# Alleghany County Public Schools
# Technology Plan 2018-2023

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# Committee Members

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|---|---|
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| Mary Jane Mutispaugh | Director of Instruction |
| Lucas Conner | Alleghany High School |
| Nick Moga | Community |
| Jan Hobbs | Director of Assessment and Accountability |
| Elizabeth Thompson | Callaghan Elementary School |
| Cindy Fox | TTRT; Clifton Middle School |
| Daphne Livesay | Alleghany High School |
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| Teresa Reed | Alleghany High School |
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| Sarah Rowe | Principal, Clifton Middle School |
| Dwayne Ross | Principal, Alleghany High School |
| Sherman Callahan | Principal, Sharon Elementary School |
| April Easton | Principal, Mountain View Elementary School |
| Christina Linsin | Alleghany High School |
| Bob Donnan | Community |
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| Lisa Fisher-Janosz | TTRT; Sharon Elementary School |
| Angela Nicely | TTRT; Callaghan Elementary School |

## Executive Summary

The Alleghany County Public Schools Technology Plan 2018-2023 is designed to promote the seamless integration of technology with instruction as a means of fulfilling the school division's mission. It incorporates the four focus areas of the *Educational Technology Plan for Virginia 2018-2023* and relates those –where possible- to the five focus areas of the National Education Technology Plan 2017: *Reimagining the Role of Technology in Education.*

| *2018-2023 Educational Technology Plan for Virginia* | *National Education Technology Plan Update 2017* |
|---|---|
| **Enhance Personalized, Equitable Student Learning Experiences with Technology**<br>-Promote and support student personalized, deeper learning experiences to demonstrate workplace readiness by creatively solving complex problems, thinking critically, collaborating, communicating, and demonstrating responsible citizenship. (Learning) | **Learning: Engaging and Empowering Learning through Technology**<br>-All learners will have engaging and empowering learning experiences in both formal and informal settings that prepare them to be active, creative, knowledgeable, and ethical participants in our globally connected society. |
| **Support Innovative Professional Learning with Technology**<br>-Promote and support current and emerging technology-based resources that support educators in developing and employing innovative strategies and practices to support student-centric learning models to increase quality of education and equity for students. (Teaching) | **Teaching- Teaching with Technology**<br>-Educators will be supported by technology that connects them to people, data, content, resources, expertise, and learning experiences that can empower and inspire them to provide more effective teaching for all learners. |
| **Create Cultures of Change through Innovative Leadership Practices**<br>-Promote leadership that supports deeper learning experiences for students and innovative instructional practices by educators through the use of technology. (Leadership) | **Leadership- Creating a Culture and Conditions for Innovation and Change**<br>-Embed an understanding of technology-enabled education within the roles and responsibilities of education leaders at all levels and set state, regional, and local visions for technology in learning. |
| **Secure and Robust Infrastructure**<br>-Promote and support a secure and robust technology infrastructure to support access, adequacy, and equity. (Infrastructure) | **Infrastructure- Enabling Access and Effective Use**<br>-All students and educators will have access to a robust and comprehensive infrastructure when and where they need it for learning. |
| No alignment in state plan. | **Assessment- Measuring for Learning**<br>-At all levels, our education system will leverage the power of technology to measure what matters and use assessment data to improve learning. |

## Executive Summary (cont.)

Alleghany County Public Schools (ACPS) recognizes the importance of technology in 21st century life. With this in mind, the division began planning its One-to-One Initiative during the fall and winter of 2015-2016. Implementation of the division's plan began during the spring of 2016 and was completed by the fall of 2018.

The framework for our infusion of technology into the mainstream of teaching and learning is the result of years of development and has been the ongoing focus of the district's technology committee. The group- in place with a varied membership since 1994- currently seats representatives from the district's central office and each school's faculty, staff, and administrative staff. Members of the community also serve.

Specific to our Initiative's vision, the school division provides access and training for every student and instructional staff member. It is our goal that all become technically literate and technically proficient. We believe our One-to-One Initiative provides the means to help our students learn core skills in a manner that will allow them to prepare for life beyond the classroom. And by placing a mobile device in each student's hands, the division has closed a digital divide allowing technology to become an equalizer and an impetus for life-long learning.

Looking ahead, Alleghany County Public Schools now has a student per computer ratio of one-to-one for those students who are enrolled in grades one through twelve. Therefore, ongoing maintenance of this favorable ratio becomes a top priority. And in order to provide the maximum benefit to our students, we must ensure that our technology continues to be integrated into our instructional practices. For this reason, our professional development program is key and must continue.

In summary, our technology plan reflects the current status of technology in Alleghany County Public Schools. It also describes our vision, mission, and goal framework for the next five years. The document is aligned with the *2018-2023 Educational Technology Plan for Virginia*, the *National Education Technology Plan Update*, our division's *Vision 2020 Plan*, the goals and standards of New Tech Network, and the characteristics that are identified in the *Profile of a Virginia Graduate*.

In order to reflect our progress and to reflect an ongoing evaluation of emerging technologies, our plan will undergo a biannual review. From a financial perspective, the plan will receive an annual review. Ultimately, the execution of this plan is dependent upon available funding, relevant technologies, and staff availability.

## ACPS Vision

Alleghany County Public Schools (ACPS) values diversity in teaching and learning and works together to meet students where they are to support them in achieving their highest potential. ACPS provides a nurturing environment that incorporates 21st century skills to develop life-long learners who are well-rounded citizens. ACPS also celebrate our successes.

## ACPS Mission

Alleghany County Public Schools is committed to preparing all students to graduate. Students will:

- Be well rounded and productive citizens;
- Master 21st century skills;
- Exhibit a strong work ethic;
- Work collaboratively to accomplish team goals;
- Utilize effective communication skills;
- Demonstrate self-confidence in creative and constructive decision making; and
- Be dedicated to lifelong learning.

## Our One-to-One Initiative- The Vision 2020 Plan

As part of our vision for the future, Alleghany County Public Schools is transitioning to a student centered, technology enriched and project based learning environment. The use of technology and technology resources in instruction enhances individual learning, student engagement, and results in students developing a personal motivation to learn. In other words, students are empowered to be self-motivated learners. Staff and students begin to focus on real world learning opportunities that employ 21st Century Skills. Thus, when students are provided real world learning opportunities in an enriched technological learning environment, the distinction between the uses of a device and the professional practice almost disappears which prepares them for life after high school.

Integrating technology into the curriculum on a daily basis provides the following:

- the ability for teachers to reach different types of learners;
- empowers students' intrinsic motivation for learning;
- enhances student participation;
- teachers become facilitators;
- develops 21st Century Skills;
- multiple methods of assessment;
- encourages students to work together in groups;
- enhances creativity;
- makes connections to the real world;
- students are engaged in the learning process;
- makes learning meaningful;
- improves feedback; and
- prepares students for the future in the workforce.

Therefore, all grade 4 through 12 students who are in attendance in the Alleghany County Public School district have 24-7 access to a personal computing device. Students in grades 1 through 3 have one-to-one access during school hours. Students who do not have Internet service at home can take advantage of after-hours Internet service at three locations in our district.

## Working as a Team

The Alleghany County Public Schools Technology Committee meets monthly throughout the school year to discuss technology related issues as well as to discuss issues relevant to the division's one-to-one initiative. The committee is composed of the instructional/administrative staff, the Technology Testing Resource teaching staff (TTRTs), business/community leaders, and parents.

This plan's School Technology Needs Assessment was developed by the *William and Ida Friday Institute for Educational Innovation* at N.C. State University. The STNA was administered during the winter of 2017.

## Connections to the Division's Mission

In order to master 21st century skills, students must not only be technologically literate, they must be technologically adept. The twenty-first century work place regardless of entry time (after high school or higher education) demands workers who are prepared to thrive in a technologically dynamic environment. Making creative and constructive decisions as an adult will require effective and efficient use of available and emerging technologies, some of which cannot be currently imagined. Public schools are charged with the task of preparing students to adapt to constantly changing technologies in collaborative work environments.

## Historical Work of the Technology Committee

| **The Technology Plan -2010-2015** | | |
|---|---|---|
| **Activity** | **Person(s) Responsible** | **Timeline** |
| Develop a framework for technology planning. | Technology Committee | April 2010 |
| Develop needs assessment | ITRTs | September 2010 |
| Assemble Technology Plan Committee | Director of Instruction | September 2010 |
| Administer needs assessment survey | ITRTs | October 2010 |
| Develop Technology Plan | Technology Plan Committee | October-December 2010 |
| Receive Technology Plan for approval | School Board | December 13, 2010 |
| Submit School Board approved plan to the Virginia Department of Education for approval | Director of Instruction | December 2010 |

| **The Technology Plan- 2014 Revision** | | |
|---|---|---|
| **Activity** | **Person(s) Responsible** | **Timeline** |
| Develop a framework for technology planning. | Technology Committee | February 2014 |
| Develop needs assessment | ITRTs | February 2014 |
| Assemble Technology Plan Committee | Director of Instruction | February 2014 |

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| Administer needs assessment survey | ITRTs | March 2014 |
| Revise Technology Plan | Technology Plan Committee | April 2014 |
| Receive Technology Plan for approval | School Board | June 9, 2014 |
| Submit School Board approved plan to the Virginia Department of Education for approval | Director of Instruction | June 30, 2014 |

| **The Technology Plan- 2017-2018 Revision** | | |
|---|---|---|
| **Activity** | **Person(s) Responsible** | **Timeline** |
| Administer Needs Assessment | Supervisor of Technology | February 2017 |
| Revise and draft preliminary 2018 technology plan update (to generally reflect Technology Committee's work relative to 1:1 initiative). | Supervisor of Technology | March 2017 |
| Evaluation of 2017 Needs Assessment | Technology Committee Needs Assessment Subcommittee | March 2017 |
| Edit and Evaluate 2018 Technology Plan Update | Technology Committee<br>Editing Subcommittee<br>Budget Subcommittee<br>Addenda Subcommittee | March/April/May 2017 |
| Present 2018 Plan Update to School Board | Supervisor of Technology | May 2017 (Information)<br>June 2017 (Action) |
| Submit 2018 Plan Update to the Virginia Department of Education | Supervisor of Technology | June 2017 (pending board approval) |

| **The Technology Plan- 2018-2023 Revision** | | |
|---|---|---|
| **Activity** | **Person(s) Responsible** | **Timeline** |
| Develop Goals | TTRTS, School Administration, Technology Committee Membership, Directors of Technology and Instruction | Spring 2018/Fall 2018 |
| Revise and draft preliminary 2018 technology plan (to generally reflect Technology Committee's work. | Director of Technology | October/November 2018 |
| Evaluation of 2017 Needs Assessment and Student-Level Needs Assessment | Technology Committee | Ongoing |

| | | |
|---|---|---|
| Edit and Evaluate 2018-2023Technology Plan | Technology Committee | November/December 2018 |
| Present 2018 Plan Update to School Board | Director of Technology | November 2018 -Information<br>December 2018 -Action |
| Advise Virginia Department of Education that plan is complete. No submission will be required | Director of Technology<br>Director of Instruction<br>Superintendent of Schools | January 2019 (pending board approval) |

## Evaluation Process and Planned Update Cycle

The 2018-2023 Alleghany County Public Schools Technology Plan will be evaluated and revised bi-annually by the Technology Committee (goals and emerging technologies). The budget will be revised on an annual basis. A needs assessment is planned for the 2019-2020 school year. A report to the Alleghany County Public Schools' School Board will be presented bi-annually.

## 2017 Needs Assessment- Executive Summary

A technology needs assessment was conducted beginning on February 28, 2017 and the assessment period concluded on March 8, 2017. The online School Technology Needs Assessment (STNA) was developed and hosted by the William and Ida Friday Institute for Educational Innovation at UNC-Greensboro. The 2017 survey is the fifth technology needs assessment that has been conducted in the past ten years and one hundred and fifty-two individuals participated. Although the results were also shared in 2018 technology plan update, the survey's results are included in this revision. In order stay on a biennial schedule, another needs assessment is planned for the fall of 2019. A graphical summary is provided in addendum eight.

The Friday Institute's survey was comprised of eighty-four questions focusing on the following criteria and sub-criteria:

I. Supportive Environment for Technology Use
   - A. Vision and Shared Leadership
   - B. Organizational Conditions
   - C. Flexible Scheduling
   - D. Infrastructure
   - E. Staff Support
   - F. Media and Software

II. Professional Development
   - A. Instruction
   - B. Planning
   - C. Quality

III. Teaching and Learning
   - A. Instruction
   - B. Planning
   - C. Information and Communication Technologies

IV. Impact of Technology
   A. Teaching Practices
   B. Student Outcomes

## Needs Assessment- Conclusions (Taken from the 2017 Plan Update)

**Progress indicated.*

**Supportive Environment for Technology Use**

With regard to the division's supportive technical environment, participating teachers generally believe that the division's technical and instructional vision has been developed through an effective collaboration among all stakeholders. While three percent strongly disagreed, sixty percent either agreed or strongly agreed. Furthermore, sixty-two percent feel the division's vision for technology use has been effectively communicated to the community. Eleven percent of survey completers disagreed. Seventy-five percent of respondents believe the administrative team effectively models technology use.

Although the majority of participating staff believe that the division's technical environment is supportive, many offer that we are lacking in non-material incentives such as public recognition or special appreciation. Over one fourth of the division's instructional staff feel that innovators go unrecognized. ****ACPS Innovators Video Series***

From an organizational perspective and in addition to being generally supportive of the division's technology planning, majorities also believe long-range planning is in place. On the other hand, those same majorities –with respect to long-range planning - are not aware of the division's planning cycle. Also majorities believe that technology is not funded appropriately. More people agree rather than disagree that the division does pursue supplemental technical funding.

Teachers describe a positive opinion of the division's efforts to use technology as a communication tool for family and community outreach. However, they are not aware that ACPS evaluates multiple sources of data when planning the impact of technical initiatives on student outcomes. ****Alignment with National Plan Update, Profile of a Virginia Graduate, etc.***

Teachers overwhelmingly agree that every classroom has at least one computer installed. Sixty percent of teachers cite appropriate access to a sufficient number of computers in order for them to plan for -at least- 2:1 activities. On the other hand, many teachers suggest that there is a need for greater access to projectors and printers. Fifty-four percent cite sufficient access to both projectors and printers. Nine percent offered no opinion. ****One-to-one rollout completion; screen installation Hodnett Hall; twenty-three projectors purchased for 18-19; division-wide secure print/copier installation; projector replacement CMS/MVES Forum Hall.***

Split almost evenly with the opposing view, a slight minority of teachers still generally believe that the reliability and speed of external connections is insufficient. To address this trend, the division's long-range Vision 2020 implementation is underway and will guarantee, by 2020, a mobile device for every student while also providing for a total infrastructure refresh at every instructional building. In addition, every instructional classroom will have an access point installed. ****Complete***

Specific to speed, the division's network and Internet contracts will be re-evaluated in the spring of 2018. Currently, Alleghany High School is provided with a one gigabyte connection (averaging fifty percent unused on the day-to-day). Each elementary school is provided with a 100 megabyte connection (rarely reaching peak), and the division's two gigabyte Internet head-end at Clifton Middle School – and shared by Mountain View Elementary School- has never

peaked. It is possible that the teachers may be correlating network speed with computer speed. ***Shentel contract awarded in Spring 2018.***

Although computers that are installed in each school's computer labs are replaced on a three to five year rotation, classroom computers have been supplied – in some cases- in hand-me-down fashion. Essentially, lab-use pcs are recycled for classroom use. Therefore, the oldest computers have traditionally been located in classrooms. Also, in 2016-2017, the division's antivirus software's foot print was identified as too great and therefore, the software is being replaced. The replacement will be complete by June 30, 2017. ***Complete***

With regard to the near even split between those identifying sufficient speed and reliability with those who do not, it is hoped that the one-to-one initiative, division-wide network refreshes, and the anti-virus software updates will improve the general staff's perception and move the needle toward a more positive opinion.

Although all staff enjoy the same leveling of web filtering –only malware, uncategorized sites, and pornographic sites are blocked, there is still work to be done specific to the level of filtering that students enjoy. Although the filtering system's hardware and software quality is outstanding, the majority of teachers believe that student-level filtering is too restrictive. Conversations and planning are underway to address the perceived but real deficiency. ***Ongoing***

A member of the information technology department visits each school on a weekly basis. Often, two members of the IT team are assigned to the weekly site visit. Principals, resident experts, and many staff members have the ability to request phone support as necessary. And the information technology staff respond to any call that is identified as an emergency by the principal. Yet, twenty-five percent of teachers do not believe they have ready access to technical support. Although more study is needed, the statistic may be reflective of the fact that additional staff may need to volunteer and serve as building-level resident experts. In order to reverse the aforementioned trend, expanding the volunteer program at the elementary schools may be essential to a change in the perception.

In terms of the needs assessment's sub-criteria of media, software, and flexible scheduling, trends were positive in all areas.

## Professional Development

From the needs assessment, the following trends were identified.

Teachers would benefit from professional development on:

1. Research-based practices that they can use in their teaching
2. Identification, location, and evaluation of technology resources, e.g., websites that they can use with their students.
3. Performance-based student assessments.
4. The use of technology to collect and analyze student assessment data.
5. Learner-centered teaching strategies that incorporate technology, e.g., project-based or cooperative learning.
6. Web security and safety.
7. The use of technology for differentiating instructions for students with special needs.
8. Uses of technology to increase professional productivity.
9. Ways to use technology to communicate and collaborate with families about school programs and student learning.
10. Ways to use technology to communicate and collaborate with other educators.
11. Alignment of lesson plans to content standards and student technology standards.

12. Use of research or action research projects to improve technology-enhanced classroom practices.
13. Use of data for reflecting on my professional practices.
14. Use of data to make decisions about the use of technology.
15. Use of technology to participate in professional development activities, e.g., online workshops, hands-on training in a computer lab.

With regard to professional development quality, many trends were positive. There is a general uncertainty as to the tracking of professional development's impact of on classroom practice and student learning. Also, many teachers would like an opportunity to evaluate the professional development activities that they are asked to attend. ***Ongoing- Each year twenty SAMR sessions are offered at each school. Instructional staff members are asked to attend twelve.***

## Teaching and Learning

Through the survey results, it was determined that teachers frequently consult publications such as online journals in order to identify research-based practices that they can use in their classrooms. Similar frequencies were shown as teachers searched for student-use resources.

