Marconi. "To be able to let go and just say you are going to the makerspace to try something is a challenge. You have to be willing to go outside of that comfort zone. You have to be able to let go. You have to be able to trust the kids."

"What I see in this makerspace is kids directing their own learning, which is really what I had in mind when I conceived the whole thing," Mrs. Muckelroy comments. The teachers really just facilitate."

Deep learning, she adds, comes about naturally through the experience. "Just being able to turn the kids loose to work together, to problem solve, to collaborate, to think outside the box about different ways to solve a problem on their own, that's deep leaning. Those are all 21st century skills that employers are now looking for."

"My kids beg to come down here," adds Mrs. Marconi. "They love it. They're not afraid to try anything."

For more information contact: Mrs. Marylou Muckelroy Woodland Elementary School st_muckleroy@smfcsd.org

Honoring Top Educators

2017 Jennings Awardees

Each year, the Jennings Foundation recognizes Ohio's most effective educators by presenting several individuals with top educator awards. These professionals are admired by their colleagues, active in their communities, and have made long-standing achievements in their field. Candidates are nominated by their school administrators, or in the case of the outstanding superintendents, by their school boards, and submit an extensive application. They are selected by a panel of leading educators. The honorees receive cash awards to be used for educational projects of their choice.

educator excellence

DAVID JAMES

OHIO SUPERINTENDENT OUTSTANDING PERFORMANCE AWARD Akron City Schools

David James offered high school teachers mini-grants to create authentic classroom learning experiences. (I.) Students showcase their artistic skills in projects that looked at the relationships between cultural values and trends in visual art under the direction of teacher Julieanne Hogarth (r.) Ray Twan Stewart earned a Gold Key for a printmaking piece and was able to attend the National Scholastic Art Award ceremony in NYC.









MARTHA HALEMBA

MASTER TEACHER AWARD

Spanish Teacher/World Languages

Department Head, Hudson High School,
Hudson City Schools

Due to Mrs. Halemb's award, all third year world language students will be able to take a nationally normed integrated assessment that will evaluate each student's proficiency in reading, writing, listening, and speaking. Results from the test will form the basis for future instruction to help students become functional in their target language.

JAMES REDING

ARTHUR S. HOLDEN TEACHER AWARD FOR EXCELLENCE IN SCIENCE EDUCATION

Environmental Science Teacher, Science Department Chair, Granville High School, Granville Exempted Village Schools

James Redding is using funds from his award to further develop a land lab in the Granville community that serves as an experiential learning lab for students from K-12. Last fall, his AP environmental science students led first graders on a assignment to study animals who live within the lab's various ecosystems.









PETER PETTO GEORGE B. CHAPMAN, JR. TEACHER AWARD FOR EXCELLENCE IN MATHEMATICS EDUCATION Mathematics Teacher, Lakewood High School, Lakewood City Schools

Peter Petto has participated in professional development sessions to learn how to construct "Essential Questions"—multistep, interdisciplinary problems centered on topics important to students. Students ultimately work in teams to solve the problems, using subject area content.

CLAIRE BROWNE KATHLEEN MCANDREWS

TEAM TEACHING AWARD

Mathematics/Science Teachers Berry Intermediate School, Lebanon City Schools

The math and science teachers collaborated to build a garden on school property. Students constructed 12 raised beds outside their classroom windows, planting seeds that will grow into many authentic learning opportunities during the school year.



