Assessing K12 Classroom Needs to Prepare Your District for Technology-Enhanced Education

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Our Past

- Computers in Each Classroom
- Computer Carts
- Computer Labs
- Media Centers
- Tech Wing at High School

Our Past

(Equipment Replacement Guidelines)

- Survey of NWO Schools (email survey)
- Most schools reported that they replace computers every 6 years
- The longest reported useful life of computers in a district was 7 years.

Our Past

(student computers)

- 300 iBooks in Primaries- 10 years old
- 145 eMacs in District- 11 years old
- 1036 MacBooks in District- 5-8 years old
- 327 iMacs in District- 5 years old
- 150 iPads in District- 2 years old
- 100 ChromeBooks in District- 2 years old

The Process

- District Needs Assessment
- Budget Assessment
- Infrastructure Assessment
- Faculty Needs Assessment
- Site Visits
- Conference Attendance
- Parent Meetings
- Student Meetings
- Faculty Meetings
- The "Culture of Instructional Design and Delivery"

ACTIVE LEARNING

Engagement and active learning improve retention.

5%

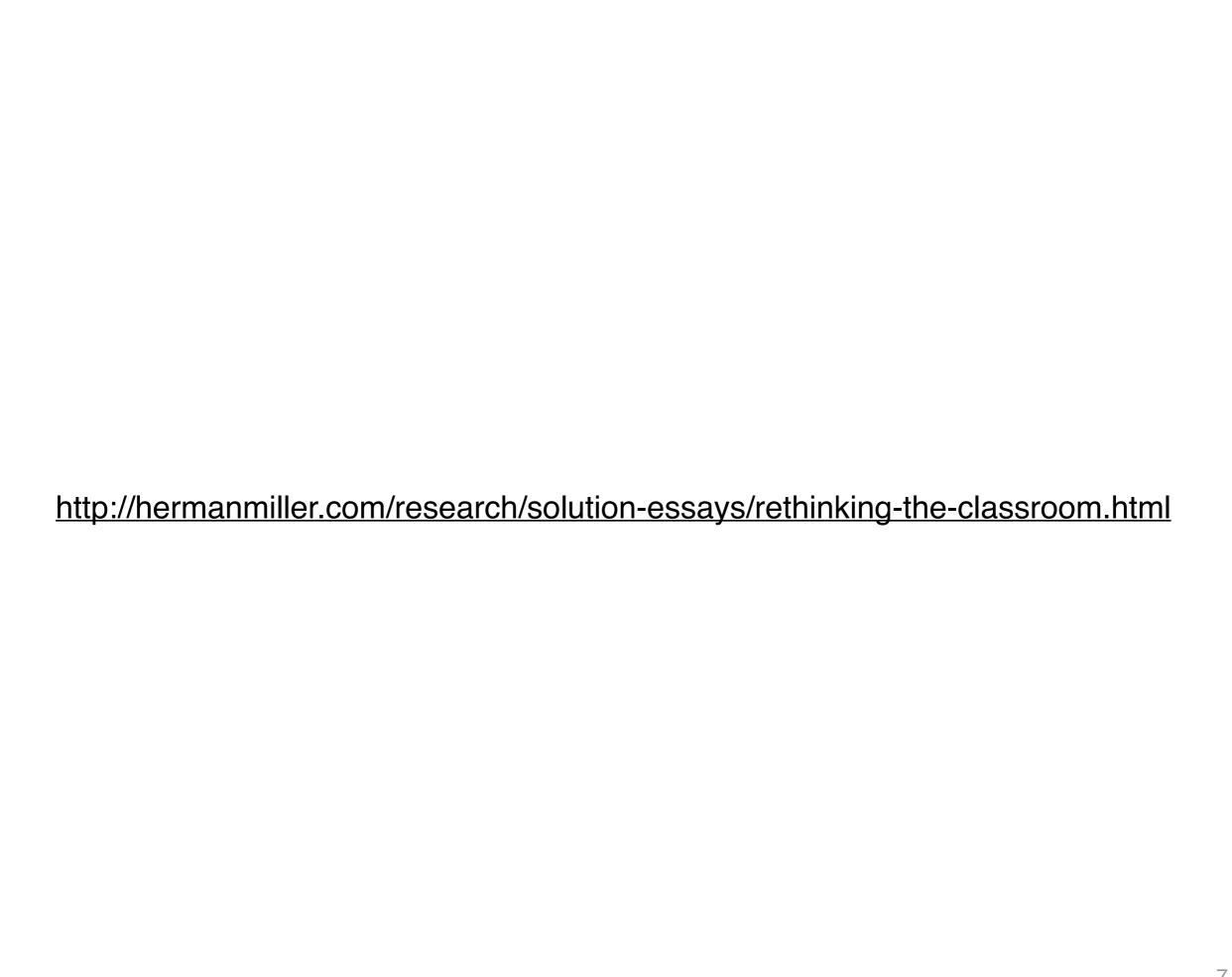
of info delivered through lecture was retained 50%

of info delivered through discussion groups was retained 70%

of info was retained through practice & doing 80%

of info was retained by students teaching each other





Transformation

Redefinition

Tech allows for the creation of new tasks, previously inconceivable

Modification

Tech allows for significant task redesign

Augmentation

Tech acts as a direct tool substitute, with functional improvement

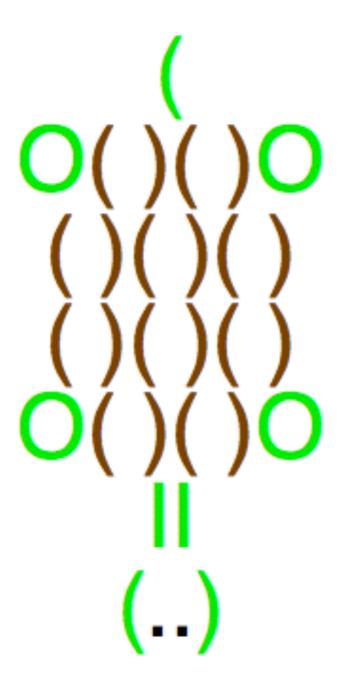
Substitution

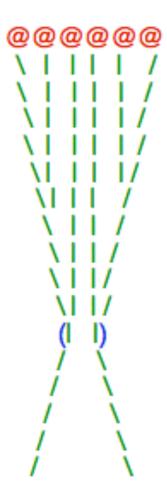
Tech acts as a direct tool substitute, with no functional change



ASCII Art

TWEET!!!!





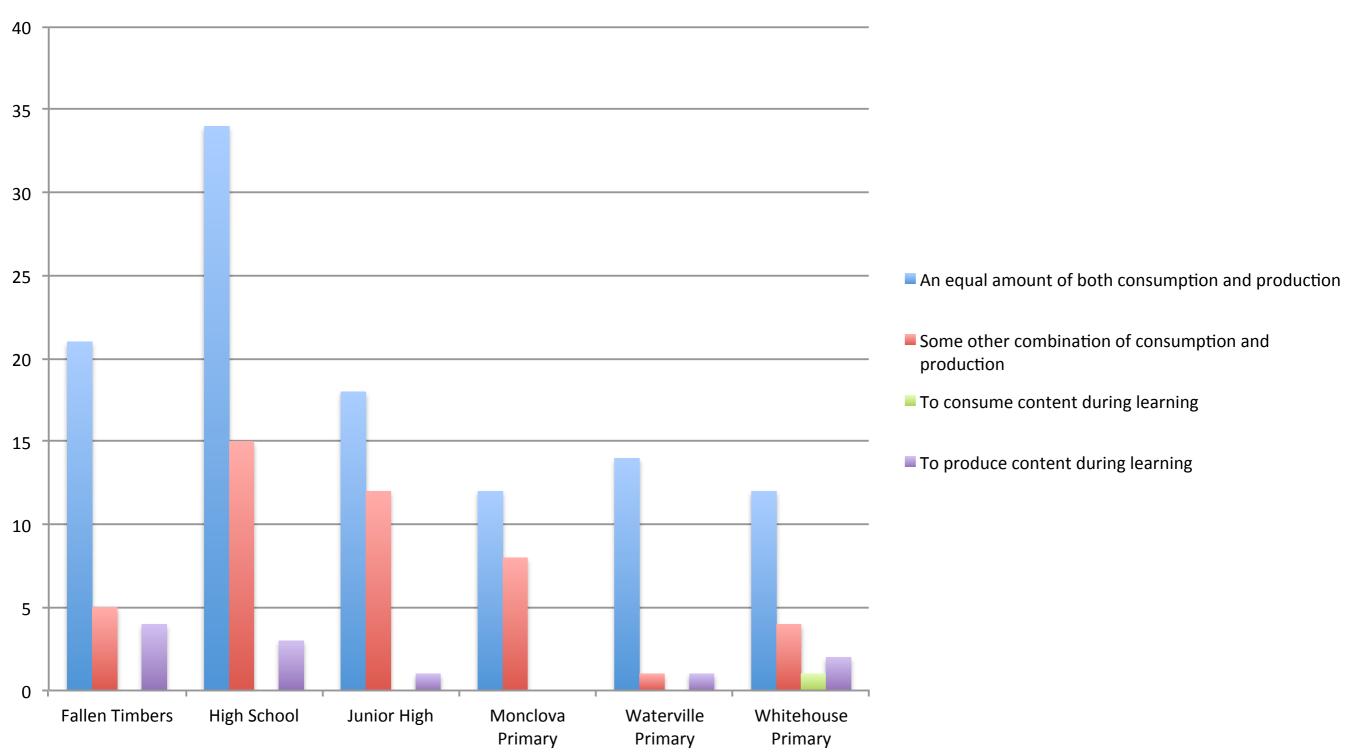
ROSES ARE RED!!!!