Although, many participating teachers apply performance-based student assessments to technology-enhanced lessons, it is of concern that twenty percent do not. Eight percent say they never use technology to collect and analyze student assessment data. And while the greatest majority of teachers regularly include technology-enhanced, learner-centered strategies, sixteen percent of participants say they never do so. ***At AHS, all departments have completed a survey training session that focused upon Powerschool Assessment's longitudinal data capability.***

Generally, respondents are believers in online security and safety but almost six percent cite a deficiency in that understanding. With regard to this statistic, a goal of the 2018 plan must include online safety training for every school. ***Access to Learning.com has been purchased for all teachers who provide instruction for grades K-8. Online safety and security modules are included.***

ACPS teachers use technology to differentiate instruction for their students with special learning needs but some may not realize the need or may not necessarily have a need to do so (four percent). On a daily basis, forty-two percent of survey completers use technology to support and increase their professional productivity. In addition, while thirteen percent are not using technology to communicate with families, the community, and other educators, the vast majority of teachers do.

Lesson planning is and must be a priority- especially with the division's 1:1 training requirements in mind- as one quarter of teachers do not include technology standards and content standards in their planning. Greater than twenty-five percent of responding teachers never use research projects to improve technology enhanced classroom practices. It is believed that this trend will improve as the division's one-to-one implementations and training plans move forward.

Teachers do frequently:

1. Use multiple sources of data for reflecting on their professional practices.
2. Use multiple sources of data to make decisions about the use of technology.
3. Use technology to participate in professional development.
4. Use a variety of technologies in the classroom.

Students frequently:

1. Use technology to access online resources.
2. Use technology to solve problems
3. Use technology to support higher-order thinking, e.g., analysis, synthesis, and evaluation.

A significant portion of teachers (thirty-five percent and twenty-eight percent) believe that students:

1. May not be using the same kinds of tools that are used by professional researchers.
2. Are not working on technology enhanced projects that approach real-world applications of technology.

Additionally, twenty-three percent of responding teachers do not believe that students are using technology to create new ideas and representations of information. With regard to the aforementioned negative trends, our division's project-based learning initiative must target those areas with respect to planning, training, and evaluation.

## Impact of Technology

With regard to the impact of technology on their teaching practices, participating teachers generally agree their teaching practices emphasize uses of technology skills to support instruction. In the upcoming school year, many survey completers will need to have their students utilize Google productivity applications. Currently, over one quarter of respondents have no ability to do so. ***Ongoing***

Additionally, the one-to-one initiatives will provide training to the twenty-one percent of respondents who are unable to include student-uses of technology in their daily teaching practices.

## Needs Assessment- Final Thoughts

Alleghany County Public Schools employs one hundred and sixty-nine teachers. Eighty-one percent completed the needs assessment survey. Although trends have been identified, those same trends may have been interpreted differently had all teachers participated. *Please see appendix eight.

Negative trends and conclusions are not drawn to signal a perception against any individual, group, department, or school. Negative trends serve as potential areas of attention, potential areas of training, and potential areas of positive growth.

Specific to goals completed and those needs that still require attention, ACPS is midway through its third school year with a full-time technical staff. ACPS is midway through its first year with each school having a dedicated Testing and Technology Resource Teacher.

ACPS has implemented a one-to-one initiative at Alleghany High School in 2017. The division deployed 510 Chromebooks at Clifton Middle School in August 2017 and concluded one-to-one implementations at Sharon Elementary, Callaghan Elementary, and Mountain View Elementary in August 2018. ACPS has embraced project-based learning and our high school is midway through its first year with the Echo learning management system.

With the aforementioned in mind, positive trends will continue to be supported and remedies for any troubling trend will be targeted for support, training, and evaluation during the period covered by this technology plan.

# Our Goals

## Enhance Personalized, Equitable Student Learning Experiences with Technology (VA-DOE)

Goal:
Promote and support student personalized, deeper learning experiences to demonstrate workplace readiness by creatively solving complex problems, thinking critically, collaborating, communicating and demonstrating responsible citizenship.

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| • Students will develop deeper learning skills by leveraging technology as a resource or tool.<br><br>• Educators will leverage current and emerging technologies to increase opportunities for students to follow personalized learning pathways.<br><br>• Students will apply technology effectively to support the construction and application of content knowledge and skills.<br><br>• Students will demonstrate mastery in a variety of ways, including the use of technology through | I. Develop knowledge and skills while investigating a meaningful problem or asking a complex question (Project/Problem-based Learning and incorporating the 5 C's)<br><br>A. Observe (Critical/Creative Thinking)<br><br>B. Hypothesize (Critical/Creative Thinking)<br><br>C. Experiment (Communication and Collaboration)<br><br>D. Conclude/Produce (Critical thinking, creative thinking, communication, collaboration)<br><br>E. Application (Includes all of the 5 C's)<br><br>II. Apply current and emergency | • Shared Instructional Resources<br>• Echo (completed tasks)<br>• Learning.com (completed tasks and activities)<br>• SAMR Professional Development Schedules<br>• Personal Learning Plans<br>• Videos<br>• Online Assessments<br>• Promote in-school and out-of-school technology-based learning opportunities (such as pursuit of industry certifications, professional licenses, and dual enrollment courses) along with career exploration, exposure, and planning opportunities.<br>• Provide technology and computer science cross-curricular connections starting in the elementary grades and across all disciplines to promote meaningful, real world applications of knowledge and skills |

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| the creation of digital artifacts.<br><br>• Educators will expose all students to career and college opportunities including those in the technical fields to promote workplace and college readiness through advanced coursework, mentorships and internships.<br><br>---<br><br>**National Recommendations**<br><br>• States, districts, and postsecondary institutions should develop and implement learning resources that embody the flexibility and power of technology to create equitable and accessible learning ecosystems that make learning possible everywhere and all the time for all students.<br><br>• States, districts, and postsecondary institutions should develop and implement learning | technologies in order to:<br><br>A. Develop individual learner profiles that outline strengths, areas for improvement, identify needs, and track historical information.<br><br>B. Utilize technology to match students with instructional resources and learning activities.<br><br>C. Utilize technology to edit/review/view learning profiles.<br><br>D. Utilize technology in order to allow an individual learning profile to progress with a student through grade levels.<br><br>III. Students will apply twelve digital literacy skills in support of content knowledge and skills.<br><br>A. Computer Fundamentals<br><br>B. Coding<br><br>C. Keyboarding<br><br>D. Online Safety and Digital Citizenship<br><br>E. Computational Thinking<br><br>F. Multimedia | and promote deeper learning opportunities aligned to the Virginia Standards of Learning. (Learning.com)<br>• Prepare our students for a participatory culture by providing resources related to Internet safety, digital citizenship skills, and student awareness of and skills for personal and data privacy (as specified by the Code of Virginia § 22.1-70.20). (Learning.com)<br>• Creation of STEM Labs at all elementary schools.<br>• Revision of Appendix 7 |

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| resources that use technology to embody design principles from the learning sciences.<br><br>• States, districts, and postsecondary institutions should take inventory of and align all learning technology resources to intended educational outcomes. Using this inventory, they should document all possible learner pathways to expertise, such as combinations of formal and informal learning, blended learning, and distance learning.<br><br>• Education stakeholders should develop a born accessible standard of learning resource design to help educators select and evaluate learning resources for accessibility and equity of learning experience.<br><br>• [Continue to explore] how the learning sciences technology is developed and used in school settings. | G. Internet Usage and Online Communication<br><br>H. Visual Mapping<br><br>I. Word Processing<br><br>J. Spreadsheets<br><br>K. Databases<br><br>L. Presentations<br><br>IV. Students will utilize technology to witness the connections between the classroom, careers, and the community by:<br><br>A. Developing a career plan that is aligned with his or her interests and experiences.<br><br>B. Developing workplace skills.<br><br>C. Developing a sense of civic responsibility.<br><br>V. Review alignment of Internet safety curriculum with VA standards of learning. | |

*Goals are written as listed in the state and national plans. Indicators and actions are local design or –if applicable- are of state design.

## Support Innovative Professional Learning with Technology (VA-DOE)

### Goal:

Promote and support current and emerging technology-based resources that support educators in developing and employing innovative strategies and practices to support student-centric learning models to increase quality of education and equity for students.

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| • Educators support personalized, deeper learning experiences that are enhanced through appropriate and meaningful technology integration.<br><br>• Through the use of technology supports (e.g., learning and/or content management systems, student information systems, and adaptive technologies) educators will monitor students' progress to personalize learning and inform instructional practices.<br><br>• Educators utilize the instructional technology resource teacher model to support student engagement through technology in the classroom.<br><br>• Educators understand how to enhance | • Define the SAMR model as the appropriate method by which technology will enhance instruction.<br><br>• At each school, require the presentation of twenty SAMR (substitution, augmentation, modification, and redefinition) professional development activities per year.<br><br>• At each school, each educator must participate in twelve SAMR activities per year. Rigor must be appropriate and each activity must be at least thirty minutes in duration.<br><br>• Current and emerging technology-based resources used by educators as indicated by the Technology | • Develop and revise existing policy and guidance documents to support innovative learning experiences.<br>• Work collaboratively with teacher and technology stakeholders to create instructional resources that can be used by educators to support innovative learning experiences.<br>• Document SAMR profession development activities and participation.<br>• Lesson Plans<br>• Classroom Observation<br>• Administrative Feedback<br>• Promote in-school and out-of-school technology-based learning opportunities (such as pursuit of industry certifications, professional licenses, and dual enrollment courses) along with career exploration, exposure, and |

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| performance-based and alternative assessments through the intentional integration of technology.<br><br>**National Recommendations**<br><br>Provide pre-service and in-service educators with professional learning experiences powered by technology to increase their digital literacy and enable them to create compelling learning activities that improve learning and teaching, assessment, and instructional practices.<br><br>Use technology to provide all learners with online access to effective teaching and better learning opportunities with options in places where they are not otherwise available<br><br>Develop a teaching force skilled in online and blended instruction<br><br>Develop a common set of technology competency expectations for university professors and candidates exiting teacher preparation programs for teaching in technologically enabled schools and postsecondary education institutions. | Needs Assessment responses.<br><br>• Collect information on the number of students enrolled in advanced coursework (e.g., dual enrollment, AP) internships, and mentorships or receiving industry certifications.<br><br>• Provide technology supports as follows:<br><br>-G-Suite<br><br>-Google Classroom<br><br>-Echo<br><br>-Powerschool<br><br>-Learning.com<br><br>-Imagine Learning<br><br>-Discovery Education<br><br>-Assessment and Analytics<br><br>-Reasoning Mind<br><br>-School Pace<br><br>-Read/Write<br><br>-Electronic textbooks and associated content<br><br>• Fully fund the TTRT program and provide one TTRT position at each school. | planning opportunities.<br>• Provide information about assistive technology availability and uses through the Training and Technical Assistance Centers (TTAC).<br>• Support instruction in the development of rubrics and other evaluation tools for use with performance-based assessment that integrate technology.<br>• Coordinate and collaborate partnerships with professional organizations, businesses, and local school divisions to ensure targeted and strategic professional learning experiences in the area of instructional technology.<br>• Division Budget |

* **Goals are written as listed in the state and national plans. Indicators and actions are local design or –if applicable- are of state design.**

## Create Cultures of Change through Innovative Leadership Practices (VA-DOE)

### Goal:

Promote leadership that supports deeper learning experiences for students and innovative instructional practices by educators through the use of technology.

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| • Educational leaders support the vision for teaching and learning that includes the appropriate use of technology.<br><br>• Educational leaders are able to communicate and guide the implementation of division and school goals for teaching and learning that integrate technology and promote innovation.<br><br>• Educational leaders model tolerance for risk and experimentation and create a culture of trust and innovation.<br><br>• Educational leaders support, secure and advocate for resources to sustain technology initiatives and goals including those designed to support personalized learning environments. | • Provide advice as to the technical qualifications needed for school leadership positions that require an understanding of the use of technology in learning and school operations.<br>• Provide opportunities implement and evaluate new technologies and instructional approaches (SAMR).<br>• Build teams of early adopters, interested educators, and school leaders and collaborate frequently. (SAMR)<br>• Sustain a planned approach for all technical purchases.<br>• Promote and provide professional learning opportunities regarding educational technology leadership, research, and innovations in education (SAMR PD).<br>• Promote the effective and efficient use of | • Types and numbers of professional learning opportunities are documented and recorded.<br><br>• Number of professional online courses and resources offered to educators and number of participant completers.<br><br>• Budget/Technology Purchase Requests<br><br>• TTRT Weekly Schedules<br><br>• Current and emerging technology-based resources used by leaders, schools, as indicated by the Technology Needs Assessment responses.<br><br>• Document (agendas) Technology and 1:1 committee meetings. |

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| • Educational Leaders promote the use of a variety of innovative instructional strategies and practices developed with current and emerging technology-based resources to support the innovative instructional approaches in the classroom.<br><br>• Educational leaders possess the capability to efficiently and effectively use technology in the performance of job duties (data-driven decision making, educator evaluations, communications, and more).<br><br>• Technology is included in technical assistance and school improvement resources provided by to educational leaders based upon school and school division needs.<br><br>---<br><br>**National Recommendations**<br><br>• Establish clear strategic planning connections among all state, district, university, and school levels and how they relate to and are | Testing and Technology Resource Teachers.<br>• Model and provide training for the use of administrative technologies.<br>• Collaborate with other organizations to provide opportunities for leaders to meet, collaborate, and share ideas, resources, and effective practices, and to promote professional learning networks through social networking tools (Shared Instructional Resources).<br>• Review practices through monthly Technology/1:1 Committee meetings. | • Post Innovators' videos.<br><br>• Shared Instructional Resources |

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| supported by technology to improve learning.<br>• Set a vision for the use of technology to enable learning such that leaders bring all stakeholder groups to the table, including students, educators, families, technology professionals,<br>• Develop funding models and plans for sustainable technology purchases and leverage openly licensed content while paying special attention to eliminating those resources and tasks that can be made obsolete by technology.<br>• Develop clear communities of practice for education leaders at all levels that act as a hub for setting vision, understanding research, and sharing practices. | | |

*Goals are written as listed in the state and national plans. Indicators and actions are local design or –if applicable- are of state design.

## Secure and Robust Infrastructure (VA-DOE)

### Goal:

Promote and support a secure and robust technology infrastructure to support access, adequacy, and equity.

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| • Students, educators, and leaders have equitable access to secure and robust networks that provide high quality, reliable access to the Internet and other networks.<br><br>• Employ best practices that comply with federal, state, and industry guidelines and recommendations to minimize network threats and vulnerabilities and protect educational data.<br><br>• Students, educators, and leaders have equitable access to computing devices and other digital resources, including assistive technologies.<br><br>• Maintain technical and human resources to ensure effective evaluation of infrastructure costs and other considerations necessary for high quality and reliable | • Annual review of Technology Needs Assessment.<br><br>• Promote equitable access to high quality, effective learning environments for all students by supporting efforts to reduce barriers to technology access (Kajeet).<br>• Budget for and maintain device interoperability, broadband capacity, and network capabilities.<br>• Promote the continual use of broadband capability in support of digital learning.<br>• Continue local participation in the<br>• E-rate and VPSA programs in order to maximize resources available to students, educators, and school leaders.<br>• Use cooperative purchase agreements when appropriate.<br>• Ensure safety and security issues but | • Biennial technology needs assessment.<br>• Network Monitoring<br>• Technology Budget/Purchase Documentation<br>• SAMR Professional Development Documentation<br>• Technology Committee Meeting Agendas.<br>• Erate/VPSA Documentation<br>• Document state contract numbers and cooperative purchase agreement numbers on all quotes.<br>• Routine Security and Safety Audits.<br>• Written Data Sharing Agreement<br>• Formal Software Adoption Guide<br>• Routing testing of all web resources via WAVE.<br>• Staff Meeting Agendas |

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| access to the Internet and other networks used by students, educators, and leaders in innovative way.<br><br>**National Recommendations**<br><br>• Ensure students and educators have broadband access to the internet and adequate wireless connectivity, with a special focus on equity of access outside of school.<br>• Ensure that every student and educator has at least one internet access device and appropriate software and resources for research, communication, multimedia content creation, and collaboration for use in and out of school.<br>• Support the development and use of openly licensed educational materials to promote innovative and creative opportunities for all learners and accelerate the development and adoption of new open technology–based | allow for instructional innovation.<br>• Review evaluation criteria and standards in order to ensure informed purchases of computing devices and other digital resources, including assistive technologies.<br>• Develop a data sharing agreement.<br>• Guide software adoption toward applications that encourage interactivity and personalized learning.<br>• Ensure that assistive technology services and devices are implemented in accordance with the Individuals with Disabilities Education Act (IDEA).<br>• Provide guidance on the efficient use of the technical support personnel.<br><br>• Weekly Website Updates | |

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| learning tools and courses<br>• Draft sustainability plans for infrastructure concerns that include upgrades of wired and wireless access as well as device refresh plans and sustainable funding sources while ensuring the safety and protection of student data.<br>• Create a comprehensive map and database of connectivity, device access, use of openly licensed educational resources, and their uses across the country. | | |

***Goals are written as listed in the national plan. Indicators and actions are local design.**

## Assessment- Measuring for Learning

## Goal

At all levels, our education system will leverage the power of technology to measure what matters and use assessment data to improve learning.

| Goals | Action (What action will be taken?) | Indicators (What evidence will exist of completion?) |
|---|---|---|
| • Maintain the district's online SOL testing capability through appropriate hardware investment, staff training, and best practices review.<br>• Maintain the division's technology supports for assessment:<br>-Echo<br>-Powerschool<br>-G-Suite<br>-Powerschool Assessment and Analytics.<br>-TestNav<br>-ProctorCaching | • Annual Training Programs<br>• Hardware Review<br>• Pre-Test Preparation<br>• Data Review<br>• Software Updates<br>• Compatibility Review<br>• Network Performance Assessment. | • Technology Tickets<br>• System Logs<br>• Agendas<br>• Email<br>• System Performance |

**Alleghany High School Technology Plan/Goals (2018-2020)**

**Goal One: Learning**

Students will develop deeper learning skills by leveraging technology as a resource or tool, apply technology effectively to support and apply the content knowledge and skills, and have increased opportunities to follow personalized learning pathways. Through curriculum, school resources, collaboration, and school wide data students will have enhanced personalized an equitable student learning experience with technology.

