Bradford EVSD



February
BOE Meeting

February Report:

- Staff Spotlight.....
- · One-to-one Discussion.....
- · Google/Gmail.....
- · Strategic Planning.....

Staff Spotlight

• Developed to recognize those who go "above and beyond" as a Bradford employee, volunteer, or community member.

• Eight Nominations: Brad Sherman, Doug Albright, Holly Johnson, Rob Grillot, and Melody Myers.

Congratulations and thank you!

- Mr. Besecker introduced a one-to-one initiative during his tenure.
- Our RLT (Railroad Leadership Team) believe it is time for Bradford Schools to become a one-to-one campus (grades 3-12).
- As mentioned, a one-to-one campus issues each enrolled student an electronic device in order to access the internet, perform digital course work, and often digital textbooks.

- The information provided in the following slides are excerpts from various articles while researching one-to-one initiatives (the articles are available if you would like to learn more about this topic).
- One-to-one student computing was first introduced in the late 1990's. The trend has since gathered steam: In 2013 and 2014 alone, schools purchased more than 23 million laptops, tablets, and Chromebooks for use by students and teachers.
- The goal is to enable teachers and software to deliver more personalized content to students, to boost students' technology skills, and to empower children to do more complex and creative work.
- · What does objective research say about one-to-one

- Let's start with what we *can* say from careful research about the benefits of these programs.
- <u>More engaged learners</u>: A four-year study of 5,000 middle school students in Texas found that those engaged in laptop immersion programs were less likely to have disciplinary problems (but slightly more likely to be absent from school) than students in schools without laptops (Shapley et al., 2009).
- <u>Better technology skills</u>: The Texas study also found that the technology skills of students in the laptop programs improved significantly so much so that after three years, low-income students in the laptop schools displayed the same levels of technology proficiency as wealthier students in the control schools (Shapley et al., 2009).

- <u>Cost efficiencies</u>: Proponents of one-to-one programs also assert that such programs create savings in other areas, including reduced costs for textbooks, paper, assessments, and paperwork, as well as a reduction in disciplinary actions (Greaves, Hayes, Wilson, Gielniak, & Peterson, 2010).
- However, like most interventions, the reality may be that one-to-one programs are only as effective or ineffective as the schools that adopt them.
- The top three factors were:
- 1. Ensuring uniform integration of technology in every class.
- 2. Providing time for teacher learning and collaboration (at least monthly).

- 3. Using technology daily for student online collaboration and cooperative learning.
- As mentioned, the reality may be that one-to-one programs are only as effective or ineffective as the schools that adopt them.
- Jim Collins (2001) arrived at a similar conclusion about technology in the business world. "Technology alone," he observed in *Good to Great*, "never holds the key to success." However, "when used right, technology is an essential driver in accelerating forward momentum" (p. 159).

- One-to-one technology can:
 - Increase student achievement
 - Complement project-based learning
 - Broaden learning beyond the classroom
 - Take advantage of the teachable moment
 - Prepare students for tomorrow's workplace
- " Additional Research
- <u>Increased quality and quantity in writing</u>: Some preliminary studies suggest that students not only write more, but write better, when using laptops rather than pen and paper.

- <u>Greater student collaboration</u>: The Center for Applied Research in Education Technology (CARET) provides a variety of research that suggests that students improve interpersonal abilities and teamwork skills through collaboration using laptops and handhelds.
- Greater teacher awareness of student progress: CARET also sites research that seems to demonstrate that teachers can better monitor, or can monitor in more varied ways, student understanding and application of skills and concepts through one-to-one technology.
- In addition, some empirical evidence exists that students' organizational skills improve in the one-to-one-computing classroom. Papers no longer are lost in the bottom of lockers or in cars or digested by dogs, teachers say.

- Article by Leo Doran and Benjamin Herold: Efforts by K-12 schools to give every student a laptop computer increased student achievement and gave a modest boost to their "21st century skills," according to a first-of-its-kind meta-analysis of 15 years' worth of research studies.
- "It's not like just providing a laptop to every student will automatically increase student achievement, but we find that it's the first step," said Binbin Zheng, an assistant professor of counseling, educational psychology, and special education at Michigan State University.

- A further review of 86 additional papers by the researchers, meanwhile, found some modest evidence of other positive benefits associated with giving laptops to students, including increased student technology use; more student-centered and project-based instruction; greater student engagement; and better relationships between students and teachers.
- The researchers also looked beyond test scores, reviewing 85 additional studies that did include an empirical examination of one-to-one laptop initiatives' impact in K-12 schools, but did not include an experimental design and/or quantitative results.

- Among the findings from that review:
- A one-to-one laptop environment often led to increased frequency and breadth of student technology use, typically for writing, internet research, note-taking, completing assignments, and reading.
- Students used laptops extensively throughout the writing process, expanding the genres and formats of their work to include writing for email, chats, blogs, wikis, and the like.
- Student-centered, individualized, and project-based learning appeared to increase in at least some instances of one-to-one laptop rollouts.
- Student-teacher communications (via email and Google docs, for example) and parental involvement in their children's school work increased in some instances.
- Students expressed "very positive" attitudes about using laptops in the classroom, as findings consistently showed higher student engagement, motivation, and persistence when laptops were deployed to all students.
- Students' technology and problem-solving skills improved and their ownership of their own learning increased, according to some evidence.