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CHICAGO
  BULLS
UUUU
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School Newspaper

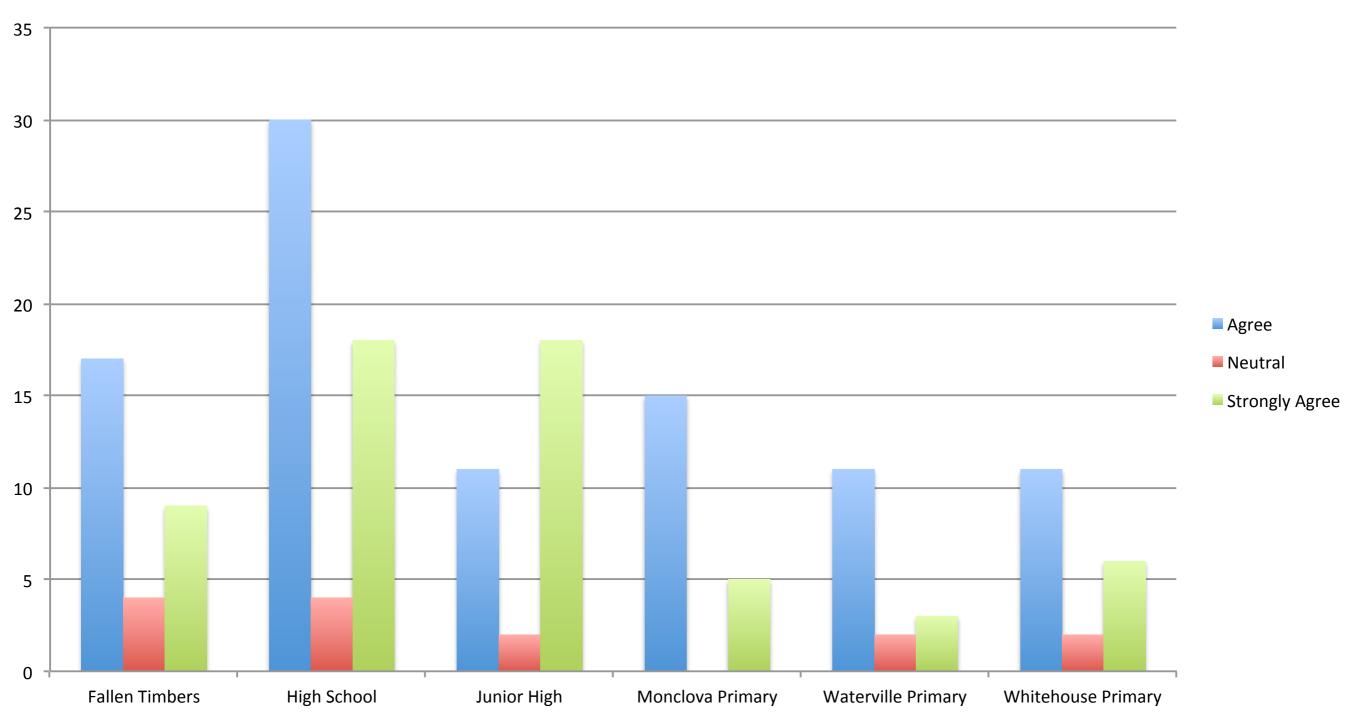
Faculty Needs Assessment

What do you think is most important for your students?

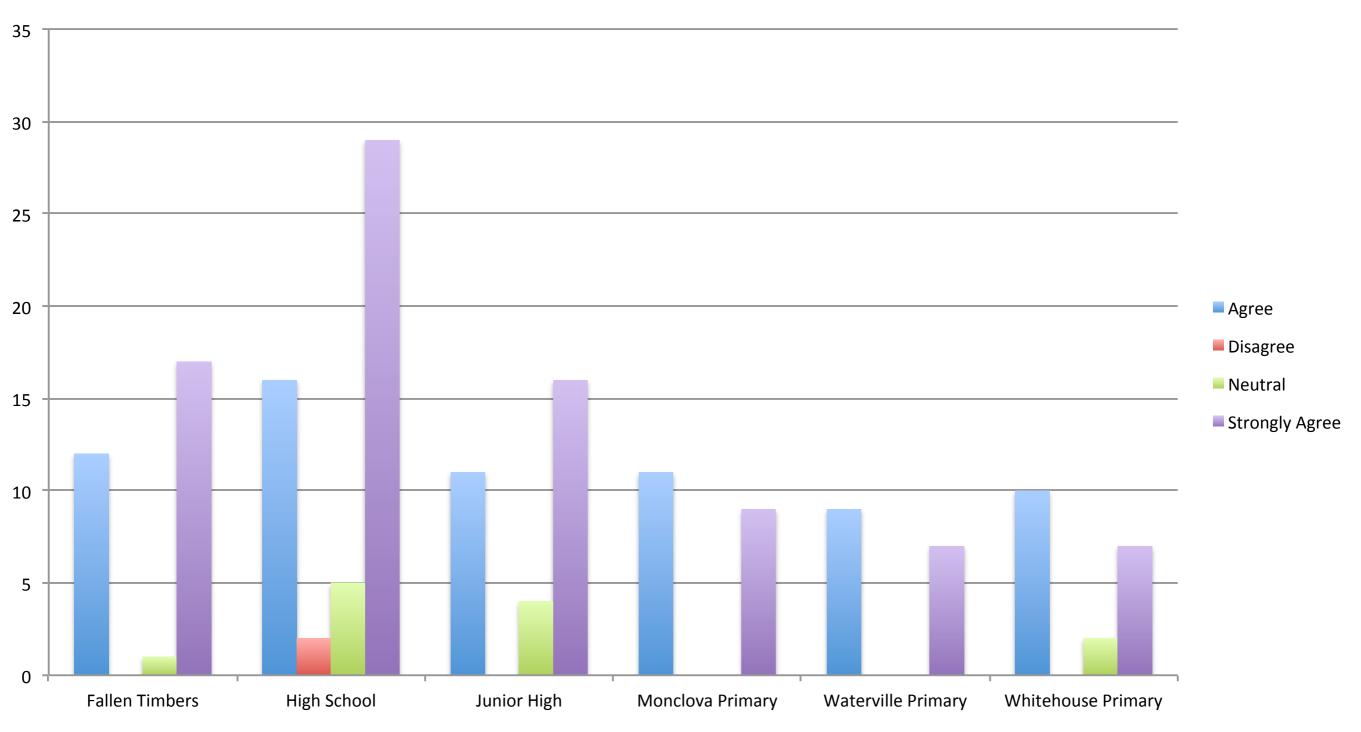


Vast majority of teachers believe the production of content in the classroom is as equally important as consumption.

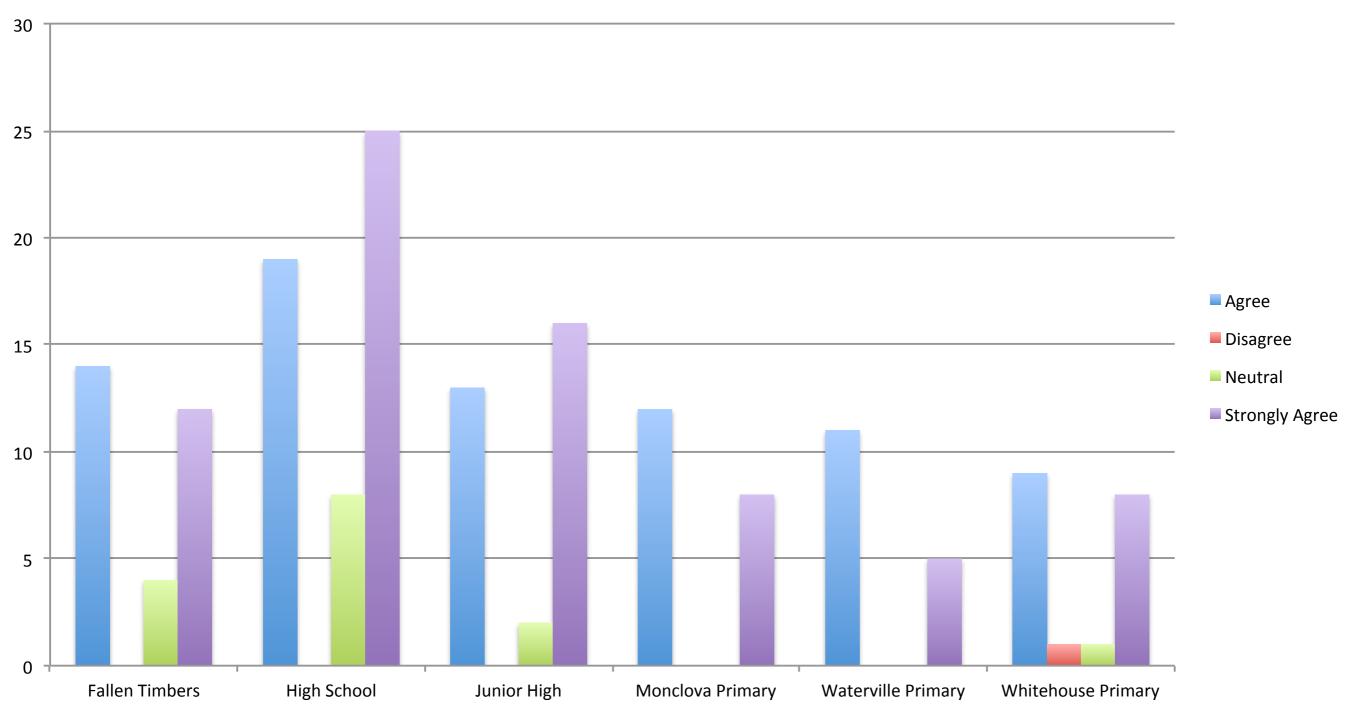
I believe that project-based learning and constructivist education is important for the learning taking place in my classroom.