**Goal Two: Teaching**

Support innovative professional learning with technology for educators to increase the quality of education and equity for students. By using technology that connects the educator to people, data, content, resources, expertise, and learning experiences can empower and inspire them to provide more effective teaching for all learners. Educators will provide students with meaningful and real-world learning experiences through the connection to content and careers through technology.

**Goal Three: Leadership**

Promote leadership and create cultures of change through innovative leadership practices by educators through the use of technology. Educational leaders will model tolerance for risk and experimentation and create a culture of trust and innovation. Through educator development meetings, technology sessions, and discussion forums instructional strategies and practices will be developed with current and emerging technology-based resources to support the innovative instructional approaches in the classroom and throughout the community, and educational leaders will also possess the capability to efficiently and effectively use technology in the performance of job duties and in the classroom.

**Goal Four: Infrastructure**

Support and promote a secure and robust technology infrastructure for all students and educators for learning purposes. Educators will develop professional development opportunities to be proficient with digital learning tools through the sustainability and capacity of the network.

(In five years- Educators will partner with community and government leaders and work to expand the role of community broadband.)

**Goal Five: Assessment**

Our education system will leverage the power of technology to measure digital learning content, tools, and resources and use assessment data to improve learning and the educators shared set of skill standards. Create and validate an integrated system to support the complex aspects of 21st Century expertise and competencies across the academic disciplines and school wide 1:1 initiative.

**Overall Goal:**

Alleghany High School will continue with the 1:1 initiative and implement Project Based Learning school-wide. Through integrated classes educators and students will develop a vision that includes the appropriate use of technology, appropriate learning environments, and innovation with current and emerging technology-based resources to also support the 1:1 Initiative, New Tech, Project Based Learning, and the ability to successful use future technologies in and outside of the classroom.

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## CMS - Goal 1 (2018-2020); Learning

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Students will develop deeper learning skills by leveraging technology as a resource or tool. | *Number of student products involving technology will increase | *Fully fund 1:1 initiative<br>*Maintain SAMR training<br><br>(Creative Thinking) |
| Current and emerging technologies will be leveraged to increase opportunities for students to follow personalized learning pathways. | *Utilize technology and programs to increase student learning at their own pace | *Revision Assistant<br>*Renaissance Learning<br>*VMath<br>*Teachers use differentiated variety of options in assigning tasks<br><br>(Critical Thinking) |
| Students will apply technology effectively to support the construction and application of content knowledge and skills. | *Use of Google Suite and other apps as selected by instructional staff | *Quizziz<br>*Kahoots<br>*Google Classroom<br><br>(Critical Thinking) |
| Students will demonstrate mastery in a variety of ways, including the use of technology through the creation of digital artifacts. | *Students will create digital portfolios using a variety of applications. | *Complete Presentations (Sheets, Powerpoint, Prezi, etc.)<br>*Continue to provide access to Google Classroom<br><br>(Critical and Creative Thinking, Collaboration) |
| All students will be exposed to careers and college opportunities including those in the technical fields to promote workplace and college readiness through advanced coursework, mentorships, and internships | *Students explore college and career opportunities | *WRS Competencies (CTE Classes)<br>*Guidance Classes (Interest Inventory)<br>*Talent Search (DSLCC)<br><br>(Critical and Creative Thinking, Citizenship) |

## CMS - Goal 2 (2018-2020); Teaching

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Educators support personalized, deeper learning experiences that are enhanced through appropriate and meaningful technology integration. | *1:1 Imitative<br>*Use of technology increases in all subject areas | *Provide Ongoing PD through Tech Tuesday<br>*Use Google Classroom to utilize PD<br>*TTRT will continue to provide support to teachers<br>(Creative & Critical Thinking) |
| Through the use of technology supports (e.g., learning and/or content management systems, student information systems, and adaptive technologies) educators will monitor students' progress to personalize learning and inform instructional practices. | *Net-Op for Chromebooks<br>*PowerSchool Analytics & Assessment (IA) | *Provide all teachers with Net-Op and document cameras for use on Chromebooks<br>*Continue using Google Classroom<br>*Monitor student progress using Revision Assist., AR, VMath, etc.<br>*Use results from PowerSchool (IA)<br><br>(Critical Thinking and Collaboration) |
| Educators utilize the instructional technology resource teacher (TTRT) model to support student engagement through technology in the classroom. | *Keep track of PD learning opportunities by documenting and recording | *Provide Ongoing PD through Tech Tuesday (Teachers will attend 12 of 20 sessions)<br>*Teachers should provide PD during Tech Tuesday<br>(Critical Thinking, Collaboration, Community) |
| Educators understand how to enhance performance-based and alternative assessments through the intentional integration of technology. | *Explore Long-distance learning | *Use of Distance learning to expand the use of technology<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| Educators will make connections to content and careers in technical fields by providing students with meaningful, real-world learning experiences to promote workplace, citizenship, vocational, military, and college readiness skill development. | *Exposure to CTE course offerings and Guidance classes | *Use CTE competencies<br>*Guidance Classes<br>Interest Inventories<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |

## CMS - Goal 3 (2018-2020); Leadership

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Educational leaders develop a vision for teaching and learning that includes the appropriate use of technology. | *Begin integrating Computer Science Standards | *Will document in standards in lesson plans to be shared with principal<br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| Educational leaders are able to communicate and guide the implementation of division and school goals for teaching and learning that integrate technology and promote innovation. | *TTRT will lead by example through SAMR training | *Continue Tech Tuesdays<br>*PD during workdays<br>*Teachers will lead PD<br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| Educational leaders model tolerance for risk and experimentation and create a culture of trust and innovation. | *Educators will explore Apps and Add-ons, as well as other types of technology<br>*Encourage student-lead instruction | *TTRT available to assist as needed in classrooms<br>*Ongoing PD<br>(Critical and Creative thinking, Communication, Collaboration) |
| Educational leaders support, secure and advocate for resources to sustain technology initiatives and goals including those designed to support personalized learning environments. | *TTRT will work with staff and administrators to advocate for resources to enhance technology | *Discussions during Faculty Meetings, Grade Level and Department Meetings<br>(Critical and Creative thinking, Communication, Collaboration) |
| Educational leaders promote the use of a variety of innovative instructional strategies and practices developed with current and emerging technology-based resources to support the innovative instructional approaches in the classroom. | *Year 1&2: TTRT will design and guide activities through SAMR<br>*Year 3-5: TTRT will transition teacher into the role of guiding activities | *TTRT will provide teachers support in the classroom.<br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| Educational leaders possess the capability to efficiently and effectively use technology in the performance of job duties (data drive decision making, educator, evaluations, communications, etc | *Use PowerSchool Analytic (IA) data to plan and facilitate learning objectives (small group, etc.)<br>*Use SOL results | *Use data from IA (Unit tests, benchmarks, SGA, Quiz)<br>*Use SOL results<br>(Critical and Creative thinking, Communication, Collaboration) |

**CMS - Goal 4 Goal 3 (2018-2020); Infrastructure**

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Students, educators, and leaders have equitable access to secure and robust networks that provide high quality, reliable access to the Internet and other networks. | *Recent network upgrades<br>*Visits from IT Staff<br>*School Dude (Work Orders) | *IT Staff visits once per week<br>*All staff is trained to do work orders<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| Schools and school divisions use best practices that comply with federal, state, and industry guidelines and recommendations to minimize network threats and vulnerabilities and protect educational data. | *Receipt of emails from IT Staff<br>*Online Safety Training<br>*Digital Citizenship Training | *Communication with staff informing of potential security issues<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| Students, educators, and leaders have equitable access to computing devices and other digital resources, including assistive technologies. | *1:1 Initiative<br>*Use of other devices for differentiation | *1:1 (Chromebooks)<br>*Students have access to individualized Apps<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |
| School divisions have access to technical and human resources that enable the effective evaluation of infrastructure costs and other considerations necessary for high quality and reliable access to the Internet and other networks used by students, educators, and leaders in innovative ways. | *Meeting agendas | *Frequent division technology meetings<br>*TTRT Meetings<br>*1:1 Initiative Meetings<br>*Parent Trainings<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |

## CMS - Goal 5 (2018-2020); Assessment

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Educators will use assessment data to support learning. | *SOL Results<br>*IA Results<br>*Renaissance (STAR Reading and Math) | *23/45 Data Tracking<br>*Student performance results analyzed to guide instruction<br><br>(Critical and Creative thinking, Communication, Collaboration) |
| Educators will transform assessment through the use of technology. | *1:1 Initiative<br>*Google Suite<br>*Apps by other devices as available | *Continuation of 1:1<br>*Continued Tech Tuesday Trainings<br><br>(Critical and Creative thinking, Communication, Collaboration) |
| Educators will develop a shared set of skill standards. | *Adoption of VDOE Computer Science Standards | *Ongoing instruction regarding implementation of standards<br><br>(Critical and Creative thinking, Communication, Collaboration, Citizenship) |

## Elementary - Goal 1 (2018-2020); Learning

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Students will develop deeper learning skills by leveraging technology as a resource or tool. | • Number of student products involving technology will increase<br>• Increasing PBL's | • Provide meaningful SAMR trainings for teachers<br>• Provide funding for the 1:1 Chromebook initiative (CREATIVE THINKING) |
| Current and emerging technologies will be leveraged to increase opportunities for students to follow personalized learning pathways. | • Utilizing technology & programs to increase students learning at their own pace. | • Providing all classroom teachers with NetOp to help monitor students<br>• Continue to provide individualize programs such as VMATH & AR (CRITICAL THINKING) |
| Students will apply technology effectively to support the construction and application of content knowledge and skills. | • Utilizing technology to apply the content skills learned | • Providing all classroom teachers with NetOp to help monitor students<br>• Provide funding for the 1:1 Chromebook initiative<br>• Continue to allow access to Google Classroom & Online activities such as Kahoot ( CRITICAL THINKING) |
| Students will demonstrate mastery in a variety of ways, including the use of technology through the creation of digital artifacts. | • Student products involving Technology | • Continue to allow access to Google Classroom<br>• Provide opportunities to use Blockly Programs ( CRITICAL THINKING, CREATIVE THINKING & COLLABORATION) |
| All students will be exposed to careers and college opportunities including those in the technical fields to promote workplace and college readiness through advanced coursework, mentorships, and internships. | | |

## Elementary - Goal 2 (2018-2020); Teaching

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Educators support personalized, deeper learning experiences that are enhanced through appropriate and meaningful technology integration. | • Use of technology increases in all subjects.<br>• IA - PowerSchool Analytics & Assessment | • Provide SAMR trainings<br>• Provide classroom support as teachers try new apps etc.<br>(CREATIVE THINKING & CRITICAL THINKING) |
| Through the use of technology supports (e.g., learning and/or content management systems, student information systems, adaptive technologies) educators will monitor students' progress to personalize learning and inform instructional practices. | • Teachers will use NetOp in some capacity<br>• IA - PowerSchool Analytics & Assessment | • Providing all classroom teachers with NetOp to help monitor students' progress<br>• Continue to allow access to Google Classroom & Online activities such as VMATH, AR & Read to Write<br>(CREATIVE THINKING, CRITICAL THINKING & COLLABORATION) |
| Educators utilize the instructional technology resource teacher (TTRT) model to support student engagement through technology in the classroom. | • TTRT will keep track of PD learning opportunities by documenting and recording | • SAMR Trainings – Teachers will attend 12 of the 20 sessions offered.<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION & COMMUNICATION) |
| Educators understand how to enhance performance-based and alternative assessments through the intentional integration of technology. | • STEM Lab | • Use the STEM Lab to model intentional integration<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |

**Elementary – Goal 3 (2018-2020); Leadership**

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Educational leaders develop a vision for teaching and learning that includes the appropriate use of technology. | • Begin integrating Computer Science Standards | • Teachers will show standards in lesson plans<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |
| Educational leaders are able to communicate and guide the implementation of division and school goals for teaching and learning that integrate technology and promote innovation. | • TTRT leads by example through SAMR & STEM lab | • PD Trainings & informational videos posted in Google Classroom<br>• STEM Lab activities<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |
| Educational leaders model tolerance for risk and experimentation and create a culture of trust and innovation. | • Explore Apps & add-ons in Google as well as other types of technology | • TTRT is available to assist as needed<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |
| Educational leaders support, secure and advocate for resources to sustain technology initiatives and goals including those designed to support personalized learning environments. | • TTRT will work with staff & admin to advocate for resources to enhance technology | • Faculty Meetings<br>• Grade Level<br>• Leadership Meetings<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |
| Educational leaders promote the use of a variety of innovative instructional strategies and practices developed with current and emerging technology-based resources to support the innovative instructional approaches in the classroom. | • During year 1 & 2 TTRT will design & facilitate STEM activities<br>• During year 3 -5 TTRT will help transition to teachers facilitating STEM activities | • TTRT will help teachers to create activities<br>• TTRT will support teachers and meet them where they are<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |

| | | |
|---|---|---|
| Educational leaders possess the capability to efficiently and effectively use technology in the performance of job duties (data drive decision making, educator, evaluations, communications, etc. | • SOL Results<br>• Increase the use of IA for practice or task cards & tests to guide small groups | • Use data from IA practice assignments or task cards & tests (CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |
| Technology is included in technical assistance and school improvement resources provided by educational leaders based upon the school and school division needs as determined by criteria such as Accreditation Matrix Performance Levels. | | |

## Elementary - Goal 4 (2018-2020); Infrastructure

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Students, educators, and leaders have equitable access to secure and robust networks that provide high quality, reliable access to the Internet and other networks. | • Recent network updates from IT staff<br>• School Dude | • IT staff visits each school once a week or as needed<br>• Teachers are trained on inputting a ticket on School Dude<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |
| Schools and school divisions use best practices that comply with federal, state, and industry guidelines and recommendations to minimize network threats and vulnerabilities and protect educational data. | • Online safety training<br>• Digital citizenship training<br>• AUP | • Communication with staff informing staff of potential security issues<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |
| Students, educators, and leaders have equitable access to computing devices and other digital resources, including assistive technologies. | • 1:1 Chromebook initiative or devices needed for differentiation | • 1:1 Chromebook initiative<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |
| School divisions have access to technical and human resources that enable the effective evaluation of infrastructure costs and other considerations necessary for high quality and reliable access to the Internet and other networks used by students, educators, and leaders in innovative ways. | • Meeting agendas | • Technology Meetings<br>• TTRT Meetings<br>• 1:1 Initiative Meetings<br>• Parent Trainings<br>• Development of PBL spaces<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, COMMUNICATION & CITIZENSHIP) |

**Elementary - Goal 5 (2018-2020); Assessment**

| Results | Indicators | Actions or Evaluations |
|---|---|---|
| Educators will use assessment data to support learning. | • SOL results<br>• IA – PowerSchool Analytics & Assessment<br>• AR, VMATH and other similar programs | • Data Tracking Spreadsheet<br>• Student profile analyze to individualize instruction<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |
| Educators will transform assessment through the use of technology. | • 1:1 Chromebook initiative, G-Suite & Age appropriate curriculum by instructional staff such as laptops, tablets, DASH/DRONES & other devices as they become available | • Completion of 1:1 Chromebook initiative<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |
| Educators will use data effectively and appropriately. | • SOL results<br>• IA – PowerSchool Analytics & Assessment<br>• AR, VMATH and other similar programs | • Data Tracking Spreadsheet<br>• Student profile analyze to individualize instruction<br>(CREATIVE THINKING, CRITICAL THINKING, COLLABORATION, & COMMUNICATION) |

## Appendix I: Chromebook Information

## Google Device Auto-Update Expiration Dates

| Product | Auto Update Expiration date |
|---|---|
| Chromebook 11 (3120) * | Jun 2020 |
| Chromebook 11 (3180) * | Feb 2022 |
| Chromebook 11 (5190) | Nov 2023 |
| Chromebook 11 2-in-1 (3189) | Feb 2022 |
| Chromebook 11 2-in-1 (5190) | Nov 2023 |
| Chromebook 13 (7310) | Sep 2020 |
| Chromebook 13 (3380) | Nov 2022 |

*Used by ACPS.