- There were mixed findings on whether one-to-one laptop programs helped overcome inequities among students and schools.
- "There was a wide consensus in the studies we reviewed that use of laptops promotes 21st-century learning skills," the authors wrote.
- And the real benefits of giving every student an access to a computer, contended Soloway of the University of Michigan, come when schools move from "instructive" to "constructive" learning, or from "teaching kids to remember something to teaching them how to figure something out."

- Here are two key ways in which one-to-one technology can drastically reduce costs in a school district.
- <u>Reduced Textbook Costs</u>: Textbooks are expensive. A high-quality math textbook for a secondary student can easily cost over \$100. One-to-one technology allows school districts to find more cost-effective ways of getting that same information to students. Some one-to-one districts are moving toward free Open Source e-textbooks to replace regular textbooks. (The entire state of California is doing just that, starting a California Open Source Textbook Project they estimate will save between 200-400 million dollars per school year once it is fully implemented.)

- Other one-to-one classrooms are finding that free online content can replace the need for a textbook entirely: access to the video instruction at Khan Academy could replace a math textbook, while online access to primary source documents could replace a history textbook.
- If a Chromebook (which can easily be purchased for less than \$300) can eliminate the need for even 1 or 2 textbooks to be purchased, it has almost paid for itself already.
- <u>Reduced Paper, Printing, and Copying Costs</u>: Another cost-saving benefit of one-to-one technology for schools is that it can dramatically reduce the amount of paper used in the classroom.

- Teachers' printing and copying costs can be dramatically reduced as well. Handouts that were once on paper can now be sent to students electronically through methods such as Google Docs or as an email attachment. Student work, similarly, can be turned in (and graded) electronically.
- A black-and-white copy typically costs a district about 4 cents, while printing something out costs the district about 10 cents per page. Imagine a high school student who takes six classes per day. It's certainly plausible that one-to-one technology could allow for that student to receive six fewer handouts, on average, each school day (one less piece of paper per class).

- Over the course of a 180-day school year, at that pace, the school district could have made 1,080 fewer copies for that student, for a savings of \$432. In that example, the cost of purchasing a computer for that student could be recouped in one year through reduced paper, printing, and copying costs alone.
- There are certainly costs involved in implementing a new one-to-one program in a school or district, but there are tremendous opportunities for one-to-one technology to help reduce other expenses. If done right, buying a device for each student in a district can actually save money for that district over the long run.
- Don't think of cost think of value.

- RLT (Railroad Leadership Team) thoughts:
 - Students should be using the same devices to complete their practice assessments as they would to complete their state assessments.
 - We need to increase the amount of technology in our schools if we want to increase the amount of technology being used by our students.
 - How is technology being used (one-to-one comparison) in other Miami and Darke County schools?
 - Can technology (increasing technology) save our district money? If so, how can technology save our district money?
 - Can technology enhance your teaching strategies? If so, how can technology enhance your teaching strategies?

- RLT (Railroad Leadership Team) thoughts:
 - What are some "other" advantages of technology?
- " Staff and Student Survey Results (Handout)
- " What we need as soon as possible:
 - " 100 Chromebooks for testing/both labs (ASAP)
 - "Our one-to-one discussion should continue and we should consider a purchase this summer in order to start the 2017-2018 school year as a one-to-one campus (250 Chromebooks might be enough).

"Questions?

Google/Gmail

- We will soon be without our current email system (currently provided by the Darke County ESC referred to as DarkeNet).
- Mr. Corcoran (Technology Coordinator at Preble & Darke County ESC) and Mr. Morrell (Bradford Technology Coordinator) suggest we transition to Google Gmail.
- According to Mr. Corcoran, a majority of school districts are switching to Gmail and this is his recommendation for us.
- Teachers are taking advantage of Google's various classroom applications as well.
- Google is free and equally as safe as competitive options (that are not free).

Google/Gmail

- Google Classroom is very popular and extremely useful (our teachers are using it now). Google Classroom is a blended learning platform for schools that aims to simplify creating, distributing, and grading assignments in a paperless way.
- Our staff has already received (and requested) several Google/Gmail professional development opportunities.
- Mr. Besecker initiated the move to Google/Gmail during his tenure; however, we will now here from Mr. Morrell and Mr. Corcoran regarding their expertise.

Strategic Planning

• We are working to finalize our goal areas (listed below).

Bradford Goal Areas:

- <u>Climate</u> This action team met on January 24th (waiting to hear back from other team members to schedule our second meeting).
- <u>Communication</u> This action team met on January 17th (waiting to hear back from other team members to schedule our second meeting).
- <u>Instruction</u> This action team is looking for elementary staff involvement (I need to send an email to our elementary staff).
- <u>Fiscal/Infrastructure</u> I have not heard (recently) from the leaders of this team regarding a first meeting (they were hoping to schedule a meeting in February).

In Closing..... Thank you for your support.