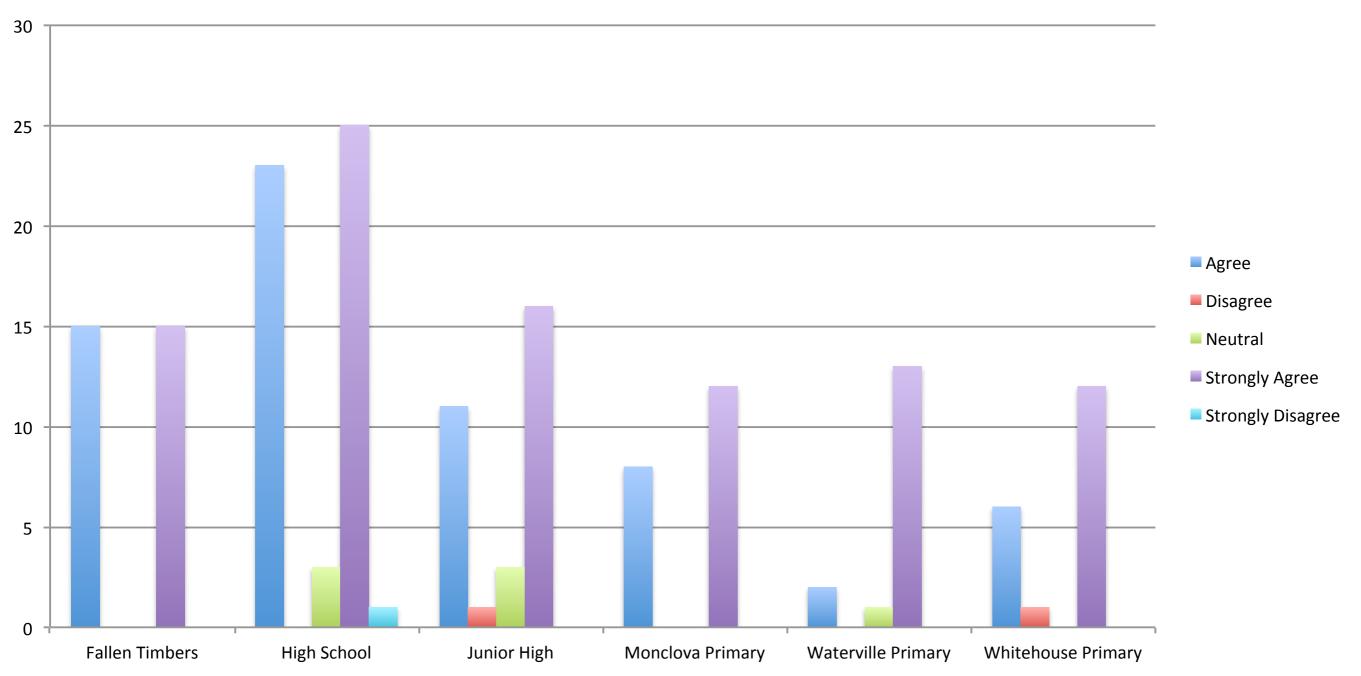
I believe technology integration is important for the delivery of my classroom curriculum.



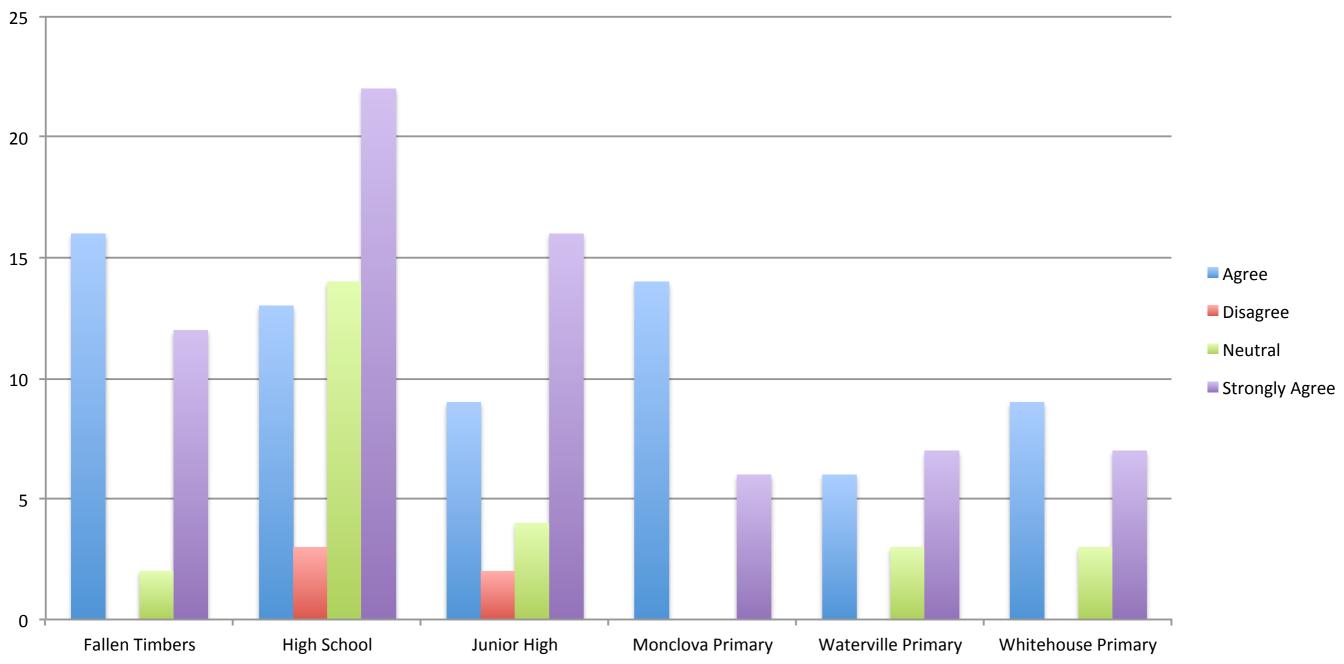
I believe that a combination of technology integration and project-based learning will result in improved student learning.



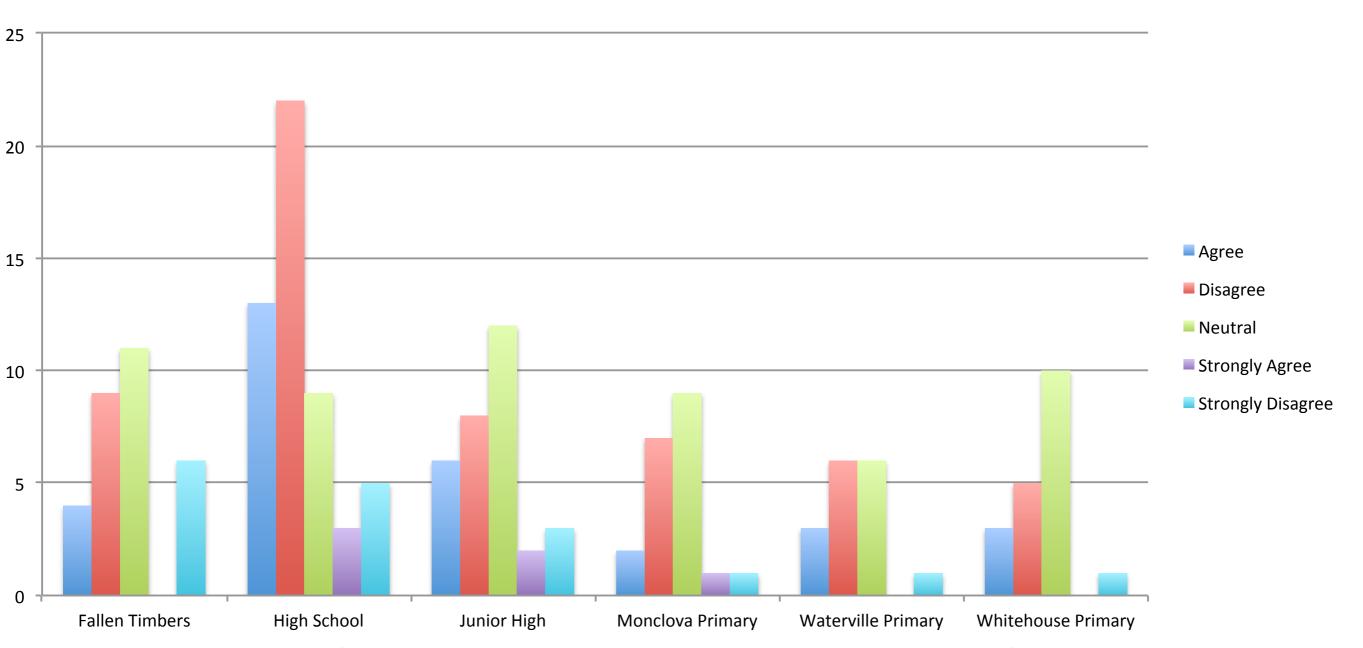
When choosing a technology device for classroom integration, it is important to consider the student's age and usability of the device at that grade level.



I believe students in the same classroom should all have the same personal computing technology device, thus ensuring that all students have the same possibilities for educational success.