# Appendix II: One-to-One Budget

**TEXTBOOK FUND BUDGET INCLUSIVE OF THE ONE-TO-ONE INITIATIVE**

**December 12, 2018**

| | Budget 2018-19 | Budget 2019-20 | Budget 2020-21 | Budget 2021-22 | Budget 2022-23 | Budget 2023-2024 | Budget 2024-2025 |
|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | |
| Fund 2-Textbooks Beginning Year Balance | $862,259 | $599,854 | $414,382 | $439,763 | $391,211 | $403,459 | $405,468 |
| Projected State Funding/Required Local Match | $214,769 | $206,863 | $198,958 | $191,052 | $183,146 | $183,146 | $183,146 |
| Projected Interest Earnings @ 0.9% | $776 | $540 | $373 | $396 | $352 | $363.11 | $364.92 |
| **Total Revenues** | **$1,077,804** | **$807,257** | **$613,713** | **$631,211** | **$574,709** | **$586,968** | **$588,979** |
| **Expenditures** | | | | | | | |
| Textbook Purchases - Social Studies | $0 | $0 | $0 | $0 | $0 | $0 | $108,186 |
| Textbook Purchases - Mathematics | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Textbook Purchases - English | $0 | $294,900 | $0 | $0 | $0 | $0 | $0 |
| Textbook Purchases - Fine Arts | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Textbook Purchases - Foreign Language | $0 | $0 | $0 | $0 | $49,500 | $0 | $0 |
| Textbook Purchases - Health/PE | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Textbook Purchases - Science | $210,100 | $0 | $0 | $0 | $0 | $0 | $0 |
| Textbook Replacements/Consumables | $18,500 | $20,000 | $20,000 | $20,000 | $20,000 | $20,000 | $20,000 |
| **Total Expenditures** | **$228,600** | **$314,900** | **$20,000** | **$20,000** | **$69,500** | **$20,000** | **$128,186** |
| **Fund 2-Textbooks Ending Balance** | **$849,204** | **$492,357** | **$593,713** | **$611,211** | **$505,209** | $566,968 | $460,793 |
| Less: One-to-One Device Purchases | ($379,350) | ($207,975) | ($283,950) | ($350,000) | ($231,750) | ($291,500) | ($350,000) |
| Add: VPSA Technology Funds Allocation | $130,000 | $130,000 | $130,000 | $130,000 | $130,000 | $130,000 | $130,000 |
| **Fund 2-Textbooks 1:1 Revised Balance** | **$599,854** | **$414,382** | **$439,763** | **$391,211** | **$403,459** | **$405,468** | **$240,793** |

# Appendix III: 2018-2019 Technology Department Budget

| ACCOUNT CODE | DESCRIPTION | BUDGET |
|---|---|---|
| 01-8100-200-3320-370-141 | PURCHASED SERVICES/SERVICE CONTRACT | $53,347 |
| 01-8100-200-3801-370-100 | TECHNOLOGY SERVICES | $0 |
| 01-8100-200-6000-100-000 | TECHNOLOGY SUPPLIES | $12,775 |
| 01-8100-200-6040-370-141 | TECHNOLOGY SOFTWARE/LOCAL | $12,775 |
| 01-8100-200-6040-370-142 | TECHNOLOGY SOFTWARE/STATE | $0 |
| 01-8100-200-6050-370-141 | NON-CAPITAL TECH HARDWARE/LOCAL | $0 |
| 01-8100-200-6050-370-142 | NON-CAPITAL TECH HARDWARE/STATE | $115,000 |
| 01-8100-200-8110-100-141 | TECHNOLOGY CAPITAL REPLACE/LOCAL | $0 |
| 01-8100-200-8110-100-142 | TECHNOLOGY CAPITAL REPLACE/STATE | $0 |
| 01-8100-200-8201-370-141 | TECHNOLOGY CAPITAL ADDITION/LOCAL | $0 |
| 01-8100-200-8201-370-142 | TECHNOLOGY CAPITAL ADDITION/STATE | $0 |
| 01-8100-300-3320-370-141 | PURCHASED SERVICES/SERVICE CONTRACT | $37,475 |
| 01-8100-300-3801-370-100 | TECHNOLOGY SERVICES | $0 |
| 01-8100-300-6000-100-000 | TECHNOLOGY SUPPLIES | $12,775 |
| 01-8100-300-6040-370-141 | TECHNOLOGY SOFTWARE/LOCAL | $12,775 |
| 01-8100-300-6040-370-142 | TECHNOLOGY SOFTWARE/STATE | $0 |
| 01-8100-300-6050-370-141 | NON-CAPITAL TECH HARDWARE/LOCAL | $0 |
| 01-8100-300-6050-370-142 | NON-CAPITAL TECH HARDWARE/STATE | $115,000 |
| 01-8100-300-8110-100-141 | TECHNOLOGY CAPITAL REPLACE/LOCAL | $0 |
| 01-8100-300-8110-100-142 | TECHNOLOGY CAPITAL REPLACE/STATE | $0 |
| 01-8100-300-8201-370-141 | TECHNOLOGY CAPITAL ADDITION/LOCAL | $0 |
| 01-8100-300-8201-370-142 | TECHNOLOGY CAPITAL ADDITION/STATE | $0 |
| 01-8100-901-1200-370-000 | OVERTIME/TECHNOLOGY | $1,200 |
| 01-8100-901-3000-370-141 | PURCHASED SERVICES/LOCAL | $0 |
| 01-8100-901-3000-370-142 | PURCHASED SERVICES/STATE | $0 |
| 01-8100-901-3320-370-141 | PURCHASED SERVICES/SERVICE CONTRACT | $2,330 |
| 01-8100-901-5500-370-000 | TRAVEL | $0 |
| 01-8100-901-6000-100-000 | TECHNOLOGY SUPPLIES | $4,088 |
| 01-8100-901-6040-370-141 | TECHNOLOGY SOFTWARE/LOCAL | $0 |
| 01-8100-901-6040-370-142 | TECHNOLOGY SOFTWARE/STATE | $0 |
| 01-8100-901-6050-370-141 | NON-CAPITAL TECHNOLOGY HARDWARE/LOCA | $15,560 |
| 01-8100-901-6050-370-142 | NON-CAPITAL TECHNOLOGY HARDWARE/STAT | $0 |
| 01-8100-901-6060-370-141 | NON-CAPITAL TECHNOLOGY INFRASTRUCT/LO | $0 |
| 01-8100-901-6060-370-142 | NON-CAPITAL TECHNOLOGY INFRASTRUCT/ST | $0 |
| 01-8100-901-8110-100-141 | TECHNOLOGY CAPITAL REPLACE/LOCAL | $0 |
| 01-8100-901-8110-100-142 | TECHNOLOGY CAPITAL REPLACE/STATE | $0 |
| 01-8100-901-8201-370-141 | TECHNOLOGY CAPITAL ADDITION/LOCAL | $0 |
| 01-8100-901-8201-370-142 | TECHNOLOGY CAPITAL ADDITION/STATE | $0 |
| | **TOTAL - TECHNOLOGY** | **$395,100** |

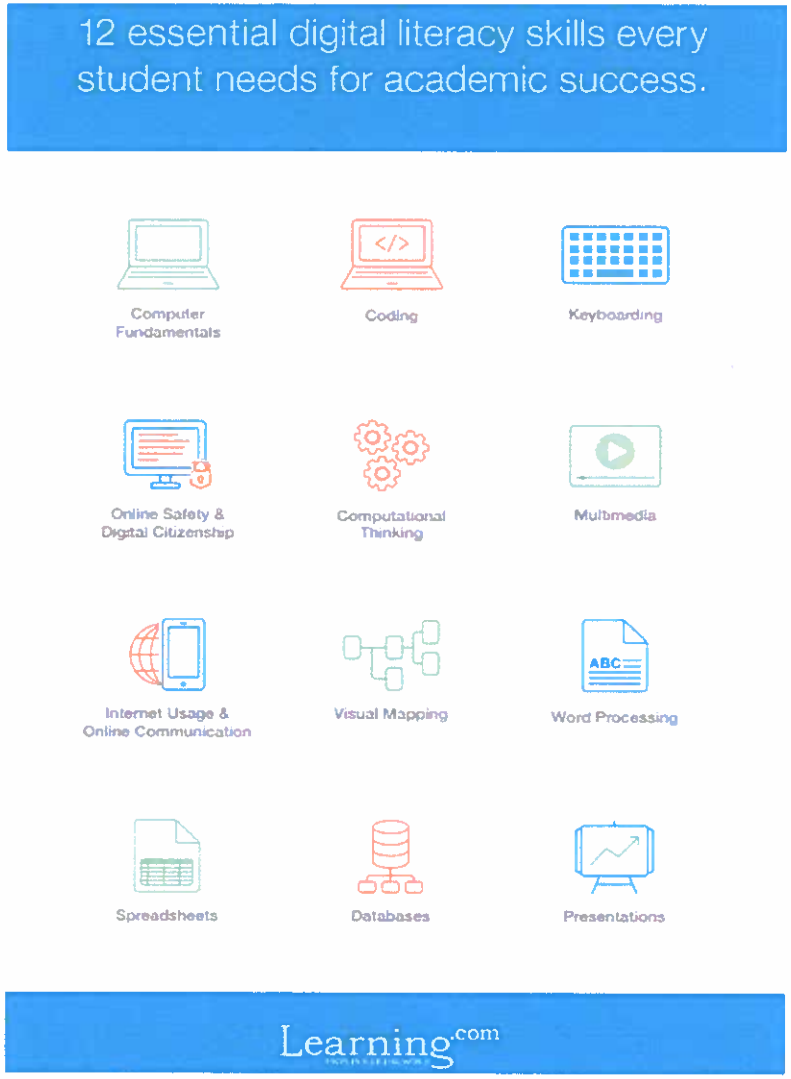
# Appendix IV: 2018-2019 Balances; Virginia Public Schools Authority Notes (VPSA Funds)
# *Non-capital Technology Hardware

**VPSA Balances - Alleghany County (Division 003)**
**As of October 31, 2018**

| | Base Grant |
|---|---|
| Series XIV | $0 |
| Series XV | $0 |
| Series XVI | $0 |
| Series XVII | $221,172.22 |
| Series XVIII | $230,000.00 |

## Appendix V: Learning.com Curriculum

*In grades K-8, the content is used to integrate the Virginia Computer Science standards across the curriculum.



A complete list of the objectives for each curriculum item is available on the curriculum item detail tab.

# EasyTech Online Safety Curriculum K-2

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Internet Usage: Research, Resources, and Ethics | Lesson | 15 |
| Internet Usage: Safe and Effective Online Searches | Lesson | 15 |
| Netiquette and Cyber Bullying Discussion | Discussion | 30 |
| Online Safety: Cyberbullying | Lesson | 15 |
| Open Communication Basics Discussion | Discussion | 30 |
| Safe Site Strategies | Discussion | 30 |
| Summer Online Safety Poster | Application Exercise | 40 |
| Texting Safety Discussion | Discussion | 30 |

# EasyTech Online Safety Curriculum 3-5

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Acceptable Use Policies | Discussion | 30 |
| Better Safe than Sorry | Application Exercise | 45 |
| Computer Rules Skit | Application Exercise | 60 |

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Email Basics Unit Quiz | Quiz | 15 |
| Have Fun, Keep Safe: Filters and Firewalls | Application Exercise | 45 |
| Healthy Computing Discussion | Discussion | 30 |
| How Would You Feel? | Application Exercise | 45 |
| Identity Theft Basics Discussion | Discussion | 15 |
| Inappropriate Content Discussion | Discussion | 30 |
| Internet Usage: Research, Resources, and Ethics | Lesson | 15 |
| Internet Usage: Safe and Effective Online Searches | Lesson | 15 |
| Netiquette Discussion | Discussion | 15 |
| Online Communication: Sharing on a Community Site | Lesson | 15 |
| Online Communications: Communicating with Instant Messaging | Lesson | 15 |
| Online Communications: Reading and Writing Blogs | Lesson | 15 |
| Online Communications: Responding to Email Messages | Lesson | 8 |
| Online Communications: Sending Email Messages | Lesson | 12 |
| Online Safety: Communicating Online and Cyberbullying | Lesson | 15 |
| Online Status Message Basics Discussion | Discussion | 30 |
| Practicing Online Safety | Application Exercise | 90 |
| Safekeeping Personal Information Discussion | Discussion | 30 |

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Safety Through Open Communication Discussion | Discussion | 30 |
| Smart Alert! Cyber Bullying Guide | Application Exercise | 45 |
| Summer Online Safety Brochure | Application Exercise | 90 |
| Texting Safety Discussion | Discussion | 30 |
| Think Before You Text | Application Exercise | 45 |

# EasyTech Online Safety Curriculum 6-8

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Texting Safety Discussion | Discussion | 30 |
| Think Before You Text | Application Exercise | 45 |
| Online Safety: Digital Citizenship | Lesson | 15 |
| Be Cyber Safe | Application Exercise | 45 |
| What's Private | Application Exercise | 90 |
| Don't Even Go There! | Application Exercise | 45 |
| Halt! Who Goes There? Avoiding Online Creeps | Application Exercise | 45 |
| Move It – Don't Lose It! | Application Exercise | 120 |
| Be an Open Book | Application Exercise | 45 |
| You Can't Scam Me | Application Exercise | 45 |

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Risk Watch! | Application Exercise | 35 |
| Have Fun, Keep Safe: Filters and Firewalls | Application Exercise | 45 |
| Online Status Messages Discussion | Discussion | 30 |
| Understanding Identity Theft Discussion | Discussion | 15 |
| Online Safety: Dealing with Cyberbullying | Lesson | 15 |
| The Bystander Effect | Application Exercise | 80 |
| Cyber Bullying Case Study: Beyond the Victim | Application Exercise | 90 |
| Take Two: Recognize and Report Cyber Bullying | Application Exercise | 45 |
| Get the Word Out | Application Exercise | 45 |
| Online Ethics | Discussion | 45 |
| Online Safety: Ethical Use of Digital Resources | Lesson | 15 |
| Ethics and Consequences | Application Exercise | 45 |
| Digital Citizenship Quiz | Quiz | 15 |
| Share and Tell | Application Exercise | 45 |
| Internet Usage: Validity and Sourcing | Lesson | 20 |
| What a Cite! APA | Application Exercise | 45 |
| What a Cite! MLA | Application Exercise | 45 |
| Internet Usage: Navigating the World Wide Web | Lesson | 15 |

| ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|
| Online Communications: Online Personal Communication | Lesson | 15 |
| Internet Usage: Effective Search Strategies | Lesson | 15 |
| Online Communication: Sharing Safely Online | Lesson | 15 |
| Online Communication: Sharing and Collaborating Online | Lesson | 15 |
| Internet Usage: Being a Global Citizen with Mapping Tools | Lesson | 15 |
| Healthy Computing Discussion | Discussion | 30 |
| Summer Online Safety Presentation | Application Exercise | 90 |
| Summer Online Safety PSA | Application Exercise | 120 |

# EasyTech Online Safety Curriculum for Teachers & Parents

| AUDIENCE | ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|---|
| Teachers | EasyTech online Safety Guide for Teachers | Weblink | 10 |
| | Focus on Cyber Bullying Prevention | Activity | 2 |
| | Copyright in the Classroom – Fair Use | Application Exercise | 45 |
| | What Really Puts Your Students At Risk Online | Activity | 30 |

| AUDIENCE | ITEM TITLE | ITEM TYPE | TIME |
|---|---|---|---|
| Parents | EasyTech Cyberbullying Guide for Parents (English) | Weblink | 5 |
| | EasyTech Cyberbullying Guide for Parents (Spanish) | Weblink | 5 |
| | EasyTech Online Safety Guide for Parents (English) | Weblink | 5 |
| | EasyTech Online Safety Guide for Parents (Spanish) | Weblink | 5 |
| | Keeping Your Kids Safe Online | Activity | 5 |

ALLEGHANY
county public schools

**Netsmartz Safety Curriculum**

**100 Central Circle**
**P.O. Drawer 140**
**Low Moor, Virginia 24457**
**540/863-1809**
**540/863-1804 (fax)**

**www.alleghany.k12.va.us**

# Introduction

The instructional staff of Alleghany County Public Schools believes that the Internet has a profound influence on education and that it has the potential to positively impact a student's academic achievement. Additionally, the instructional staff acknowledges that the high-speed Internet has made the World Wide Web more interactive and that it has expanded communication possibilities beyond the written word. Furthermore, the instructional staff recognizes that students tend to adopt new technologies quickly and that many of them do not have the experience or knowledge to understand the potential risks. Therefore, the instructional staff believes that parents, educators, and community members must encourage students to take advantage of the Internet's benefits while reducing its risks.

Alleghany County Public Schools has an Internet acceptable use policy that contains an Internet safety component and the division maintains current filtering software in an effort to reduce the risks associated with Internet use. In addition, a program for integrating Internet safety had been developed and infused into the core curriculum. The goal of these efforts is to help protect young people from online dangers.

This document contains the Alleghany County Public Schools Internet Safety Curriculum for grades K-12. When students use the Internet in the classroom, teachers remind students of the rules outlined in the Acceptable Use Policy, discuss techniques for evaluating information from Web pages, review the potential dangers of using Web pages or e-mail for communication, and note proper precautions to take as well as a appropriate steps to take if they encounter a problem by infusing age-appropriate lessons into the core curriculum. The overall goal is to help students internalize these messages by constantly repeating the cybersafety elements.

# Overview

This document is divided into three sections. The first section outlines the teacher training component which includes the methodology, resources for the instructional staff, and related standards of learning. The second section contains an overview of the complete K-12 curriculum. The third and final section includes a detailed description of the grade-by-grade Internet Safety Curriculum.

| Teacher Training Components | | |
|---|---|---|
| Methodology | Resources | Related Standards of Learning |
| • All teachers attend in in-service by TTRT on Internet safety for general content knowledge<br><br>• All teachers may request one-on-one instructional support from TTRT on grade level specific curriculum content<br><br>• All teachers review and sign the Acceptable Use Policy and review the appropriate components with their students<br><br>• All teachers are required to document Internet safety instruction in their daily lesson plan books<br><br>• All teachers are trained in the use of the NetSmartz.org curriculum as it relates to the core curriculum<br><br>• All teachers are encouraged to make use of teachable moments as they relate to Internet safety | • The Virginia Department of Education's Internet Safety page<br><br>• www.netsmartz.org<br><br>• Virginia Technology Standards for Students and Instructional Personnel<br><br>• iSafe.org<br><br>• CyberSmart Curriculum | • CyberSmart's alignment of Virginia K-8 Sol's and Internet Safety<br><br>• C/T K-2.1, 2.2, 2.3, 2.4, 2.7<br><br>• C/T 3-5.3, 5.4<br><br>• C/T 6.8.3 (a,b), 8.4 (a,b), 8.5 (a,b)<br><br>• C/T 9-12.3, 12.4, 12.6, 12.7 |

## Curriculum Overview
## Grades K-2

| GRADE | GOAL | TOPIC | OBJECTIVES |
|---|---|---|---|
| K-2 | Know the Rules | Check First | Recognize the need to check with parent or other trusted adult before going anywhere, helping anyone, accepting anything, getting into a car, or leaving with anyone. |
| K-2 | Know the Rules | Take a Friend | Recognize the importance of taking a friend when going places or playing outside. |
| K-2 | Know the Rules | Tell People "No" | Understand what to do if someone tries to touch them in ways that make them feel scared, uncomfortable, or confused. |
| K-2 | Know the Rules | Tell a Trusted Adult | Recognize the need to tell a parent, guardian or other trusted adult if anything happens to them. |
| K-2 | Develop Internet Awareness | Chat Abbreviation | Recognize the need to be Net smart |
| K-2 | Develop Internet Awareness | Chat Abbreviation | Recognize the need to be Net smart in various situations |
| K-2 | Develop Internet Awareness | Instant Messaging | Recognize the dangers of sharing personal information online |
| K-2 | Develop Internet Awareness | Viruses Damage Computers | Recognize how viruses are spread and how they can damage computers |
| K-2 | Understand the World Wide Web | World Wide Web | Recognize that the World Wide Web connects us from person to person by comparing it to a spider web |
| K-2 | Understand the World Wide Web | Dangers of the World Wide Web | Recognize the potential dangers associated with the World Wide Web |
| K-2 | Understand the World Wide Web | Dangers of the World Wide Web | Recognize the potential dangers on the Internet |

