



ABOVE & BEYOND

A newsletter for Penn Manor School District

WINTER/SPRING 2014

1:1 laptop program breaks new ground

Student assistance, free software unique

Penn Manor High School has provided more than 1,700 laptop computers to its students for use in the classroom in the largest 1:1 student laptop program of any school district in Lancaster County.

Every student in grades nine through 12 received a

custom-designed Acer computer, carrying case, charger and mouse. About 1,725 laptops were distributed at a total cost of \$586,105.

The program "gives everyone equal access to the Internet and a full and powerful computing device, instead of just a smartphone or tablet," said Charlie

Reisinger, Penn Manor technology director. "These laptops are the Swiss Army Knives of educational computing."

1:1 at a glance

Total laptops: **1,725**
Grades impacted: **9-12**
Cost per laptop: **\$313**
Software costs: **\$0**

saving the district over \$200 per device in annual licensing fees, or about \$345,000 this year. The program is believed to be the only open-source 1:1 student laptop program in Pennsylvania.

The computers cost the district \$313 apiece, a fraction of what was spent just a few years ago for

In contrast to other school 1:1 programs, Penn Manor's laptops are loaded with free, open-source Linux software,



Using a monitor, Nick Joniec, a student technology apprentice, instructs Penn Manor High School students and staff on how to use the new laptops.

laptops under a state-funded grant program called Classrooms for the Future. Penn Manor paid more than \$1,100 per computer in 2007-08 and 2008-09 under that now-defunct program.

The new 1:1 program is being implemented without hiring additional technical staff, in part, because of the level of student involvement in the effort.

Working closely with district staff members, a team of student technology apprentices designed a

unique software imaging system, inventory program and other software applications for the computers. They also set up the devices, helped train students on using them and will staff a "help desk" to diagnose technical problems. "The complexity of the work and technical skills of the student team are unlike anything else in our region," Reisinger said.

For more information, visit www.pennmanor.net/techblog.

District's elementary STEM curriculum earns state honors

Penn Manor's 21st Century Skills course, which teaches science, technology, engineering and math skills to elementary students, has earned the 2013 Program Excellence Award from the Technology and Engineering Education Association of Pennsylvania.

Penn Manor is only the second school district in the state since 1998 to earn the prestigious award for an

elementary program.

Developed entirely by the district staff, the 21st Century Skills curriculum emphasizes the "technology design loop," which teaches students to analyze problems, collaborate with their peers on possible solutions and develop, test and evaluate creative solutions.

Lessons utilize everyday

materials, such as Legos, empty drink containers, meat trays, straws, rubber bands and paper clips that students use to build and test simple machines such as airplanes, rainwater harvesters and birdhouses.

Teaching such applied engineering skills to elementary students will enable them to delve more deeply into STEM subjects in later grades, teachers say.

Superintendent's message

The winter of 2014 will go down in history as one of the most disruptive to Penn Manor schools in many years. We have experienced extreme weather conditions, from snow and ice to a polar vortex and freezing fog. Despite these circumstances, Penn Manor School District continues to adapt not only to varying weather patterns but, more importantly, to the ever-changing nature of public education in 2014.

A highlight of this issue of Above & Beyond is our focus on technology and how it has become an excellent tool in the instruction of our children.

You will read about the alumni Wall of Honor and learn that "Chip" Cargas, a member of the Class of 1965, is a national leader in the field of technology and software — an area in which Penn Manor continues to be an innovator. Our new 1:1 laptop program is utilizing free open-source software to cut costs and is tapping into the skills of our own students, who helped implement the project.

Having met some of our seniors in the Class of 2014, I am sure that many will continue in the tradition of graduates like Chip and lead professional lives that will result in future inductees to our Wall of Honor!

We also are proud of our partnership with Millersville University in many

different areas. One of our newest collaborative efforts is the "Flipped Classroom" program, in which university students utilize technology to help create mini-lessons that can be delivered electronically so students can learn basic information on topics at home. That enables classroom instructional time to be spent exploring concepts in greater depth and breadth.