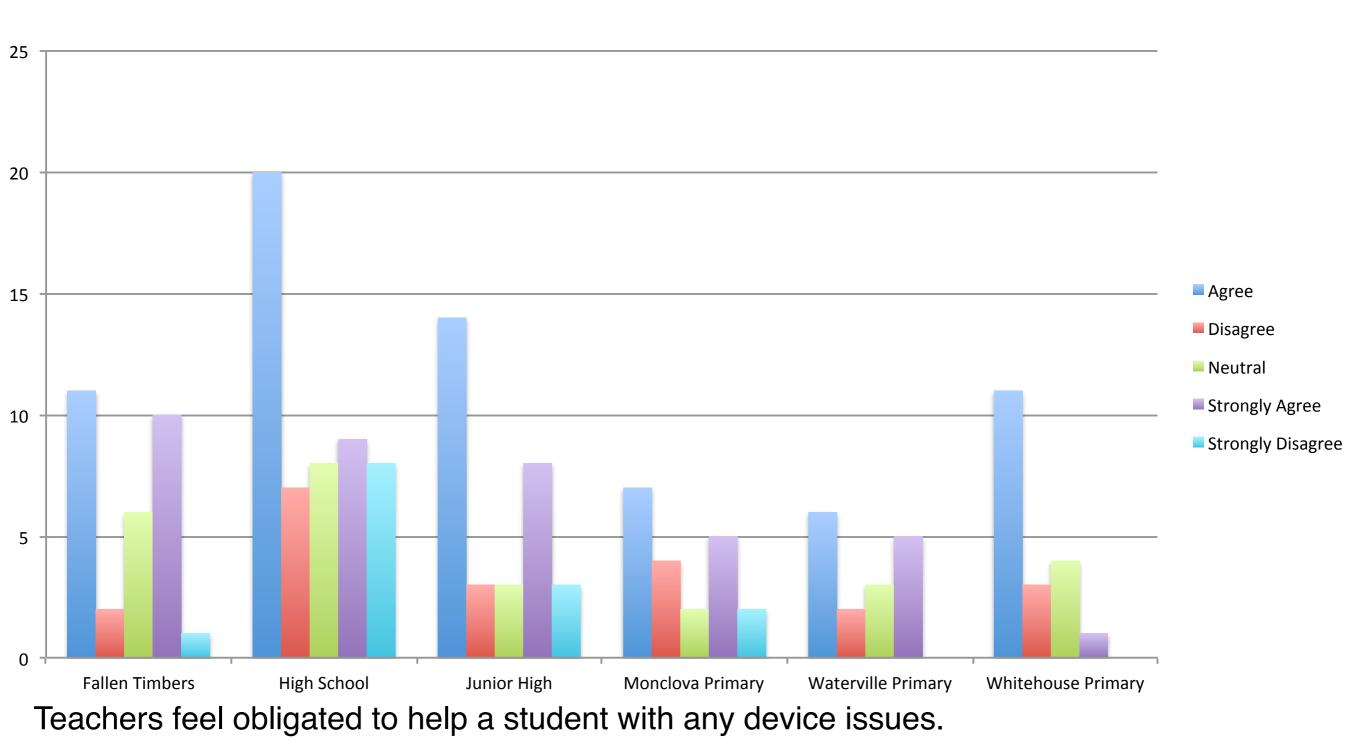


I believe students in the same classroom can achieve equal levels of educational success with "any" personal computing technology device that they bring to class from home.

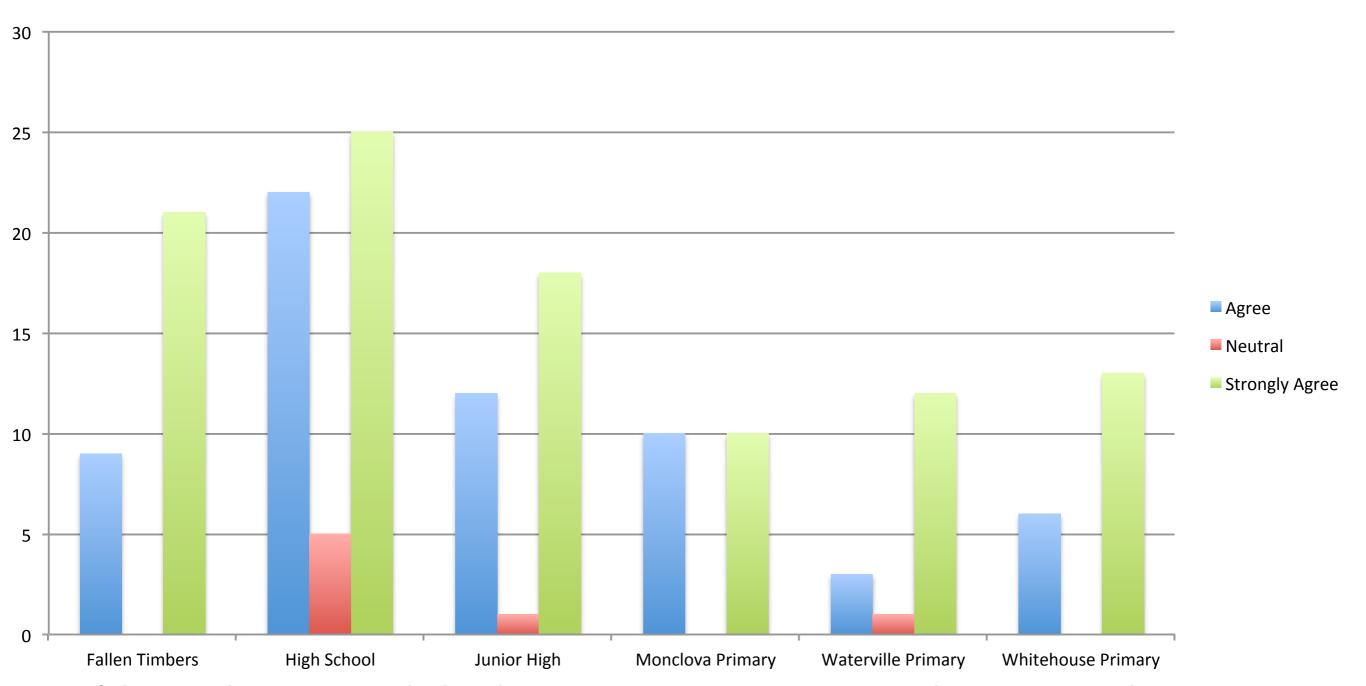


The data generally reflects disagreement, although a large number of teachers seem neutral.

As a teacher I would feel obligated to troubleshoot a student's malfunctioning technology device as part of a 1:1 or BYOD initiative?

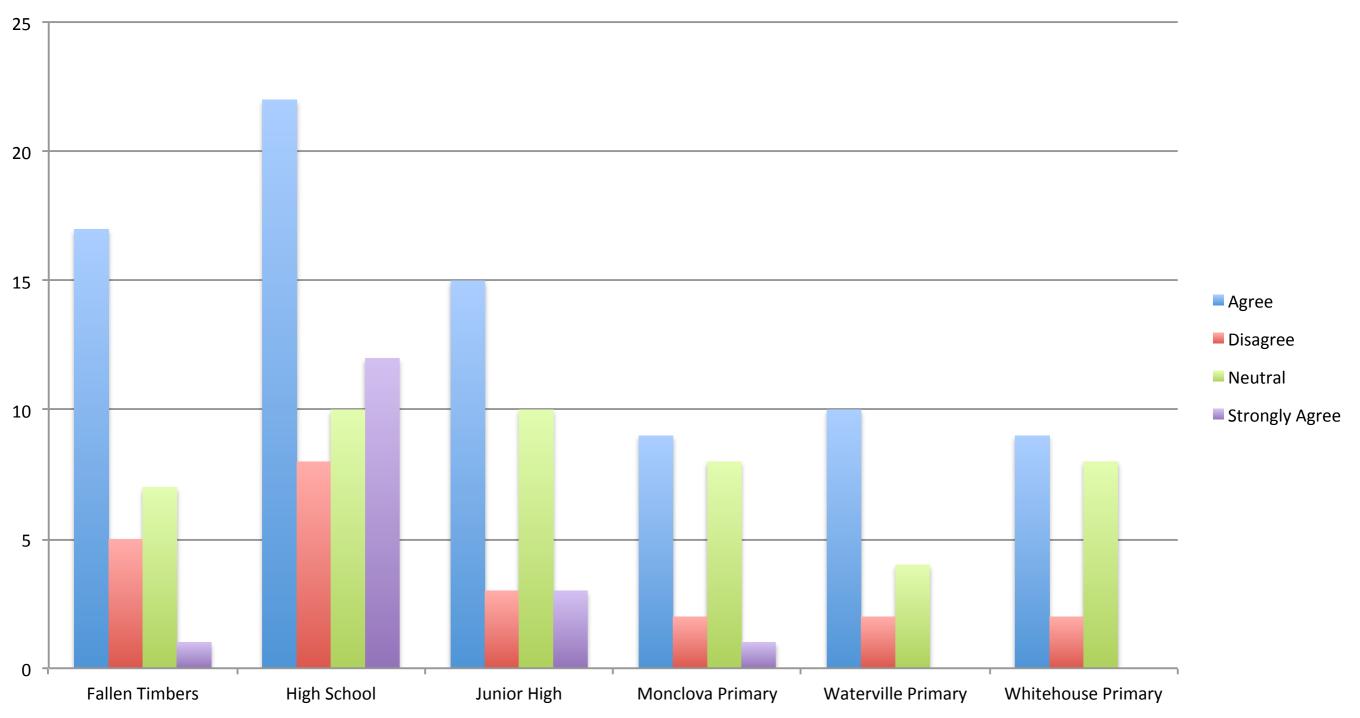


With respect to troubleshooting, I believe that it would be more effective, and instructional time would be optimized if every student had a common device?