## Curriculum Overview
## Grades 3-4

| GRADE | GOAL | TOPIC | OBJECTIVES |
|---|---|---|---|
| 3-4 | Know the Rules | Check First | Recognize the need to check with parent or other trusted adult before going anywhere, helping anyone, accepting anything, getting into a car, or leaving with anyone. |
| 3-4 | Know the Rules | Take a Friend | Recognize the importance of taking a friend when going places or playing outside. |
| 3-4 | Know the Rules | Tell People "No" | Understand what to do if someone tries to touch them in ways that make them feel scared, uncomfortable, or confused. |
| 3-4 | Know the Rules | Tell a Trusted Adult | Recognize the need to tell a parent, guardian, or other trusted adult if anything happens to them |
| 3-4 | Develop Internet Awareness | Chat Abbreviation | Recognize the need to be Net smart |
| 3-4 | Develop Internet Awareness | Instant Messaging | Recognize the dangers associated with sharing personal information online |
| 3-4 | Develop Internet Awareness | Computer Viruses | Recognize what a computer virus is, how they spread from computer to computer, and how they can damage computers |
| 3-4 | Develop Internet Awareness | Passwords | Recognize how passwords work and how important it is to have a password that no one can guess |
| 3-4 | Develop Internet Awareness | Passwords | Understand the concept of non-identifying information and how to create a good password |
| 3-4 | Develop Internet Awareness | Passwords | Develop strategies for creating strong passwords and review the importance of keeping a password private |
| 3-4 | Understand the World Wide Web | Internet Dangers | Recognize dangers on the Internet |
| 3-4 | Understand the World Wide Web | Internet Dangers | Reinforce the ability to recognize dangers on the Internet |
| 3-4 | Understand the World Wide Web | Internet Dangers | Recognize that people are not always who they say they are on the Internet and identify personal information that should not be shared on the Internet |

## Curriculum Overview
## Grades 5-6

| GRADE | GOAL | TOPIC | OBJECTIVES |
|---|---|---|---|
| 5-6 | Know the Rules | Check First | Recognize the need to check with parent or other trusted adult before going anywhere, helping anyone, accepting anything, getting into a car, or leaving with anyone. |
| 5-6 | Know the Rules | Take a Friend | Recognize the importance of taking a friend when going places or playing outside. |
| 5-6 | Know the Rules | Tell People "No" | Understand what to do if someone tries to touch them in ways that make them feel scared, uncomfortable, or confused. |
| 5-6 | Know the Rules | Tell a Trusted Adult | Recognize the need to tell a parent, guardian, or other trusted adult if anything happens to them |
| 5-6 | Develop Internet Awareness | Chat Abbreviations | Review the basic Internet safety rules |
| 5-6 | Develop Internet Awareness | Instant Messaging | Recognize how difficult it is to tell when someone is misrepresenting themselves online |
| 5-6 | Develop Internet Awareness | Viruses | Recognize how viruses can affect their computer and how easy it is for a virus to spread |
| 5-6 | Understand the World Wide Web | Internet Dangers | Recognize possible dangers on the Internet |
| 5-6 | Understand the World Wide Web | Internet Dangers | Recognize that people are not always who they say they are on the Internet |
| 5-6 | Understand the World Wide Web | Internet Dangers | Identify safe and unsafe online behaviors |
| 5-6 | Understand the World Wide Web | Online Information | Distinguish between appropriate and inappropriate information to share online |
| 5-6 | Understand the World Wide Web | Social Networking | Identify rules that should be followed when adding "friends" on social networking sites |
| 5-6 | Understand the World Wide Web | Cyberbullying | Identify the various forms of Cyberbullying, their effects and consequences |

## Curriculum Overview
## Grades 7-8

| GRADE | GOAL | TOPIC | OBJECTIVES |
|---|---|---|---|
| 7-8 | Develop Internet Awareness | Personal Information | Recognize why it is important to protect personal information while online |
| 7-8 | Develop Internet Awareness | Password Protection | Recognize why it is important to protect passwords from everyone except parents or guardians |
| 7-8 | Understand the World Wide Web | Cybebullying | Recognize how information from friend to friend can become information shared with everyone on the World Wide Web |
| 7-8 | Understand the World Wide Web | Decision-making | Recognize how decisions made while using the Internet can have serious consequences |
| 7-8 | Understand the World Wide Web | Promises and Intentions | Recognize the difference between promises and intentions of an unknown person vs. those made by a trusted adult and how to know whom to turn to when feeling sad and alone |
| 7-8 | Understand the World Wide Web | Vocabulary | Recognize and use vocabulary dealing with Internet behavior i.e. flaming and cyberstalking |
| 7-8 | Understand the World Wide Web | Communication | Recognize the need to communicate with a trusted adult when confronted by unknown persons online |
| 7-8 | Understand the World Wide Web | Cyberbullying | Understand how to protect themselves against cyberbullies |
| 7-8 | Understand the World Wide Web | Social Networking | Identify rules that should be followed when adding "friends" on social networking sties |
| 7-8 | Understand the World Wide Web | Cyberbullying | Understand Cyberbullying, its effects and possible consequences |

## Curriculum Overview
## Grades 9-12

| GRADE | GOAL | TOPIC | OBJECTIVES |
|---|---|---|---|
| 9-12 | Develop Internet Awareness | Personal Information | Recognize how to avoid the negative consequences associated with giving out personal information and the need to maintain privacy on the Internet |
| 9-12 | Understand the World Wide Web | Cyberbullying | Recognize the consequences of giving out a password to anyone other than parents or guardians |
| 9-12 | Understand the World Wide Web | Cyberbullying | Recognize the positive and negative aspects of sharing information on the Internet |
| 9-12 | Understand the World Wide Web | Online Acquaintances | Recognize the consequences of meeting an unknown person who was met on the Internet and the importance of communicating with a trusted adult |

## Internet Safety Curriculum Detail

### Grades K-5

At the elementary level, Internet safety can be condensed into four general categories which encompass the NetSmartz goals and topics in the Curriculum Overview, and align with Virginia SOLs where indicated. This curriculum includes the Virginia Department of Education Internet Safety Guidelines, ACPS curriculum materials, and other Internet safety resources. It offers opportunities for teachers to incorporate internet safety as they teach content relating to a variety of SOLs.

Revisions: re-linked, updated links, additions

Introduction to the Internet

Computer Rules & Ethics

- Follow the Rules
- Character Counts
- Property Rights (intellectual property, viruses)

Personal Safety

- Protect Identity/Passwords
- Social Networking
- Cyberbullying
- Gaming

Online Safety Strategies

- Problem-solving strategies
- Identify helpful resources
- Peer-pressure strategies
- Strategies for handling conflict

Media & Information Literacy

- Separate fact from fiction
- Evaluate websites
- Propaganda
- Recognize commercial intentions

# All Elementary Grades

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Computer Rules & Ethics | | | | |
| | Follow the Rules | | C/T K-2.3<br>C/T 3-5.4 | Follow the district's Acceptable Use Policy; practice safety rules everywhere, including on the computer; obey rules posted in the classroom |
| K-5 | AUP (Acceptable Use Policy) | | | Discuss at the beginning of the school year when students return signed AUP<br>AUP Agreement on the ACPS website<br>It refers to this policy in Policy Manual:<br>Acceptable Computer System Use<br>*Also referred to in Student/Parent Handbook |
| K-5 | Internet rules when using classroom computers | All | | Internet Safety Rules & Pledges (Primary/Intermediate)<br>Download video: Know the Rules<br>Kidsmart: Being Smart Rules |
| K-5 | Internet rules when using library computers | Lib Media | | Post and discuss rules pertaining to use of library computers. Limit to kid-friendly search engines and stress Internet safety rules. |
| | Character Counts | | | Exhibit the 6 pillars of character when interacting on computers; be a good netcitizen; respect others when communicating electronically |
| K-5 | | All: Character Counts | | Discuss responsibility, trustworthiness, caring, respect, fairness, citizenship in relation to school/class/Internet rules |

# Grades K-2

## An Introduction to the Internet can be added for younger students

| Introduction to the Internet | | | | |
|---|---|---|---|---|
| K-2 | Going Places Safely | | | http://www.commonsensemedia.org/educators/lesson/going-places-safely-k-2 A virtual field trip helps children experience the power and excitement of the Internet |
| K-2 | My Online Neighborhood<br><br>My Online Community | | | Students explore the concept of cyberspace as a means of connecting people and explain how the ability to communicate can unite a neighborhood or community.<br>My Online Community<br>Lesson video: What is the Internet? |

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Computer Rules & Ethics | | | | |
| | Follow the Rules | | C/T K-2.3 | Follow the district's Acceptable Use Policy; practice safety rules everywhere, even on the computer; obey rules posted in the classroom |
| K | Good citizen: follow rules and understand consequences of breaking rules | History: Civics | K.8 | When showing them websites, mention that when they get on the Internet when they're older, they must have an adult with them |
| K | Need for rules/practices | Health-PE | K.3 | Include Internet rules when discussing school rules |
| K-3 | Respect for rules/laws | Guidance | EP1 (K-3) | Include Internet rules when discussing school rules |
| | Know the Rules: Check First | | | Netsmartz Activity Card (Primary lesson plan): (scroll down to *Know the Rules* to download) Students watch the "Know the Rules" rap video. They discuss checking first with a parent, guardian, or another trusted adult before going anywhere, helping anyone, accepting anything, getting into a car, or leaving with anyone. |
| K<br><br>2<br><br>1 | Participate in creative dramatics<br><br>Create and participate in oral dramatic activities<br><br>Expand and use listening and speaking vocabularies | English-Oral Language<br><br><br><br>English-Oral Language | K.1<br><br>2.1<br><br>1.2 | Students practice what was discussed through teacher-guided group skits.<br><br>Students create their own Internet Safety skit with teacher assistance<br><br>Check the *Key Vocabulary* in CommonSense Media lessons |
| 1 | Good citizenship: recognize purpose of rules & practice self-control | History/Social Science: Civics | 1.10 | |
| K-2<br><br><br><br>2 | Know the Rules: Take a Friend<br><br><br><br>Demonstrate map skills by constructing simple maps, using title, map legend, and compass rose | <br><br><br><br>Geography | <br><br><br><br>2.6 | Netsmartz Activity Card (Primary lesson plan): (scroll down to *Take a Friend* to download) Students watch the "Know the Rules" rap video and discuss the importance of taking a friend with them when going places or playing outside.<br><br>Students make maps of their neighborhoods and highlight a path to a favorite play area where they would take a friend with them to be safer. |
| | Character Counts | | Exhibit the 6 pillars of character when interacting on computers; be a good netcitizen; respect others when communicating electronically | |
| K-3 | Exhibit principles of character (honesty, trustworthiness, respects others' rights and property, fairness, caring, citizenship, responsibility for actions) | Guidance | EP1 | Stress that character is important when dealing with people and materials on the Internet |

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| 1 | Demonstrate responsible behavior (respect for others, acceptance of responsibility) | PE/Health | 1.6 | When discussing responsible behavior and respect, mention respect for people you can't see (on the telephone, on the computer) and responsible behavior on the computer |
| 2 | Good citizenship: take responsibility for one's own actions | History/Social Science: Civics | 2.10 | Explain the responsibilities of a good (net) citizen (Digital Citizenship). Have students write a short story about cybercitizenship on Storybird. |
| 2-3 | Respect rights of others while using computers | All | | CommonSense Media lesson: Show Respect Online<br>Students discuss good manners in the real world and learn some do's and don'ts when using E-mail in cyberspace.<br>Respectful behavior when sending online messages (email) |
| Primary | Netiquette | | | Students learn the definition of netiquette and discuss the importance of having good manners online. |
| | Property Rights | | C/T K-2.3<br>C/T K-2.4 | Respect other peoples' computers; don't do anything to damage them, either physically or internally (e.g., downloading an email containing viruses, or a program containing spyware); also respect intellectual property rights (no pirating software or plagiarizing); give credit to sources of information (citations/bibliographies) |
| K-2 | Give credit for creative work | | | CommonSense Media: My Creative Work<br>Students learn the basics for crediting creative work |
| K-2 | Combat spread of viruses | | | Students discuss computer viruses by relating them to germs that spread between humans, using a "hands-on" activity to demonstrate this point. |
| 2<br><br>2-3 | Respect and protect the rights and property of others<br><br>e-Safety: Logo Design & Copyright | History/Social Science: Civics | 2.10 | Don't copy something from the internet and paste it to something on your computer without saying where you got it (copy and paste the URL too!) |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| | | | Personal Safety | |
| | Protect Identity & Passwords | | C/T K-2.3 | Information that is shared online-even with a friend--can find its way to strangers who might do you harm. Not giving out personal information and using passwords are ways to protect yourself. |
| K-2 | Do's and Don'ts of Online Information | | | Play (or read to younger children) Safety Land game |
| 2-3 | Private identity information<br><br>Write stories, letters, and simple explanations; use available technology | English: Writing | 2.11 | CommonSense Media lesson: Keep it Private<br>Students learn that many websites ask for information that is private and discuss how to responsibly handle such requests.<br><br>While co-writing a story online (Storybird), students learn an important safety rule: Before sharing private information in cyberspace, they must get permission from a parent or teacher.<br><br>MediaSmarts: Privacy Pirates: introduces children to the concept of online privacy and teaches them to distinguish between information that is appropriate to give out and information better kept private; interactive game |
| K-2 | Passwords | | | CommonSense Media: Powerful Passwords: students learn password tips, create their own passwords, test them with an interactive game |
| K-2 | Don't share personal information or passwords | | | Phishing means that someone is trying to play tricks on you to get your personal information from you, usually through email.<br>Don't share your email password with anyone except your parents |
| K-2 | Digital Footprint | | | Students follow the digital information trails of two fictional animals. They make observations about the size and content of each trail, and connect these observations by thinking critically about what kinds of information they want to leave behind. |
| | Social Networking | | | E-mailing, IM-ing, online gaming, chatting, and other ways of making and keeping up with friends online can be a lot of fun—but you have to be careful of people you have never actually met who may misrepresent themselves. Even people you know can use online communications to harass or bully you. |
| K-2 | Beware online strangers | | | You wouldn't talk to someone on the street that you don't know, and you shouldn't chat or respond to an instant message from someone that you don't know without asking your parents or another trusted adult. |
| K-2 | People who misrepresent themselves | | | Puppet show: an unseen person pretends to be someone else<br>And/or what can be done with digital images (yours and someone else's)? They can be altered to look like someone or something else |
| K-2 | Social Network sites | | | Review rules one needs to follow to stay safe on social network sites |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| | Cyberbullying | | | Online harrassment |
| 2 | effects of verbal and nonverbal aggressive behavior | PE/Health | 2.5a | Mention that this type of behavior can occur over the Internet or in email/IM |
| K-2 | | | | Cyberbullies send hurtful messages using the Internet or texting on cell phones to try to make other kids feel bad. |
| 2-3 | What can you do when someone is mean to you online? | | | Students learn that children sometimes can act like bullies when they are online. They explore what cyberbullying means and what they can do when they encounter it. |
| K-2 | e-Safety and Cyberbullying | | | Joe gets means texts about his brother |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Online Safety Strategies | | | | |
| | Problem-solving strategies | | | What should you do when you encounter a problem online? If you get to a website you know you shouldn't see? If a friendly person online pressures you to meet in person? If someone is bullying you? Some problems can be solved by just following the rules; some by strategies like just saying 'no'; others by knowing where to go and whom to ask |
| K-3 | Precautions/steps/ strategies if a problem is encountered online | All | | NetSmartz online game: Clicky's Quest (what to do when a 'web outlaw' is encountered)<br>(what to do in various situations on the web: use your NetSmartz) |
| | Identify helpful resources | | | Knowing safe ways to search online and safe sites to visit, as well as adults you can turn to, can help prevent or solve online problems |
| K-2 | Kid-friendly search engines | English | K.12 | CommonSense Media: A-B-C Searching<br>This idea uses safe-searching techniques with young children as part of a lesson on beginning sounds. |
| K-2 | Knowledge of acceptable sites to visit | | | Help students by showing them how to find Web sites that are good for kids.<br>You know that some sites are good for kids, but not all of them are safe places. If you get scared or worried by a Web site, just click "Back" or log off. |
| K-3 | Identify resource people in school and community: how to seek their help<br><br>Match simple descriptions of work people do with names of those jobs: community workers (..teacher..) | Guidance<br><br>HSS: economics | EP6<br><br>K.6 | Who you might ask/tell if you have a problem with people or websites on a computer<br><br>Ways in which the teacher can help if you are having problems on the computer |
| K-2 | Importance of seeking guidance from parents/trusted adults | PE/Health | K.5 | Students discuss telling a parent, guardian, or other trusted adult if anything happens to them. Students post word cards of possible trusted adults and then draw pictures of their own trusted adults on a "Trust Tree." |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Media/Information Literacy | | | | |
| | Separate fact from fiction | | | Unfortunately, not everything we read on the web is true. It's a long process to determine what is real and what is fiction or just someone's opinion. Practice and some evaluation techniques can help build the necessary skills. And you can always ask a trusted adult. |
| 1 | Fiction-nonfiction (starting K), distinguish between real and make-believe (people or information) | Library Media | 1.1 | Recognize information as real or not; characters, events in stories |
| | Evaluate websites | | | When students research on the Internet, they need to be reminded about how to evaluate Web sites for authenticity and factuality. |
| K-1 | Web page evaluation | | | CommonSense Media lesson Sites I Like: Children explore and evaluate a children's Web site, concluding that people's opinions about the quality and usefulness of a site will vary. An extension of this lesson is for children to evaluate 2 websites using recommended criteria and happy faces. |
| 1 | Use simple reference materials | English-Reading | 1.10 | Participate in an online dictionary scavenger hunt: Internet safety can be addressed when students are using online resources for research or interactive sites for practicing other skills. Remind students that they must follow the division's Acceptable Use Policy; and not all web sites contain truthful and accurate information. |
| | Propaganda | | | |
| 2 | Realize influence of print/electronic media | PE/Health | 2.4 | |
| | Recognize commercial intentions | | | |
| K-1<br><br>2-3 | Recognizing Commercial Intentions<br><br>Persuasive tactics (online ads) | | | MediaSmarts: CoCo's AdverSmarts helps children recognize the marketing techniques used on commercial websites that target children.<br><br>CommonSense Media lesson: Things for Sale<br>Students learn that some Web sites are advertising environments intended to promote good feelings about products. |
| 2 | Use oral language for different purposes: to inform, to persuade, and to entertain | English: Oral language | 2.3 | When helping students learn how to use oral language or how to write to inform, persuade, and entertain, point out how these techniques are often used on Web sites. |