We are hopefully at the end of the wintry weather season, but I want to emphasize the importance of checking multiple sources for information on school delays and cancellations. We always urge families to check local media outlets first since they are among the first we contact after a decision has been made. The school district website and Twitter feed, along with my Twitter feed, also are excellent sources of up-to-date information.

While Penn Manor has access to a rapid telephone calling system, we do not utilize that system in the early morning hours since all families do not want to be interrupted with an unexpected call.

Soon, we plan to offer another useful communication option. Over the next few months, we will be working with a software provider to develop a mobile app for Android and iPhone platforms



Dr. Michael Lechlitter

to provide our community with greater choice in how they receive information from the school district. Look for more details on this initiative in the summer of 2014.

In the meantime, please take advantage of both our district website and our Twitter feed to stay current on Penn Manor news.

Go Comets!

—**Michael G. Lechlitter**

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Inclement weather information

School closings or delays will be reported on local radio and television stations before 6 a.m., when-ever possible.

You also can check the website www.pennmanor.net, sign up for a Twitter closings/delays notification or call the inclement weather hotline at 872-9500, ext. 2333.

When inclement weather conditions develop during the day, resulting in an early clos-



ing, high school and middle school students will generally be dismissed first, followed by elementary pupils.

Unanticipated weather conditions or other factors may require changes to these procedures.

Should the school districts need to dismiss students early, parents/guardians will receive a phone call through the School Messenger system.

District Snapshot

Enrollment as of October, 2013—5,200
 Graduating Class of 2013 —441
 Current kindergarten class —326
 Special education —16.85%
 Free/reduced lunch participation —33.1%
 Teachers employed —367
 Support staff employed —212
 Administration staff employed —30
 Budget 2013-14 —\$67,348,369
 Per-pupil expenditure '13-14 —\$12,952
 Millage —17.25 (12th of 16 school districts)
 Bus miles driven per day —4,979

Fast Facts: Class of 2013

Members of the Class of 2013 received \$2,924,965 in scholarship money to continue their education.

- 103 seniors earned 154 awards at the Senior Awards Ceremony.
- 47% are attending a four-year school.
- 22% are attending a two-year school.
- 4% of the senior class joined the United States military.
- 61 students achieved a 4.0 GPA or higher.
- 64 students graduated in the honors program (by earning a 3.75 or better GPA while taking three years of foreign language and earning a “B” or better, and four advanced-placement credits and five honors classes, earning a “B” or better in each).
- Seniors took 199 advanced-placement tests in 20 different subjects.
- The class had four National Merit Commended Students – Mary Christman, Morgan Flood, Derek Harzinski and Austin Rineer.
- Two students, Lake Heckaman and Mark Hutchens, qualified as National Merit Finalists.



Pictured with Dr. Mike Lechlitter at 2013 commencement are valedictorian Lake Heckaman, far left, who is attending Notre Dame University, and salutatorian Jillian Heckman, who attends Emory University.

Elementary students ‘flip’ over new way to learn

Millersville University Partnership uses videos to create ‘active learners’

For some Penn Manor elementary students, the practice of doing homework after school has been turned upside-down. Under a pilot program called “Flipped Classroom,” the students are learning lessons on their own at home before coming to class to demonstrate their knowledge.

“Instead of being passive learners, students are actively engaged,” Pequea Elementary sixth-grade teacher Kevin Bower said of the new approach.

Now in its second year, the program is a collaboration with Millersville University students, who create video lessons for the younger pupils to watch on their own, at their own pace. Elementary teachers then use their students’ knowledge base to expand on the lessons and refine their instruction in the classroom.

Bower is one of two sixth-grade teachers at Pequea participating, along with six other teachers at Conestoga, Letort and Central Manor elementary schools. Currently, the lessons cover



Two Millersville University students, right, solicit feedback from Pequea Elementary School students on videos used in the “Flipped Classroom” project.

history and language arts in grades four through six, but the Flipped Classroom approach may be expanded to other grades.

One early assessment revealed that all students in grades four and six who participated in the program scored 100 percent on a vocabulary assessment. As more students participate, Penn

Manor teachers plan to get more feedback on how effective the new approach is.

But teachers say they already notice their students being more enthusiastic about learning and more engaged in the classroom.