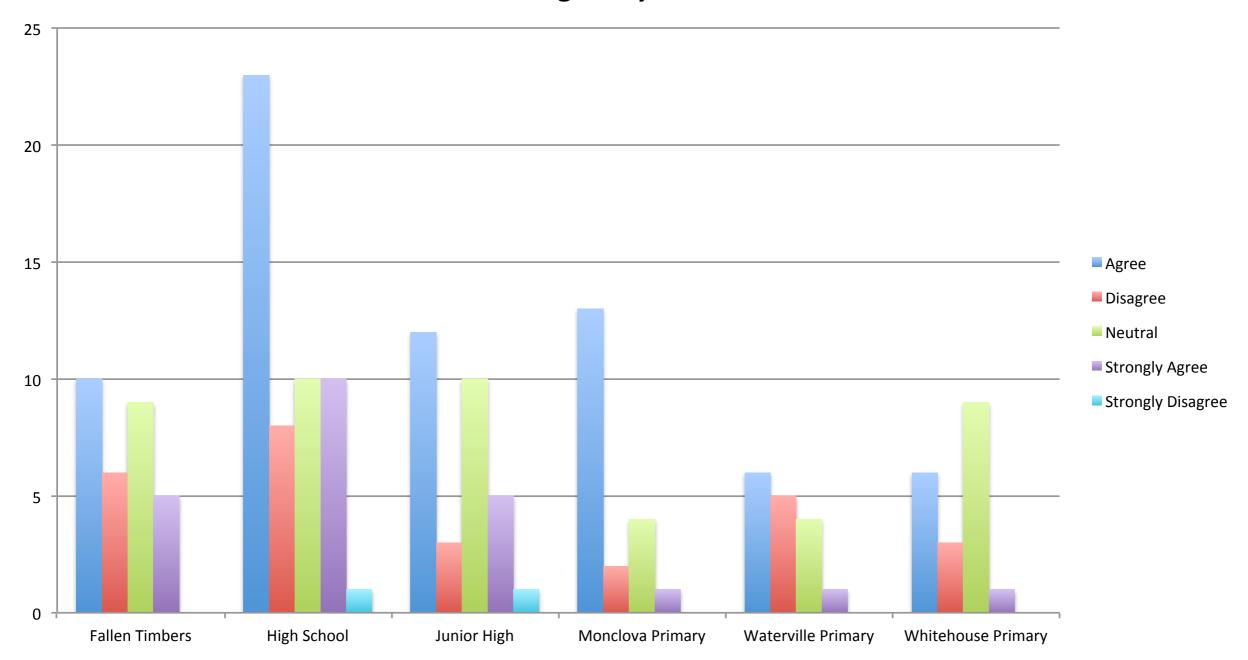


All of the teachers responded with agree or strongly agree. No dissention on this question.

I am currently using project-based learning and constructivist education in my classroom.

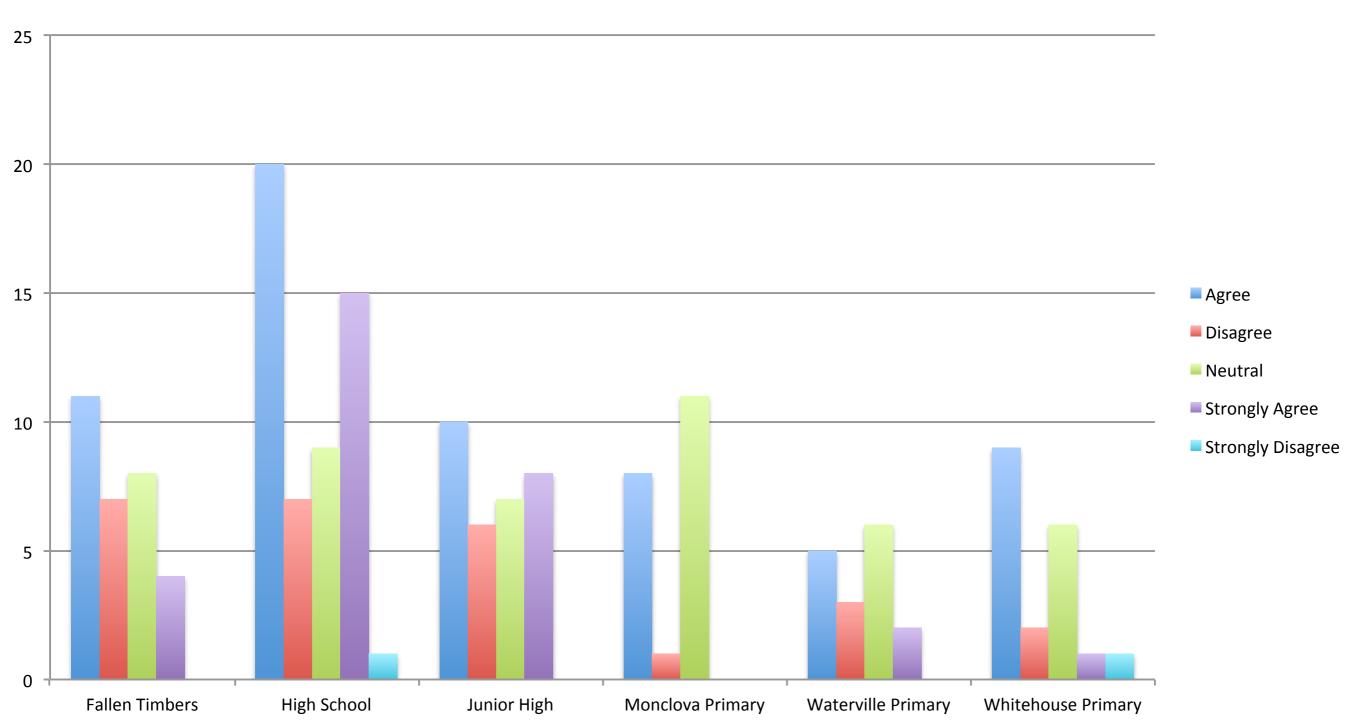


I am currently combining technology integration with project-based learning in my classroom.



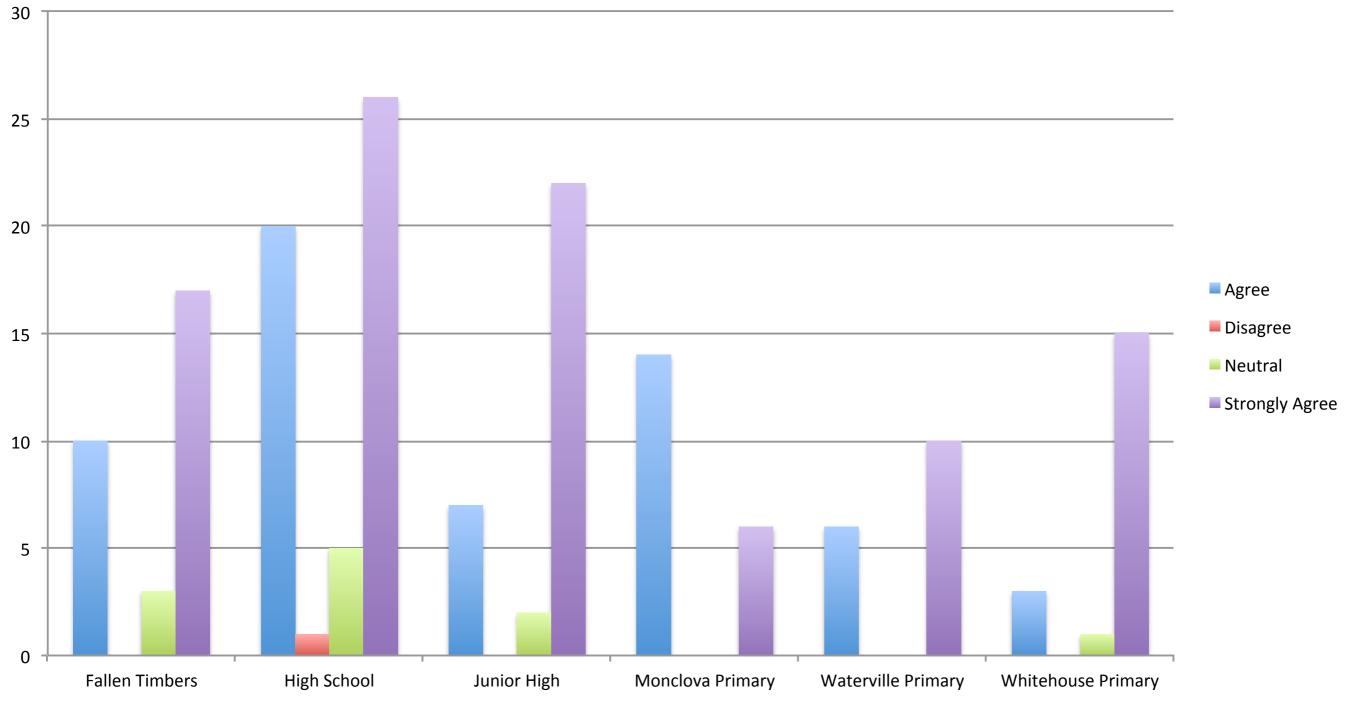
While some teachers are integrating technology into project based learning, many others are not. This may be attributed to a lack of devices or the culture of instructional design.

I am currently teaching information literacy skills in my classroom.