# Grades 3-4

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Introduction to the Internet | | | | |
| 3-4 | Netsmartz: What you can do on the web | | | Digital Passport for Kids App (Google &iTunes): earn a digital passport for online safety through games & lessons, including passwords, cyberbullying, and privacy. |
| Computer Rules & Ethics | | | | |
| | Follow the Rules | | | NetSmartz Activity card: Know the Rules: Take a Friend<br><br>Students watch the "Know the Rules" rap video. They discuss checking first with a parent, guardian, or another trusted adult before going anywhere, helping anyone, accepting anything, getting into a car, or leaving with anyone. Students make safety books to reinforce these concepts and take them home to show their parent or guardian. |
| 3-4 | Safety rules | Civics | 3.10 | 3-6 Internet Safety Pledge (supplemental activity) |
| 3 | Explain purpose of rules and laws | | | Exhibit the 6 pillars of character when interacting on computers; be a good netcitizen; respect others when communicating electronically |
| | Character Counts | | | Common Sense Media lesson: Rings of Responsibility<br>Students learn what it means to take on responsibilities in both their offline and online communities as a way to learn how to be good digital citizens.<br><br>Digital Citizenship Pledge: good online behavior |
| 3-4 | Good digital citizenship | English-Oral Language | 4.1 | Common Sense Media lesson: Super Digital Citizen Students explore what it means to be responsible and respectful to their offline and online communities as a step toward learning how to be good digital citizens.Effective oral communications skills<br><br>Have a group discussion on what it means to be a good digital citizen. |
| 4-5 | | | C/T 3-5.3<br>C/T 3-5.5 | Respect other peoples' computers; don't do anything to damage them, either physically or internally (e.g., downloading an email containing viruses, or a program containing spyware); also respect intellectual property rights (no pirating software or plagiarizing); give credit to sources of information (citations/bibliographies) |

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| | Property Rights | | | Common Sense Media lesson: Whose Is it, Anyway? Students discuss rules for respecting property of others, and that copying and representing their work as yours is called plagiarism. |
| 3-4 | Respect property of others (works of others) | Library Media | 4.5 | When taking notes or doing research, it is not acceptable for students to copy and paste sentences and paragraphs from online articles into a word processing document and turn it in as their own work. |
| 4 | Recognize the importance of expressing information in own words | English: Writing | C/T 3-5.4<br>4.7 | KidsHealth lesson: KidSmart Music<br>Students about do's and don'ts of music downloading<br>Write paragraphs on related topics |
| 4-5 | Plagiarism and Copyright | English:media literacy SOLs | 3.11<br>4.9<br>5.9 | What is Plagiarism?<br>The difference between plagiarism and using one's own words; meaning and consequences of plagiarism |
| 3-5 | Identifying plagiarism | Library Media | 3.1 | Include bibliographic citation for information taken from Internet sources; remind students that this is part of copyright recognition |
| 3 | Identify components of a bibliographic record | | | Students discuss what viruses are, how quickly they can spread, and how computer viruses can damage computers. |
| 3-4 | Spread of viruses | | | |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Personal Safety | | | | |
| | Protect Identity & Passwords | | | Information that is shared online-even with a friend--can find its way to strangers who might do you harm. Not giving out personal information and using passwords are ways to protect yourself. |
| 3-5 | Private identity information | | | Common Sense Media lesson: Private and Personal Information<br>Students learn to think critically about the user information that some websites request or require. They learn the difference between private information and personal information, distinguishing what is safe and unsafe to share online. |
| | | | | Common Sense Media lesson: Privacy Rules |
| 3-4 | Student will write stories, letters, simple explanations, and short reports across all content areas; use available technology | English: Writing | 3.10 | Write story, explanation, or report about what is safe to share online |
| 3-4 | Your Digital Footprint | | | Everything you post online combines to make your digital footprint. Remember that what you share with your friends may also be viewed by people you don't know. And once it's online, it could be there forever. So think before you post. |
| 3-4 | What makes a good password | | | Students discuss the concept of non-identifying information and basic ideas for what makes up a good password. |
| 3-5 | | | | Common Sense Media: Strong Passwords<br>Students learn how to create secure passwords in order to protect their private information and accounts online |
| | Social Networking | | | E-mailing, IM-ing, online gaming, chatting, and other ways of making and keeping up with friends online can be a lot of fun—but you have to be careful of people you have never actually met who may misrepresent themselves. Even people you know can use online communications to harass or bully you. |
| 3-4 | Instant messaging/chat | | | Students learn how difficult it is to tell when someone is misrepresenting themselves online. |
| | Write descriptive paragraphs | English: Writing | 3.9 | Write a paragraph describing some of the situations you may encounter online. |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| | Write paragraphs | English: Writing | 4.7 | |
| 3-4 | Recognize dangers on the Internet | | | MediaSmarts Cybersense & Nonsense: Second Adventure of the 3 CyberPigs: three CyberPigs learn some important lessons about authenticating online information and observing rules of netiquette. They also learn how to distinguish between fact and opinion and how to recognize bias and harmful stereotyping in online content. As Les, Mo and Lil discover, "just because it's on the Internet, doesn't mean it's true |
| | Student will write stories, letters, simple explanations, and short reports across all content areas | English: Writing | 3.10 | Students write and illustrate a story about one of the CyberPigs. |
| 4 | Recognition of harmful or abusive relationships | PE/Health | 4.2d | Include these types of relationships online |
| 4-5 | Chat, messaging, email | | C/T 3-5.5 | Common Sense Media lesson: Talking Safely Online Students learn that the Internet is a great place to develop rewarding relationships. But they also learn not to reveal private information to a person they know only online<br><br>Kidsmart: Chat |
| 3-4 | Cyberbullying | | | Online harassment |
| 4<br><br>3-5<br><br>3-4 | Identification of bullying and aggressive behavior<br><br>Get the facts on cyberbullying | PE/Health | 4.2b | Discuss this type of behavior when encountered over the Internet or in email/IM/texting<br><br>App: Professor Garfield-Cyberbullying<br><br>Common Sense Media lesson: The Power of Words What should you do when someone uses mean or scary language on the Internet?<br><br>Common Sense Media Lesson: What's Cyberbullying?<br>Students learn the definition of cyberbullying and help the teacher fill in a Venn diagram that compares in-person bullying with cyberbullying. They then read a story of a student who is cyberbullied, identifying the players involved and how the target might feel. |

| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other websites |
|---|---|---|---|---|
| Online Safety Strategies | | | | |
| | Problem-solving strategies | | | What should you do when you encounter a problem online? If you get to a website you know you shouldn't see? If a friendly person online pressures you to meet in person? If someone is bullying you? Some problems can be solved by just following the rules; some by strategies like just saying 'no'; others by knowing where to go and whom to ask |
| 4-5 | Strategies for handling conflict | Guidance | EP11<br>EP12 | Stress to students that there are ways to handle online conflict as well |
| 3 | Process of resolving conflicts peacefully | PE/Health | 3.2b | |
| 4-5 | Recognize when someone/something online makes you uncomfortable<br><br>Use of descriptive words in writing | English: Writing | 4.7 | When you're online you may come across material that makes you feel uncomfortable or upset—what can you do to protect yourself?<br><br>Students consider some online scenarios and examine their personal comfort levels. They learn to recognize feelings of discomfort and responsibly manage their actions in cyberspace. Explore descriptive words for feelings. |
| | Identify helpful resources | | | Knowing safe ways to search online and safe sites to visit, as well as adults you can turn to, can help prevent or solve online problems |
| 3-4 | Safe searching online | | | Kidsmart: Safe Searching<br>Be smart when searching online |

| Media/Information Literacy | | | | |
|---|---|---|---|---|
| 3-4 | Separate fact from fiction | | | Unfortunately, not everything we read on the web is true. It's a long process to determine what is real and what is fiction or just someone's opinion. Practice and some evaluation techniques can help build the necessary skills. And you can always ask a trusted adult. |
| 3-4 | Fact-fiction | English | 3.6<br>4.5 | Students can apply nonfiction reading skills to information on Web sites, especially when identifying the author's purpose or distinguishing between fact and opinion.<br><br>App: Garfield Fact or Opinion<br><br>MediaSmarts: 2nd Adventure of the 3 Cyberpigs Distinguish between fact and opinion and recognize bias. |
| | Evaluate websites | | | When students research on the Internet, they need to be reminded about how to evaluate Web sites for authenticity and factuality. |
| 3-5 | Evaluate & synthesize information<br>Use available technology | English-Reading | 4.6<br>4.7 | Students discuss criteria for rating informational websites, then apply the criteria by examining and scoring an assigned site. They compare their results, and learn that all websites are not equally good sources of information. |
| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other websites |
| | Recognize commercial intentions | | | |
| 4-5 | Web advertising techniques | | | Cybersmart lesson:<br>Students explore how some Web sites are designed as advertising environments to entertain visitors while promoting advertisers' brands and products.<br><br>Common Sense Media lesson: Advertising Detectives<br>Students learn to recognize five different kinds of online ads prevalent on children's sites. They learn how to distinguish advertising content from other content on a website.<br><br>Common Sense Media lesson: Selling Sterotypes Students first watch and discuss a video of a little girl questioning why companies market boys' and girls' toys differently. Then they compare and contrast gender stereotypes portrayed in two LEGO® online activity zones. |

| | | | | |
|---|---|---|---|---|
| | Compare fact and opinion<br><br>Evaluate and synthesize information<br><br>Advertising stereotypes | English-Reading | 4.5<br><br>4.6 | Don't be fooled by free prizes! Before you enter a contest or give out any personal information, ask a parent for help. Free prizes may be a tricky way of finding out where you live so companies can sell you their products. |

# Grades 5-6

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| Computer Rules & Ethics | | | | |
| | Follow the Rules | | | Follow the district's Acceptable Use Policy; practice safety rules everywhere, even on the computer; obey rules posted in the classroom |
| 4-5 | Acceptable Use Policy | | | Acceptable Use Policy (AUP) contracts encourage responsible behavior by students and staff and give administrators enforceable rules for acceptable use of school computers. Students will interpret and make inferences about their school's AUP. |
| 5-6 | Safety rules<br><br>Write letters | <br><br>English: Writing | <br><br>5.9 | NetSmartz Activity Card: Know the Rules: Take a Friend<br>Student's watch the "Know the Rules" rap video and discuss the importance of taking a friend with them when going places or playing outside. Students read pretend headlines (situation cards) and<br><br>write or type a "Letter to the Editor" in response to the headlines. |
| 5-6 | Safety rules<br><br>Describe characteristics of poetry (rap lyrics?)<br>Write for a variety of purposes | <br><br>English: Reading<br>Writing<br>Poetry<br>Music | <br><br>5.5<br><br>5.8 | NetSmartz Activity Card: Know the Rules-Check First<br>Students watch the "Know the Rules" rap video. They discuss checking first with a parent, guardian, or another trusted adult before going anywhere, helping anyone, accepting anything, getting into a car, or leaving with anyone.<br><br>Students create their own safety rap lyrics in groups or individually, with assigned strips of sentences they much include in the rap. If time permits, students present their raps to the class. |
| | Character Counts | | | Exhibit the 6 pillars of character when interacting on computers; be a good netcitizen; respect others when communicating electronically |
| 4-5 | Responsibilities and privileges of cyber citizens | | | Cybersmart lesson:<br>Students learn that Internet users are citizens of a global community with the power to share ideas with people around the world.<br><br>Lesson in Action: Super Digital Citizen<br>Students design their own superhero and create a digital comic in which their superhero helps others and spreads digital citizenship; download video by right-clicking on it and selecting "save video as" from dropdown menu<br><br>Online projects: http://www.ciese.org/nationalprojects.html |

| Grade Level | Internet Safety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
|---|---|---|---|---|
| | | | | http://www.globalschoolnet.org/expeditions/ |
| 4-5 | Computer ethics | English-Oral Language | 5.3 | Cybersmart lesson: Do the Right Thing<br>Students learn that they should apply the same ethical principles in cyberspace that guide them in face-to-face situations.<br>Extension activity involves a mock trial.<br>Make planned oral presentations |
| | Property Rights | | C/T 3-5.4<br>C/T 3-5.5 | Respect other peoples' computers; don't do anything to damage them, either physically or internally (e.g., downloading an email containing viruses, or a program containing spyware); also respect intellectual property rights (no pirating software or plagiarizing); give credit to sources of information (citations/bibliographies) |
| 4-5 | Plagiarism and Copyright | English: Writing | 4.7 | Cybersmart lesson: Whose is it anyway? SEE 3-5 ABOVE<br>Students learn that, although the Internet makes it very easy, copying others' work and presenting it as one's own is unethical. They also learn about circumstances in which it is permissible to copy others' work.<br>Write paragraphs on related topics |
| 5 | Student will compile a bibliography on a given subject. | Library Media | 5.2 | Bibliographic citations are ways of giving credit to an author for his/her work; this includes anything copied from the Internet (pictures, music, text, video, etc.) |
| 5-6 | Copyright | | | All Right to Copy? Lesson and video teach students about copyright, and how it impacts them as both users and creators. |
| 5-6 | Spread of viruses | | | NetSmartz UYN Activity card: Don't Open that File<br>Students talk about how viruses can affect their computer, and play a group activity called "The Virus" to demonstrate how viruses spread. |

| Personal Safety | | | | |
|---|---|---|---|---|
| | Protect Identity | | | Information that is shared online-even with a friend--can find its way to strangers who might do you harm. Not giving out personal information and using passwords are ways to protect yourself. |
| 4-5 | Private Information | | | Cybersmart lesson: Private Information<br>By examining and identifying actual online requests for private information, students learn to apply the same safety rules in cyberspace as they use when encountering strangers in the face-to-face world. |
| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
| 4-5 | Privacy Rules | | | Cybersmart lesson: Privacy Rules!<br>Students learn that children's Web sites must protect their private information, and look for privacy policies and privacy seals of approval. |
| 4-6 | How to protect your online identity | | | Your Online Identity |
| | Social Networking | | | E-mailing, IM-ing, online gaming, chatting, and other ways of making and keeping up with friends online can be a lot of fun—but you have to be careful of people you have never actually met who may misrepresent themselves. Even people you know can use online communications to harass or bully you. |
| 5-6 | People who misrepresent themselves | Classroom | | NetSmartz Kids Activity Card: The Boy Who Loved IM 1<br>http://ncmec.vo.llnwd.net/o15/downloads/print/56boyim1.pdf<br>Students learn how difficult it is to tell when someone is misrepresenting themselves online and play a game to reinforce this. |
| 5-6 | Recognize dangers on the Internet | | | NetSmart Activity card: Meet the WizzyWigs 1:<br>http://ncmec.vo.llnwd.net/o15/downloads/print/56meetww1.pdf<br>Students watch "Meet the WizzyWigs" and are introduced to possible dangers on the Internet in the form of characters named the WizzyWigs. |
| 5-6 | Acceptable/non-acceptable social networking (email, IM, chat) | | | NetSmartz Activity Card Angela's Experience 1<br>Students watch "Angela's Experience" and discuss the safe and unsafe online behaviors they identified in the vignette.<br><br>NetSmartz Activity Card Post-to-be-Private 1<br>Students watch "Post-to-be Private" and discuss what rules should be followed when adding "friends" on social networking sites. They participate in an activity where they decide whether or not to add someone they don't know in real life to their friends list.<br>Students then write a persuasive letter to help a fictional friend realize potential dangers of using social networking sites. Upon completing these activities, |

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|---|---|---|---|---|
| | Write for a variety of purposes (Persuasive writing); use available technology | English-Writing | 5.8 | students will know to only accept "friends" on their social networking profiles that they know and trust in real life. |
| Grade Level | Cybersafety Elements/Standards* | Content Area | SOL | Lessons/Ideas from Netsmartz & Other Resources |
| 5-6 | Cyberbullying | | | http://mediasmarts.ca/lessonplan/introduction-cyberbullying-avatars-and-identity-lesson |

| Online Safety Strategies | | | | |
|---|---|---|---|---|
| | Problem-solving strategies | | | What should you do when you encounter a problem online? If you get to a website you know you shouldn't see? If a friendly person online pressures you to meet in person? If someone is bullying you? Some problems can be solved by just following the rules; some by strategies like just saying 'no'; others by knowing where to go and whom to ask |
| 4-5 | Understand problem-solving strategies | Guidance | EP9 (4-6) | |
| | Peer-pressure strategies | | | |
| 4-5 | Strategies for managing peer pressure | | | Dealing with peer pressure:<br>http://kidshealth.org/PageManager.jsp?dn=KidsHealth&lic=1&article_set=22003&cat_id=20069& |
| | Strategies for handling conflict | | | |
| 4-5 | Strategies for handling conflict | Guidance | EP11<br>EP12 | http://www.usemod.com/cgi-bin/mb.pl?ConflictResolution<br>NetSmartz Activity card:<br>Cyberbullying on the Internet: You Can't take it Back<br>(this lesson is listed under the middle school age level; however, if this is a problem at the elementary level, determine if it is appropriate for your class) |
| | Refusal skills | | | |
| 5-6 | Develop refusal skills | English: Writing | 5.8 | NetSmartz Activity Card Know the Rules: Tell People No<br>Students watch the "Know the Rules" rap video and discuss what to do if someone tries to touch them in ways that make them feel scared, uncomfortable, or confused.<br>They review "Body Language That Says 'NO'" and complete a writing activity in response to situation cards. Students practice saying "NO" with a partner as they act out their written responses to the situation cards. |
| | Identify helpful resources | | | Knowing safe ways to search online and safe sites to visit, as well as adults you can turn to, can help prevent or solve online problems |
| 5-6 | Trusted adults | | | NetSmartz: Students watch the "Tell a Trusted Adult" rap video.<br>They learn that it is important to tell a parent, guardian, or other trusted adult if anything happens to them. Students brainstorm and identify who the trusted adults are in their family, neighborhood, friend group, school, and community. They then complete a math project using drawing compasses to create their own "Circle of Trust." |

| Media/Information Literacy | | | | |
|---|---|---|---|---|
| | Evaluate websites | | | When students research on the Internet, they need to be reminded about how to evaluate Web sites for authenticity and factuality. |
| 5-6 | Target searches/evaluate websites | | | MediaSmarts Stay on the Path: Scavenger Hunt |
| 5-6 | Evaluate websites (created for 6-8 grade, determine if appropriate for your class) | | | |
| | Propaganda | | | |
| 4-5 | Propaganda tactics, misleading ads, etc.) | | | Doing research online: explore source of website (backtrack url), what is the agenda of the person promoting ideas; how different websites present the same topic |
| | Recognize commercial intentions | | | |
| 5 | Write for a variety of purposes: describe, inform, entertain, explain | English: Writing | 5.8 | When helping students learn how to use oral language or how to write to inform, persuade, and entertain, point out how these techniques are often used on Web sites. |
| 4-5 | Web advertising techniques | | | Cybersmart lesson:<br>Students explore how some Web sites are designed as advertising environments to entertain visitors while promoting advertisers' brands and products.<br>Don't be fooled by free prizes! Before you enter a contest or give out any personal information, ask a parent for help. Free prizes may be a tricky way of finding out where you live so companies can sell you their products. |