More FLIPPED on Page 5

Five alumni named to Wall of Honor

Five Penn Manor graduates were recently inducted into the Distinguished Alumni Wall of Honor to recognize their accomplishments. Donald G. “Chip” Cargas, C. Willis Herr, Richard M. Stoner, Mark J. Swayne and the late Boyd N. Lyon were honored at the 2013 Alumni Banquet.

“Chip” Cargas, a 1965 PMHS graduate, earned his bachelor’s degree in Industrial Engineering from Cornell University and founded Cargas Systems, an employee-owned software and consulting company. The firm is nationally recognized for innovative workplace programs and for six straight years was named a Best Places to Work in Pennsylvania winner.

Chip is a past recipient of the Small Business Person of the Year award presented by the Lancaster Chamber of Commerce, and Cargas Systems was one of 40 finalists nationwide in the Top Small Company Workplaces for 2010 sponsored by Inc. Magazine and Winning Workplaces.

C. Willis Herr, a 1960 PMHS graduate, served as CEO of Herr’s Fruit Farm from 1964 to 2009. He was a member of Penn Manor school board from 1997 to 2009, serving as board president for 10 years, and is former president of the Marietta Jaycees.

Willis also served as president of Hopeway, an agency that supports the transition of inmates back into the mainstream, and headed the board of directors of Lancaster Association of Retarded Citizens. He was an active member and board member of Manor Brethren in Christ Church. He is married to Martha Finney (PM ’60), and the Herrs have seven children and eight grandchildren, all educated in Penn Manor schools.

Richard Stoner, a 2001 PMHS graduate, earned his Ph.D. in bioengineering from the University of Pittsburgh. He was a postdoctoral fellow in Neurosciences at the University of California San Diego Center for Autism Research.



Pictured with the Wall of Honor plaque are, from left, Richard Stoner; C. Willis Herr; “Chip” Cargas; Diane Lyon, mother of the late Boyd Lyon; and Mark Swayne.

Rich developed programs to allow visualization of large amounts of data utilizing everyday technology, such as a smartphone or tablet, to access scientific information. In 2012, he was awarded a \$25,000 prize at an international competition for creating a remote diagnostic app to help in the screening and diagnosis of autism in children.

Employed by the University of California San Diego medical school, Rich is developing WholeSlide Inc., which creates mobile apps across numerous scientific fields, and is designing and building low-cost hardware for use in Third World hospitals.

Mark Swayne, a 1984 PMHS graduate, earned a bachelor’s degree in mechanical engineering from Norwich Military University in 1988. He earned his wings in Naval Flight School and was named a naval flight officer, serving as an A6 Bomber navigator. Mark received the Navy Achievement medal and the Defense Superior Service Medal. In 1993, he led a bombing raid into Iraq.

He retired from the Navy as a commander in 2008 after serving 20 years.

Mark served as a Legislative Fellow to Sen. John Warner of Virginia and in 2005 was named Director for African Affairs for the National Security Council. He also worked with the Joint Chiefs of Staff as a civilian contractor focusing on Somalia and is now employed by the Office of the Secretary of Defense –Africa Policy.

Boyd Lyon, a 1988 PMHS graduate, earned a bachelor’s degree in biology from San Diego State University and pursued a master’s degree in biology and conducted research at the University of Central Florida Marine Turtle Research Institute. In his effort to research and protect the male sea turtle, he implemented a hand-capturing method for tagging and studying turtles without using nets.

During a research trip in August 2006, Boyd attempted to tag a turtle spotted in the ocean and did not surface from his dive. Several memorials have been established in his name, including the UCF Boyd Lyon Memorial Fellowship for a doctoral student in the conservation biology Ph.D. program and the Boyd Lyon Sea Turtle Fund to benefit marine biology students whose research is focused on sea turtles.

District schools fare well on new state assessments

High school earns Governor's Academic Excellence Award

Penn Manor schools fared well in a new measure of academic performance released by the state Department of Education in the fall.

Under the new School Performance Profile system, each school receives an overall academic score based on math, science, reading and literature test scores, student growth from the previous year, attendance and graduation rates and other measures.

The new assessments replace the previous system, which determined whether schools were making "adequate yearly progress," or AYP.