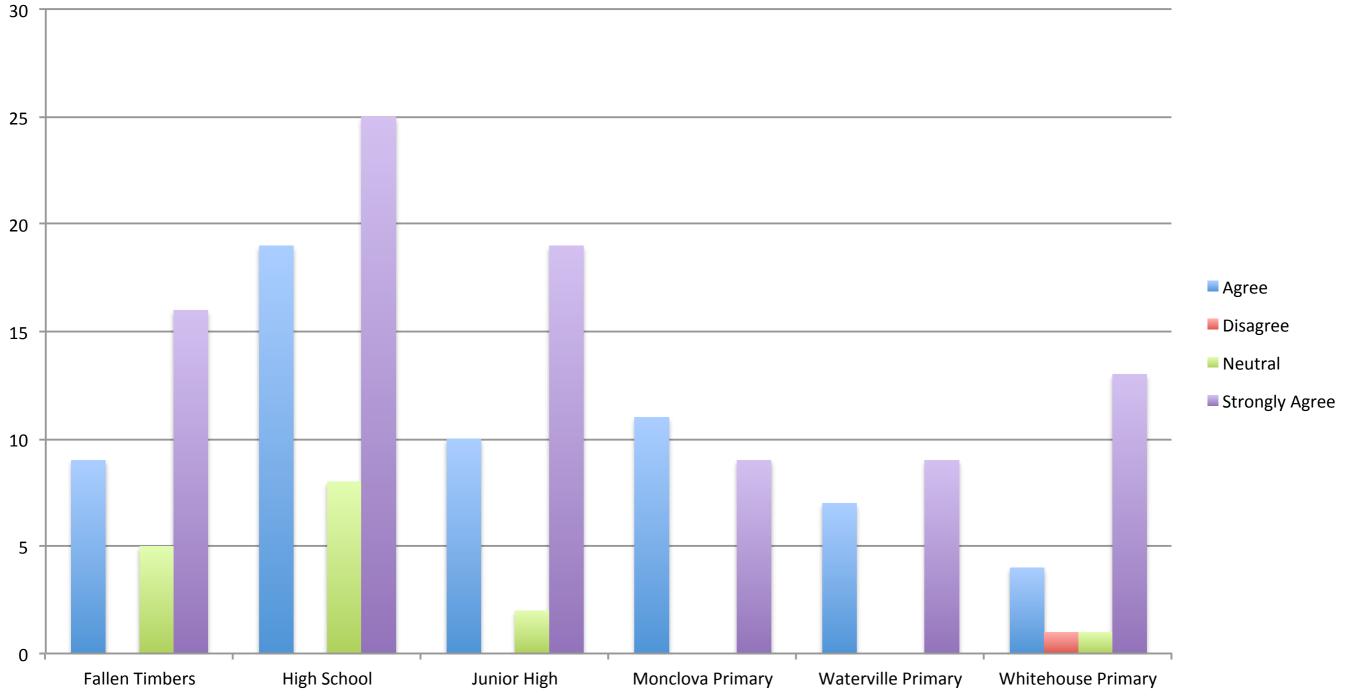


Information literacy skills are being taught at campus, but to a lesser degree at the primaries. The high number of neutrals should be noted.

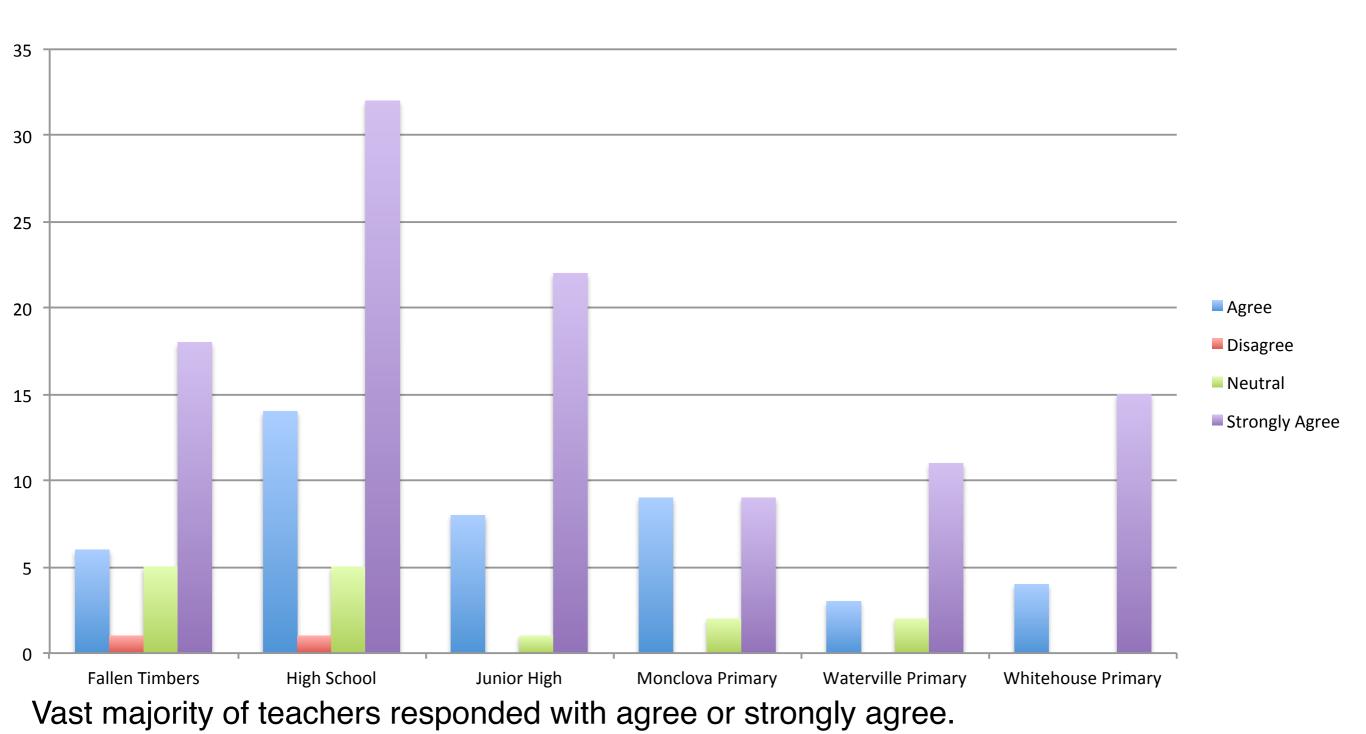
I believe that my students and I require additional access to technology devices to more effectively integrate technology into my classroom.



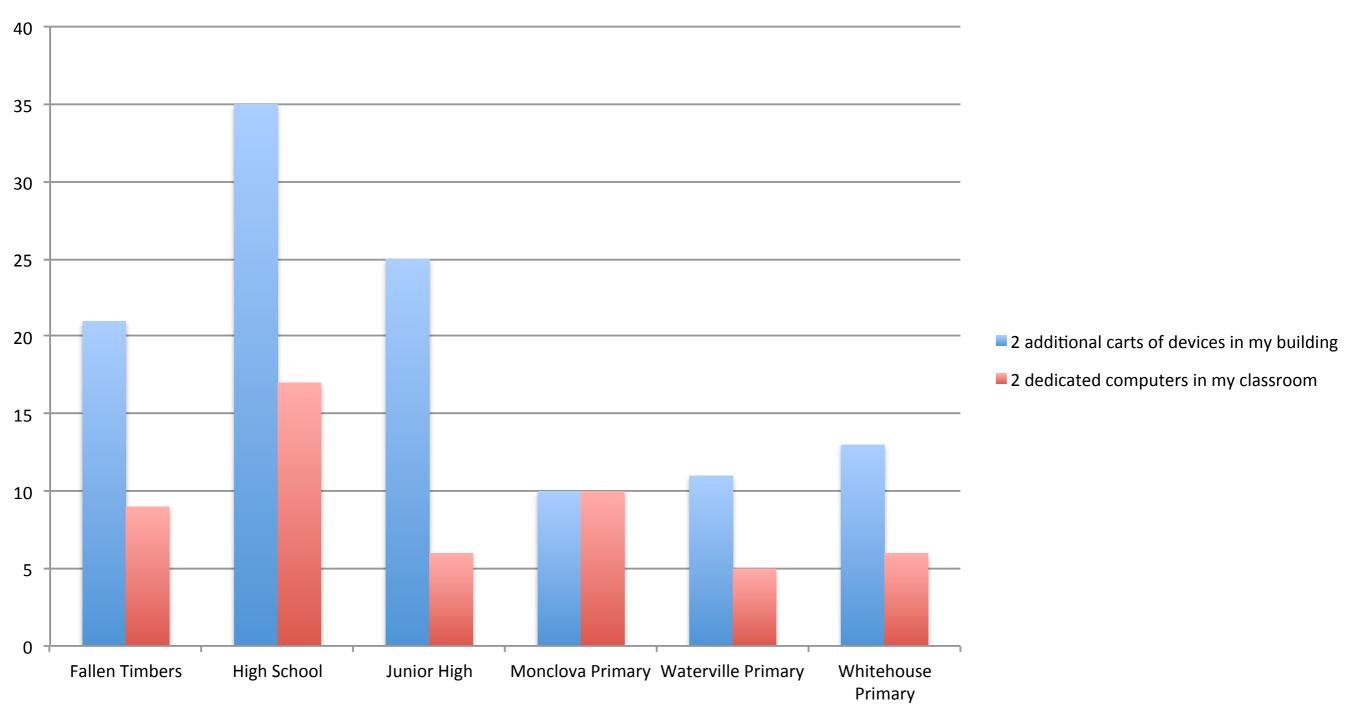
Increasing access to technology devices would enhance both my teaching and student learning.



If I had unlimited access to classroom technology devices, I would more frequently integrate technology into my curriculum.