# Resources

## Other DOE resources used

Integrating NetSmartz: http://www.netsmartz.org/overview/howtousens.htm,

Health Education SOLs: http://www.doe.virginia.gov/testing/sol/standards_docs/health/index.shtml

Computer/Technology SOLs: http://www.doe.virginia.gov/testing/sol/standards_docs/computer-science/index.shtml

## NetSmartz.org resources

NetSmartz Activity Cards:
http://www.netsmartz.org/resources/activitycards.htm

NetSmartz Kids adventure games: http://www.netsmartzkids.org/AdventureGames

NetSmartz-what can be downloaded?: http://www.netsmartz.org/education/download/ : includes activity cards, other activities, games, and supplemental materials
NetSmartz rules and pledges: http://www.netsmartz.org/education/download/resource.html?catalog=/feeds/print_catalog.rss&item=rules-and-pledges

## Other Internet Safety online resources

Common Sense Media
Alignment & Standards: http://www.commonsensemedia.org/educators/classroom-curriculum/alignment
Scope and Sequence: http://www.commonsensemedia.org/educators/scope-and-sequence
Cyberbullying Toolkit: https://www.commonsensemedia.org/educators/cyberbullying-toolkit

Digital Citizenship: http://www.digitalcitizenship.nsw.edu.au/

Budd:e (Australian internet safety curriculum): https://budd-e.staysmartonline.gov.au/teachers/primary/index.html

BBC e-Safety & Cyberbullying: http://www.bbc.co.uk/education/topics/zcpp34j

MediaSmarts (Canada's Centre for Digital & Media Literacy): http://mediasmarts.ca/

Kidsmart: http://www.childnet.com

Childnet.com (Copyright): http://www.childnet.com/resources/downloading/what-is-copyright-and-why-is-it-important

Internet Safety Games:
Safety Land: http://www.att.com/Common/images/safety/game.html

Meatball Wiki: http://www.usemod.com/cgi-bin/mb.pl?ConflictResolution

# Middle School/High School Activities and Resources

| Activities<br>Grades 6-8 | | | |
|---|---|---|---|
| Core Subject | SOL | Activity | Resource |
| English | **6.2** | As students learn to express opinions with convincing arguments, emotions likely will become heated. Students should be apprised of the dangers of cyberbullying.<br><br>This lesson incorporates the teaching of bullying issues with literature. It easily can be extended to include cyberbullying. | http://cyber-safety.com/ |
| | **6.5, 7.6, 7.7, 8.6** | When students use online tools as reference resources, address the general safety issues appropriate for this age group.<br><br>In writing factual articles for an online encyclopedia, students learn about fact and opinion as found on the Internet. | www.NetSmartz.org<br>http://cyber-safety.com/<br>www.wikipedia.com |
| | **7.3, 8.3** | Students exploring persuasive messages can see how these same techniques are used in Web content and advertisements.<br><br>This lesson develops student awareness of the logical fallacies used in advertising. | www.NetSmartz.org<br>http://cyber-safety.com/<br><br>*Identifying and Understanding the Fallacies Used in Advertising*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=785* |
| | **8.6** | Students learning to analyze details for relevance and accuracy also can use these skills with Internet sites.<br><br>This lesson provides techniques for teachers to use when teaching students how to evaluate Web sites. | www.NetSmartz.org<br>http://www.library.cornell.edu/olinuris/ref/research/webeval.html<br>http://cyber-safety.com/<br><br>*Inquiry on the Internet: Evaluating Web Pages for a Class Collection*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=328* |

| | | | |
|---|---|---|---|
| | **7.8, 8.7** | If students are using online tools for written communications, address the general safety issues | www.NetSmartz.org<br>http://cyber-safety.com/ |
| History/Social Science | **USI.1, USII.1, CE.1, WH.1** | If students are using online resources for practicing skills or conducting research, address the general safety issues.<br><br>This lesson focuses on research skills and illustrates how predators easily can piece together information about students. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **USII.1, CE.1** | As students learn to express opinions with convincing arguments, emotions likely will become heated.<br>Students should be apprised of the dangers of cyberbullying. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **CE.7** | While studying the impact of media on public opinion and public policy, use examples from the Web.<br>Students doing research must learn to recognize techniques used to persuade others of a certain point of view. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **USII.1, CE.1** | Use the Web to underscore the concepts of interpreting ideas from different perspectives and separating fact from opinion. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **USII.8, CE.3, CE.8, CE.10, CE.11, CE.12** | Students exploring the impact of new technologies on our culture should examine safety issues related to the Internet and other electronic communication devices. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **CE.1** | Students using charts and spreadsheets to explore information could examine Internet cyber safety data. | www.NetSmartz.org<br>http://cyber-safety.com/<br>http://www.pewinternet.org/search.asp |

| | | | |
|---|---|---|---|
| Science | **6.1, LS.1, PS.1** | If students are using online tools for written communications, address the general safety issues appropriate for this age group.<br><br>This lesson, based on a doctored photograph of a shark, can help students understand that not all they see online is true. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **6.1** | Students learning how to think logically can evaluate information on the Internet for accuracy and logical validity.<br><br>This lesson in logical thinking helps students understand how online predators gather bits of information to target victims. | www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **6.9, PS. 1** | Students doing research must explore the difference between fact and opinion and recognize techniques used to persuade others of a certain point of view. | www.cnn.com<br>www.NetSmartz.org<br>http://cyber-safety.com/ |
| Math | **6.18, 6.19, 6.20, 7.16, 7.17, 7.18, 8.12, 8.13** | Students could use data about cyber safety issues.<br><br>Although this resource is not a lesson plan, it can provide a good reference for students exploring how data can be presented and misrepresented using charts and graphs. | www.NetSmartz.org<br>http://cyber-safety.com/<br>http://www.pewinternet.org/search.asp |

| Activities<br>Grades 9-12 | | | |
|---|---|---|---|
| Core Subject | SOL | Activity | Resource |
| English | **9.3** | Students exploring literary styles can see how these same styles are used in Web content and advertisements. | www.msn.com<br>www.wikipedia.com |
| | **9.4, 9.9, 10.11, 11.4, 11.10, 12.7, 12.8** | When students use online tools as reference resources, address the general safety issues appropriate for this age group.<br><br>This lesson focuses on the various forms of literacy required in today's world. A teacher easily can incorporate safety issues into this lesson plan. | www.NetSmartz.org<br>http://cyber-safety.com/<br><br>*Defining Literacy in a Digital World*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=915* |
| | **9.4, 10.9, 12.8** | Students can apply nonfiction reading skills to information on Web sites, especially when identifying the author's position and purpose. | www.cnn.com<br>www.NetSmartz.org<br>http://cyber-safety.com/ |
| | **12.1** | As students learn to express opinions with convincing arguments, emotions likely will become heated. Students should be apprised of the dangers of cyberbullying. Note: Cybersafety may be used as a topic<br>for presentations.<br><br>This lesson addresses music downloading and legal issues as topics for a persuasive debate activity. | www.cnn.com<br>www.NetSmartz.org<br>http://cyber-safety.com/<br><br>*Copyright Infringement or Not? The Debate over Downloading Music*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=855* |
| | **11.9** | If students are using online resources for practicing skills, address the general safety issues. | http://cyber-safety.com/<br><br>www.netsmartz.org |
| | **9.6, 10.7, 10.11, 11.7, 11.9, 12.7** | If students are using online tools for written communications, address the general safety issues. | www.NetSmartz.org<br>http://cyber-safety.com/<br><br>*Naming in the Digital World: Creating a Safe Persona on the Internet* |

| | | | |
|---|---|---|---|
| | | This lesson teaches students to create safe user names while learning about word connotations.<br><br>This lesson focuses on student communication with news outlets and blogs. Safety issues can be incorporated easily. Teachers may opt to use a blog simulation rather than a real blog. | *http://www.readwritethink.org/lessons/lesson_view.asp?id=843* |
| | **9.6, 10.7, 11.7, 12.7** | When writing, students can use Internet safety as a topic. Students use fiction to explore their assumptions about technology.<br><br>Students focus on their personal uses of technology and how these affect their lives. | *Paying Attention to Technology: Exploring a Fictional Technology*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=323*<br><br>*Paying Attention to Technology: Writing Technology Autobiographies*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=325*<br><br>www.netsmartz.org |
| | **9.3, 9.4, 11.2, 12.7** | When exploring the differences between fact and opinion, students should understand that Web sites do not always contain factual information and that certain techniques can be used to persuade others. | http://cyber-safety.com/<br><br>www.netsmartz.org |
| | **11.1, 11.7, 12.1** | Students learning to write persuasive messages can see how these same techniques are used in Web content and advertisements.<br><br>This lesson focuses generally on advertising techniques and can easily incorporate Internet-based advertising. | www.netsmartz.org<br><br>http://cyber-safety.com/ |
| | **9.4, 9.9, 10.11, 11.4, 11.10, 12.7, 12.8** | When students research on the Internet, remind them how to evaluate Web sites for authenticity and factuality. | http://www.library.cornell.edu/olinuris/ref/research/webeval.html<br><br>www.netsmartz.org |

| | | | |
|---|---|---|---|
| | **9.4, 11.2** | Students learning to analyze details for relevance and accuracy can use these same skills with Internet sites.<br><br>In this lesson, students learn about techniques used in advertising, including electronic ads. | *Identifying and Understanding the Fallacies Used in Advertising*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=785*<br>http://cyber-safety.com/ |
| English | **9.4, 9.9, 10.4, 10.11, 11.4, 11.10, 12.4. 12.7, 12.8** | Students exploring issues with research and for writing projects can use technology and ethics as a topic.<br><br>Students use their book review techniques to review a technology.<br><br>Students use the technology of a blog to write about how their own visions of a utopia would work. An alternative activity is included for divisions that do not have access to blog technology. | www.netsmartz.org<br><br>*Paying Attention to Technology: Reviewing a Technology*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=838*<br><br>*Blogtopia: Blogging About Your Own Utopia*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=942* |
| History/Social Science | **WHII.15, WG.7, VUS.1, VUS.14, GOVT.1, GOVT.18** | As students learn to express opinions with convincing arguments, emotions likely will become heated. Students should be apprised of the dangers of cyberbullying.<br><br>This lesson asks students to probe the issues involved with social networking sites, the government's role in protecting children, and their own role as citizens. | www.netsmartz.org<br><br>http://cyber-safety.com/ |
| | **WHII.1, WG.7, VUS.1, GOVT.1, GOVT.6** | Students doing research must explore the difference between fact and opinion and recognize techniques used to persuade others of a certain point of view. Students explore the nature of propaganda. Teachers can make a connection to information found on Web sites or in advertisements. | *Argument, Persuasion, or Propaganda?: Analyzing World War II Posters*<br>*http://www.readwritethink.org/lessons/lesson_view.asp?id=829*<br><br>http://cyber-safety.com/ |
| | **WHII.15, WG.9, WG.12, VUS.14, GOVT.9, GOVT.11** | Students exploring the impact of new technologies on our culture should examine safety issues related to the Internet and other electronic communication devices. | http://cyber-safety.com/<br><br>www.netsmartz.org |

| | | | |
|---|---|---|---|
| | | This lesson focuses on the government's role in protecting children, balanced with free-speech rights.<br><br>This lesson explores the various communication technologies available today and their impact on everyday life. | |
| Science | **ES.2, ES.11, ES.12, ES.14, BIO.1, BIO.8, PH.3, PH.4** | Remind students that personal observations and opinions can be communicated on the Internet as if they are fact. | http://www.library.cornell.edu/olinuris/ref/research/webeval.html<br>http://cyber-safety.com/<br>www.netsmartz.org |
| | **ES.1, BIO.1, CH.1, PH.1** | Teachers can help students understand that data collected and presented on the Internet may be flawed due to many variables, including equipment malfunction, human bias, or presentation mechanisms. | |
| | **ES.1, BIO.1, CH.1, PH.1** | If students are using online tools for written communications, address the general safety issues appropriate for this age group. | www.netsmartz.org<br>http://cyber-safety.com/ |
| | **ES.1, BIO.1** | As students learn to express opinions with convincing arguments, emotions likely will become heated.<br>Students should be apprised of the dangers of cyberbullying. | www.netsmartz.org<br>http://cyber-safety.com/ |
| Math | **A.4, A.5, AII/T.19, PS.1, PS.8, PS.9** | Students could use data about cyber safety issues. | www.netsmartz.org<br>http://cyber-safety.com/<br>http://www.pewinternet.org/search.asp |
| | **PS.9** | Students could use data about information found on the Internet. | www.netsmartz.org<br>http://cyber-safety.com/ |

| | | | |
|---|---|---|---|
| | **G.1** | Students can explore logical arguments using information about cyber safety. | www.netsmartz.org<br>http://cyber-safety.com/ |
| | **DM.12** | Students can use logic techniques to analyze arguments on Web sites.<br><br>This logical-thinking lesson can help students understand how online predators gather bits of information to target victims. | www.netsmartz.org<br>http://cyber-safety.com/ |

# School Technology Needs Assessment

**Compiled District**
**Data**
**Survey Dates: February 23, 2017 - March 8, 2017**

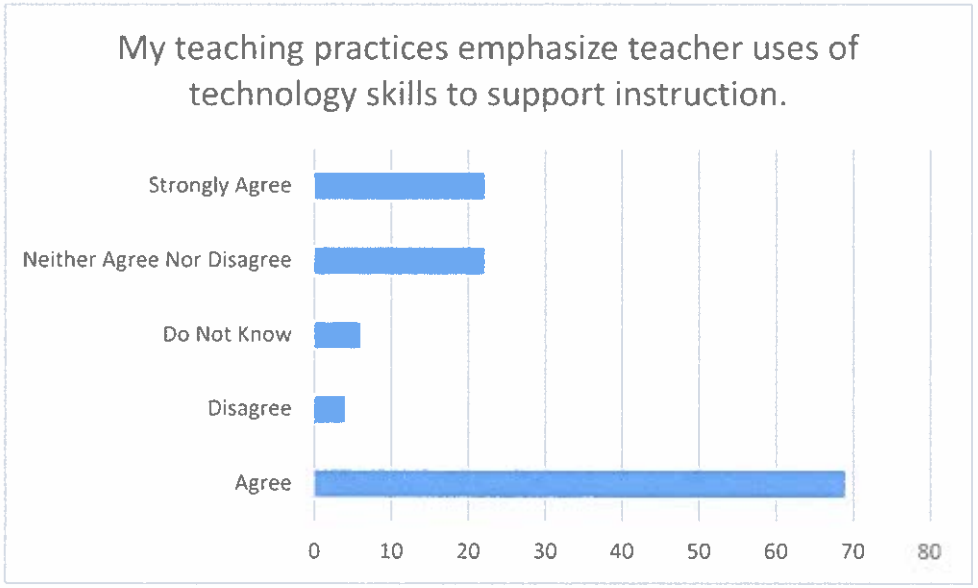
***Developed and Hosted by: The William and Ida Friday Institute for Educational Innovation***

***University of North Carolina at Greensboro***

## "In My School..."

**My teaching practices emphasize teacher uses of technology skills to support instruction.**

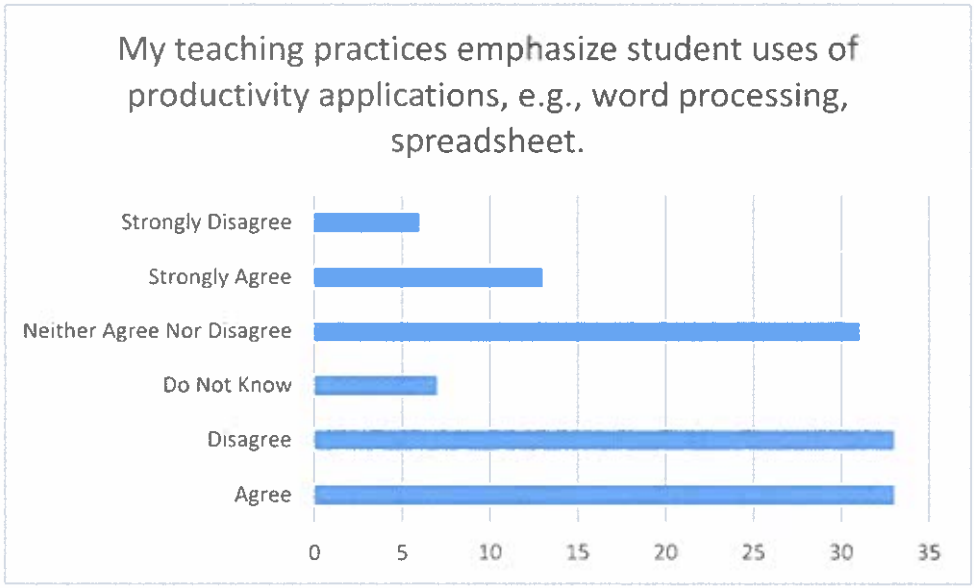
| 1 | |
|---|---|
| Agree | 69 |
| Disagree | 4 |
| Do Not Know | 6 |
| Neither Agree Nor Disagree | 22 |
| Strongly Agree | 22 |
| Grand Total | 123 |