Penn Manor High School was named a recipient of the Governor's Award for Excellence in Academics for scoring more than 90 points on the School Performance Profile assessment. The school earned 91.8 points out of a possible 107, one of the highest scores of any high school in Lancaster County.

PMHS is one of only 428 schools of the more than 3,000 public schools in Pennsylvania to receive the

Governor's Award for Excellence.

Principal Phil Gale said the award "is recognition of the efforts the faculty has put forth over the past few years to increase expectations for students and assist them in reaching those standards."

"Teachers have worked diligently to increase the rigor of all classes, which has enabled students to develop the skills necessary to succeed in the classroom and in life after high school," he said.

Overall, Penn Manor district schools scored an average of 85.9 points, well above the level – 70 points – at which schools are considered to be making progress under the SPP system.

In addition, Manor Middle School was named a "Reward (High Progress)" Title I school for closing the achievement gap among students in reading and math and improving overall standardized test scores in both subjects.

By the numbers

High School – 91.8

Manor MS – 87.0

Marticville MS – 86.1

Central Manor ES – 81

Conestoga ES – 89.1

Eshleman ES – 84.2

Hambright ES – 78

Letort ES – 86.3

Martic ES – 88.2

Pequea ES – 86.9

School Performance Profile scores out of a possible 107

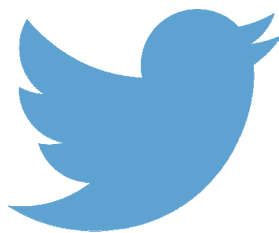
"Penn Manor schools performed very well, and I'm happy with the numbers," said Dr. Mike Leichter, district superintendent.

"Nothing replaces a strong teacher-student classroom relationship and parental support," he added.

Stay in touch with Twitter

If you're not following Penn Manor School District on Twitter, here are some of the things you may be missing out on:

- ◆ Updates on weather alerts and school closings and delays
- ◆ Notices of important district events, announcements and activities
- ◆ Links to stories in the media about Penn Manor schools, students and staff
- ◆ Links to important postings on the district website
- ◆ Links to stories of general interest about education



@pennmanor

Signing up for a Twitter account is free at [Twitter.com](https://twitter.com). Already signed up? Go to [@pennmanor](https://twitter.com/pennmanor) and click the "follow" button to stay in touch!

Flipped: New way to learn

The video lessons free up time for classroom reading and critical thinking activities and enable teachers to more effectively differentiate their classroom instruction.

"It builds confidence," Bower said of the program. "Kids who never raised their hands before are becoming active learners."

The Flipped Classrooms project also provides a real-world learning lab for the participating MU students. About 60

education majors have been involved in creating the video lessons and interacting with students in class.

Dr. Ollie Dreon, the education professor who heads the effort at MU, said the program provides invaluable real-world experience. "My students tell me this is the most authentic instruction they get," he said.

Participants will review assessment data and student feedback to fine-tune the instructional model for 2014-15.

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The Above & Beyond newsletter is published by Penn Manor School District. If you have questions or comments, please direct them to Brian Wallace, Community Relations Coordinator, at 872-9500 xt. 2241 or at brian.wallace@pennmanor.net.

Frerichs heads board of PSBA

Penn Manor school board member Dr. Richard Frerichs has been named president of the Pennsylvania School Boards Association board.



Dr. Rich Frerichs

This is the first time in recent history that a school board member from Lancaster County is serving in this role for the statewide organization.

He will serve as PSBA board president through 2014.

Rich recently completed his 16th year on the Penn Manor school board. He served three years as president and 10 years as vice-president.



The new Hambright Elementary takes shape along Charlestown Road.

Hambright ES school project moves forward

Work is progressing on the new Hambright Elementary School, which is scheduled to open in August next to Manor Middle School.

About two-thirds of the school is under roof as contractors begin to focus on interior finishes.

Challenging weather conditions have delayed some aspects of the project, but the school is still expected to open on time for the 2014-2015 year.

The \$19.5 million project will provide classroom space in several bright, airy wings for 750 students

kindergarten through grade six.

The building will be the first new elementary school in the district since Letort was built in 1961.

Efforts are under way to sell the existing Hambright school building, which was originally built in the 1930s.