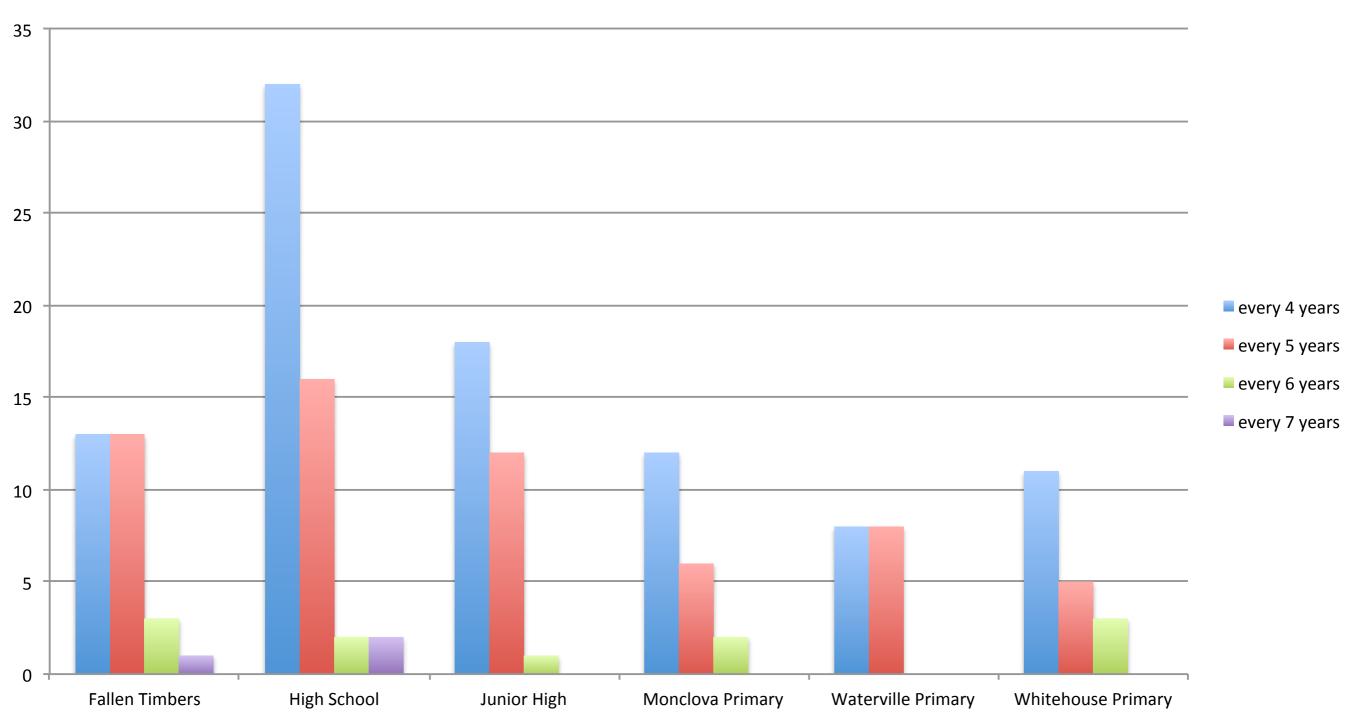


Given the choice of having dedicated computers in your classroom or additional carts of devices in your building, which would you prefer?



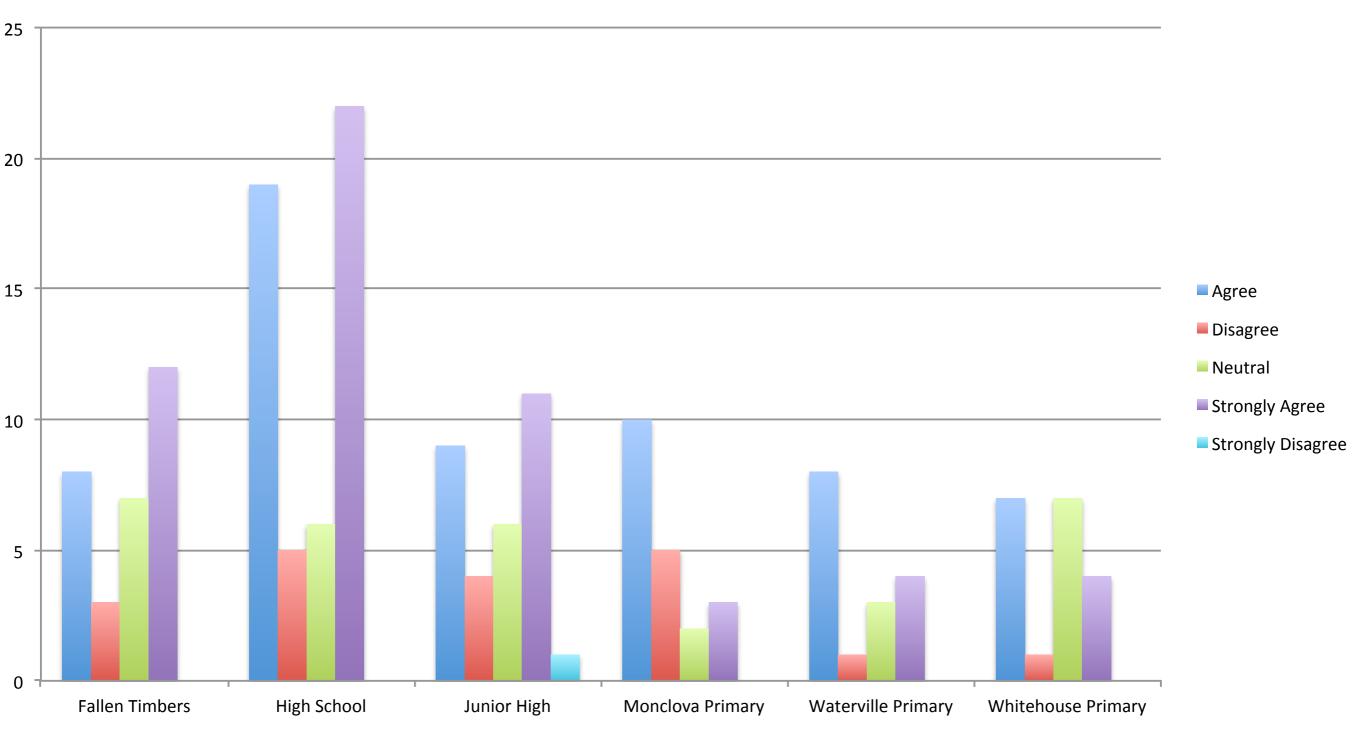
Most buildings prefer additional carts.

Based on my experiences with computers in my classroom, I believe that district computers should be replaced...

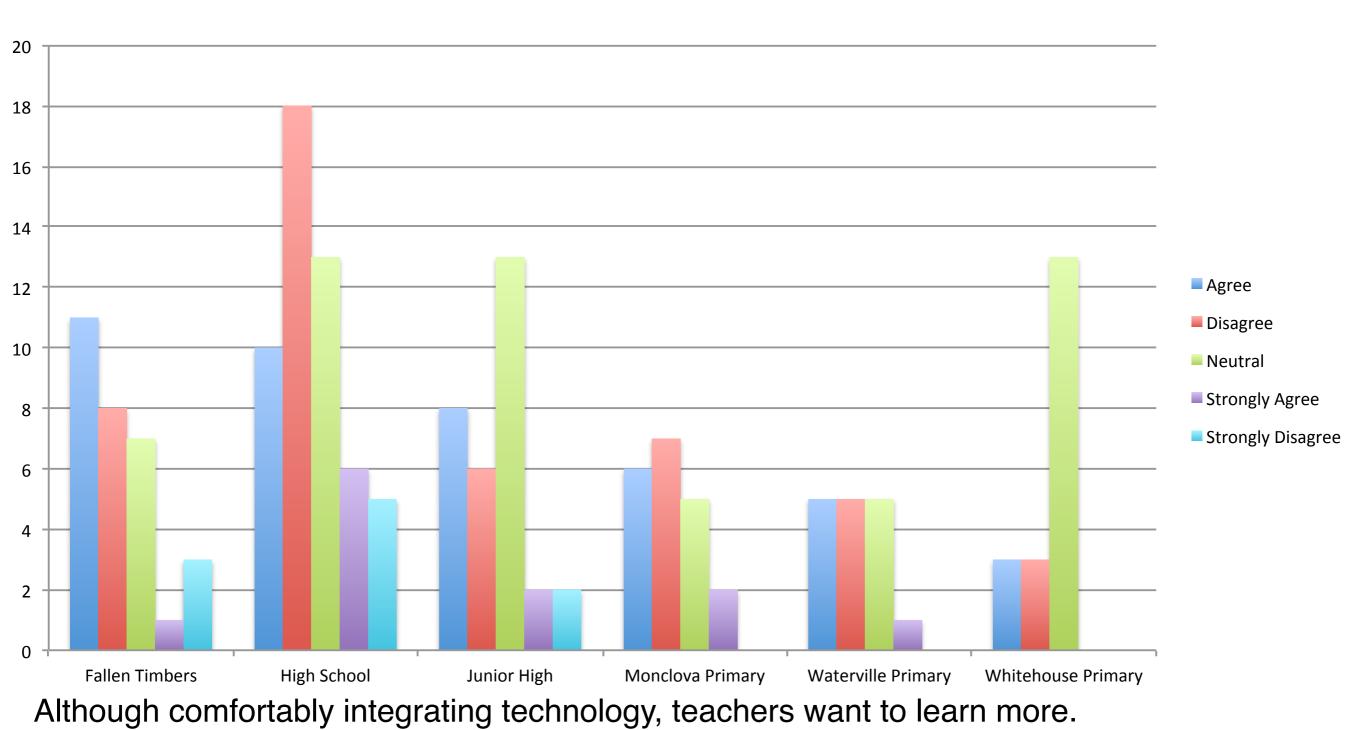


Most teachers feel computers should be replaced every 4-5 years.

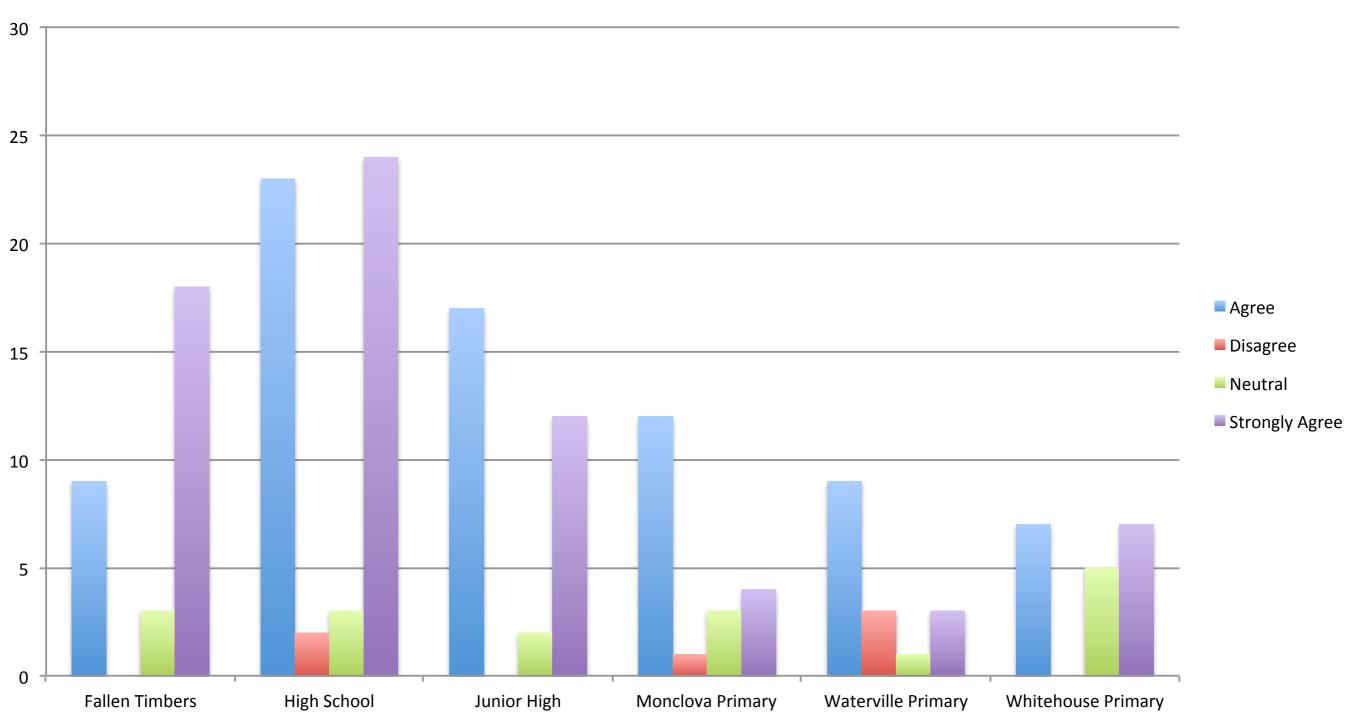
I am comfortable creating and implementing a lesson that integrates technology into my classroom curriculum.

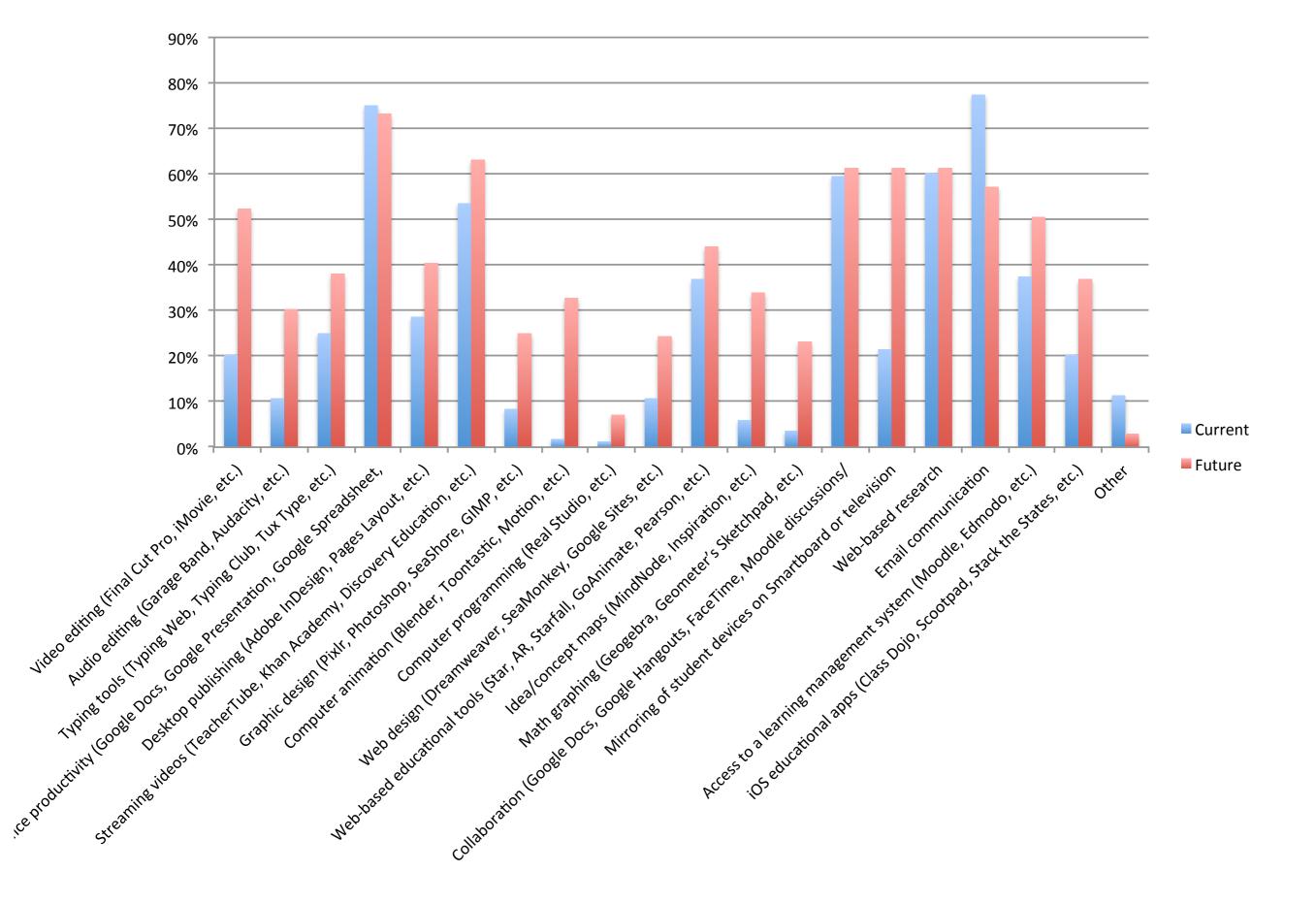


I currently receive enough professional development to effectively integrate technology into my classroom curriculum.



The success of 1:1 or BYOD intiatives in our district will require faculty professional development specifically focused on those initiatives.





JH Student Survey

 Varied from Pro-Apple to Pro-Chromebook to "Chromebooks are poorly made devices."

Additional Survey

- An additional survey was sent to primary grade teachers
- Survey
- Classroom technology integration in the Primary buildings overwhelmingly required only a web browser.

- Technology is More Prevalent in our Lives
- State of Ohio Standardized Tests Are Online and Require Devices
- Research Proves Effective Technology Integration Leads to More Engaged and Motivated Learners
- Research Proves Higher Student
 Achievement When Using "Effective"
 Technology Integration

Online Services

- Moodle LMS
- Google Apps for Education
- PowerSchool
- InfoSnap

Cost Reductions

- Reduced or Eliminated Many Costs Related to Vendor Supplied Services
- Telecommunications Savings
- Limited Vendor Agreements Requiring Annual Fees

Internet Safety and Social Media

- All Anthony Wayne Students Receive Education on Internet Safety and Acceptable Use of Social Media Each Fall
- Additional Expert Presentations on Internet Safety and Social Media for All AWLS Students

Learning Culture

- Lecture/Test
- Rote Memorization
- Project-based learning

Professional Development

- Integration Specialist
- PD course in Moodle
- Building-level PD
- CREATE! Conference w/BGSU
- Third party resources (NWOCA, WGTE)

I:I or BYOD

Google Doc of Ohio Schools

Generals Technology Grant Project

LINK TO GRANT

Student Computers

- I300 Chromebooks (Primary Classrooms/ Generals Grant)- New
- 30 iMacs in District- New
- 150 MacBook Air- New
- 510 iPad 2 in District- 0-2 years old
- 100 ChromeBooks in District- 3 years old
- 327 iMacs in District- 5 years old
- 1036 MacBooks in District- 6-8 years old

Faculty Computers

- 300 MacBook Pro- 3 years old
- 60 iPad 2

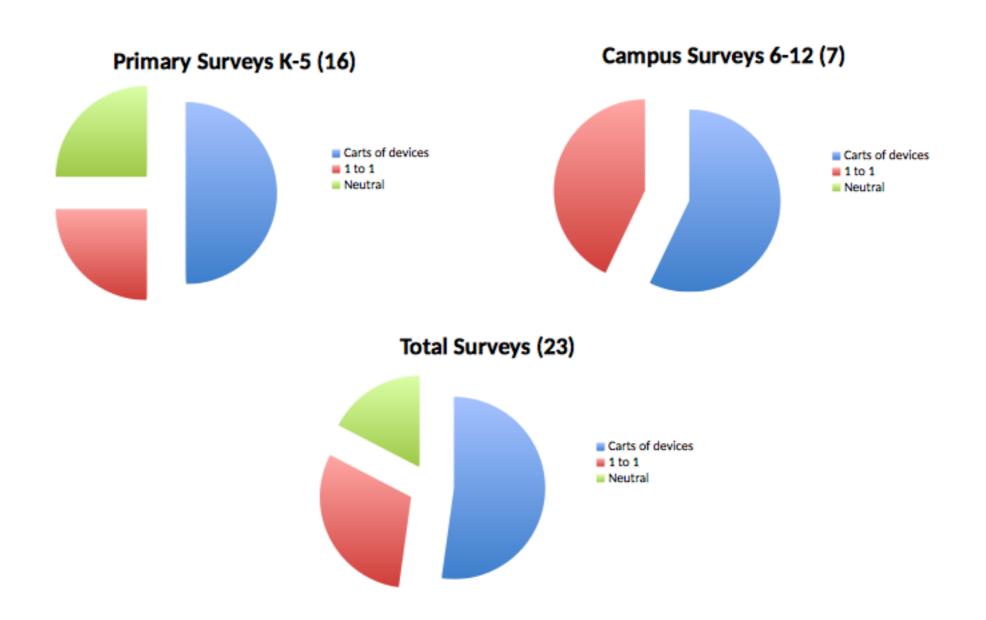
Interactive Whiteboards

- Most faculty have a SmartBoard
- 30 faculty have an Apple TV/LCD TV/iPad
- Some still need a solution

Tech Grant Survey

Survey

I:I or Carts of Devices



Our Future?

- Additional Grants or 1:1?
- We want your thoughts....

Thank You!