**My teaching practices emphasize student uses of productivity applications, e.g., word processing, spreadsheet.**

**2**

| | |
|---|---|
| Agree | 33 |
| Disagree | 33 |
| Do Not Know | 7 |
| Neither Agree Nor Disagree | 31 |
| Strongly Agree | 13 |
| Strongly Disagree | 6 |
| Grand Total | 123 |

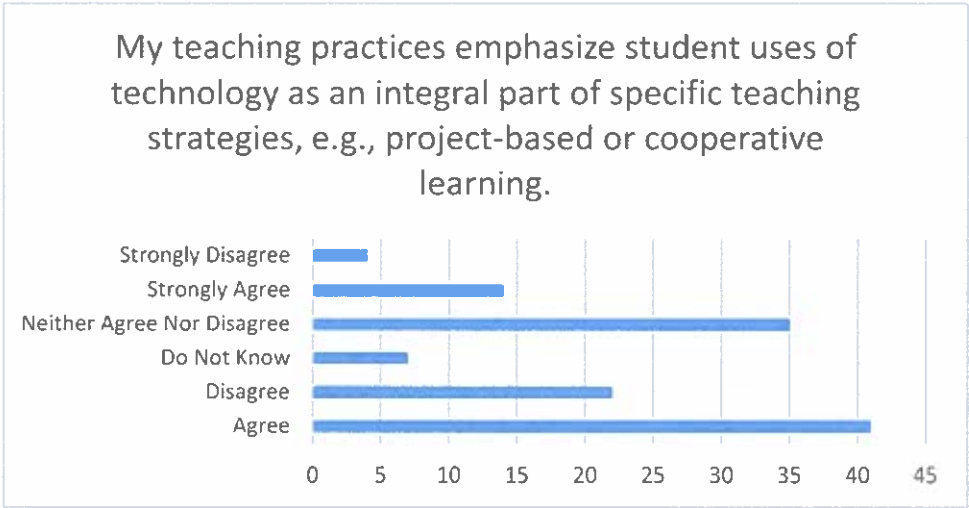



*Impact of Technology*
Teaching Practices

**My teaching practices emphasize student uses of technology as an integral part of specific teaching strategies, e.g., project-based or cooperative learning.**

**3**

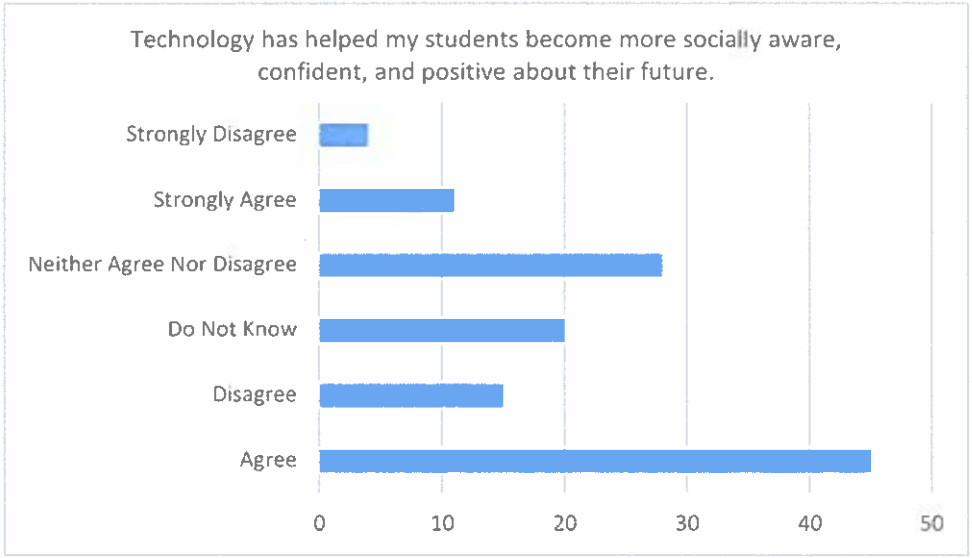
| | |
|---|---|
| Agree | 41 |
| Disagree | 22 |
| Do Not Know | 7 |
| Neither Agree Nor Disagree | 35 |
| Strongly Agree | 14 |
| Strongly Disagree | 4 |
| Grand Total | 123 |




*Impact of Technology*
Teaching Practices

**Technology has helped my students become more socially aware, confident, and positive about their future.**

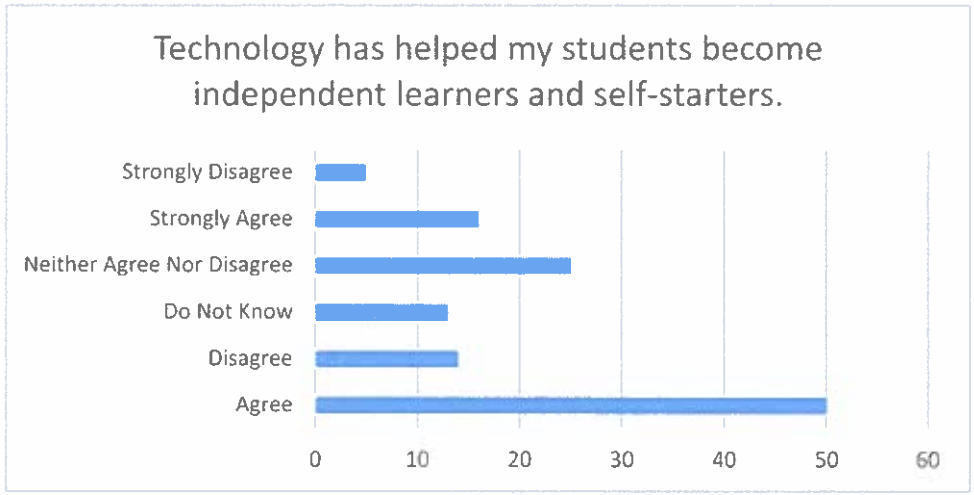
| 4 | |
|---|---|
| Agree | 45 |
| Disagree | 15 |
| Do Not Know | 20 |
| Neither Agree Nor Disagree | 28 |
| Strongly Agree | 11 |
| Strongly Disagree | 4 |
| Grand Total | 123 |




*Impact of Technology*
Student Outcomes

**Technology has helped my students become independent learners and self-starters.**

| 5 | |
|---|---|
| Agree | 50 |
| Disagree | 14 |
| Do Not Know | 13 |
| Neither Agree Nor Disagree | 25 |
| Strongly Agree | 16 |
| Strongly Disagree | 5 |
| Grand Total | 123 |



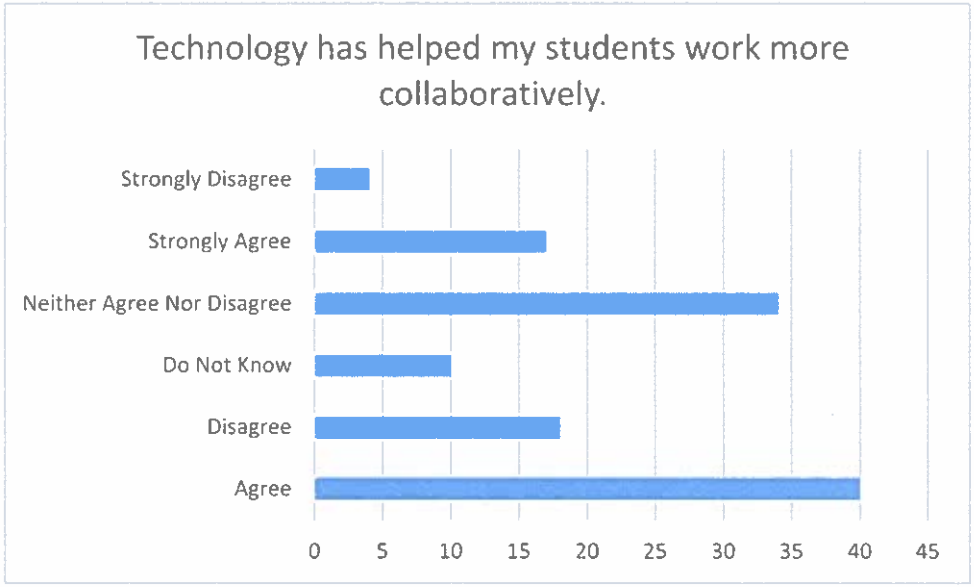

*Impact of Technology*

Student Outcomes

**Technology has helped my students work more collaboratively.**

**6**

| | |
|---|---|
| Agree | 40 |
| Disagree | 18 |
| Do Not Know | 10 |
| Neither Agree Nor Disagree | 34 |
| Strongly Agree | 17 |
| Strongly Disagree | 4 |
| Grand Total | 123 |

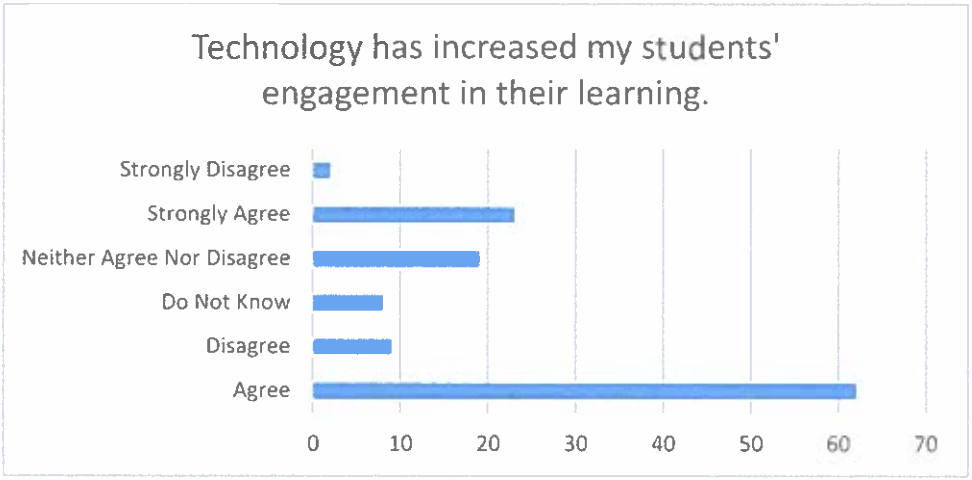



*Impact of Technology*
Student Outcomes

**Technology has increased my students' engagement in their learning.**

**7**

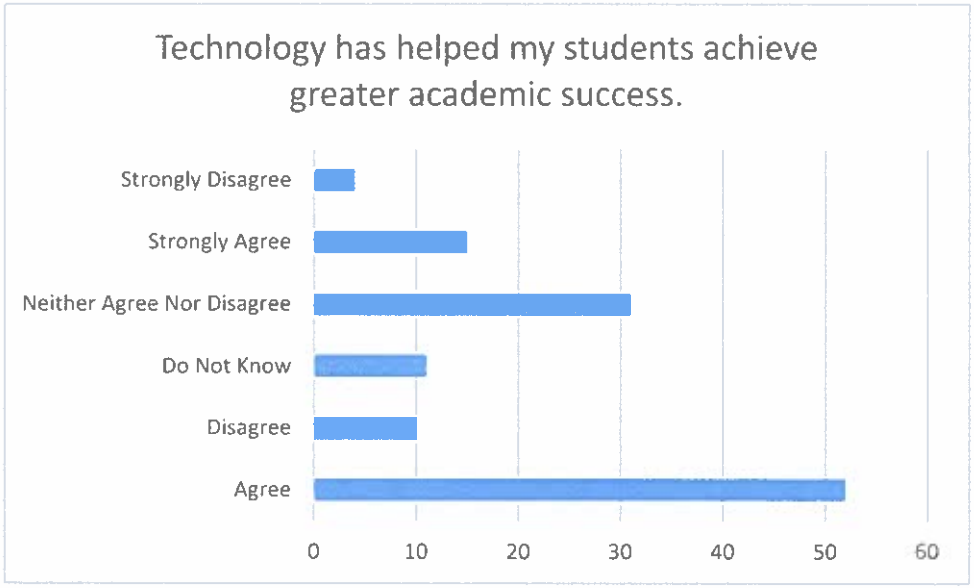
| | |
|---|---|
| Agree | 62 |
| Disagree | 9 |
| Do Not Know | 8 |
| Neither Agree Nor Disagree | 19 |
| Strongly Agree | 23 |
| Strongly Disagree | 2 |
| Grand Total | 123 |




*Impact of Technology*
Student Outcomes

**Technology has helped my students achieve greater academic success.**

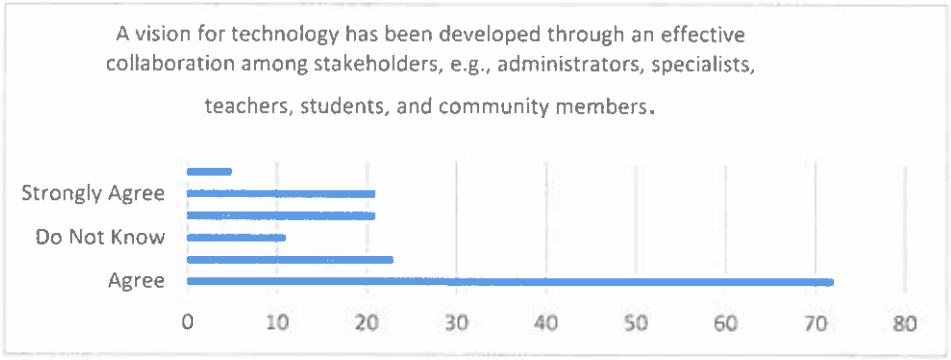
| 8 | |
|---|---|
| Agree | 52 |
| Disagree | 10 |
| Do Not Know | 11 |
| Neither Agree Nor Disagree | 31 |
| Strongly Agree | 15 |
| Strongly Disagree | 4 |
| Grand Total | 123 |




*Impact of Technology*
Student Outcomes

**A vision for technology has been developed through an effective collaboration among stakeholders, e.g., administrators, specialists, teachers, students, and community members.**

| 9 | |
|---|---|
| Agree | 72 |
| Disagree | 23 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 21 |
| Strongly Agree | 21 |
| Strongly Disagree | 5 |
| Grand Total | 153 |



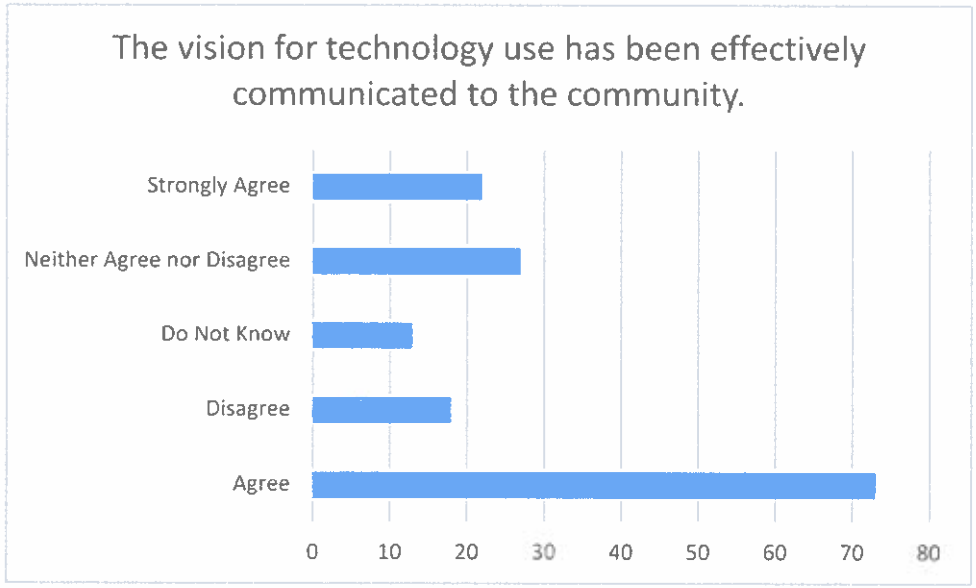

*Supportive Environment*

Vision/Shared Leadership

**The vision for technology use has been effectively communicated to the community.**

**10**

| | |
|---|---|
| Agree | 73 |
| Disagree | 18 |
| Do Not Know | 13 |
| Neither Agree nor Disagree | 27 |
| Strongly Agree | 22 |
| Grand Total | 153 |

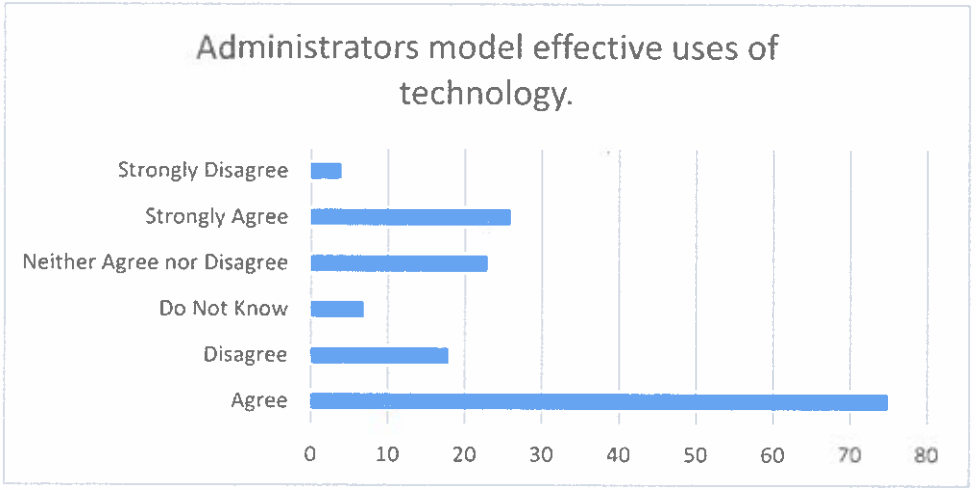



*Supportive Environment*
Vision/Shared Leadership

**Administrators model effective uses of technology.**

**11**

| | |
|---|---|
| Agree | 75 |
| Disagree | 18 |
| Do Not Know | 7 |
| Neither Agree nor Disagree | 23 |
| Strongly Agree | 26 |
| Strongly Disagree | 4 |
| Grand Total | 153 |

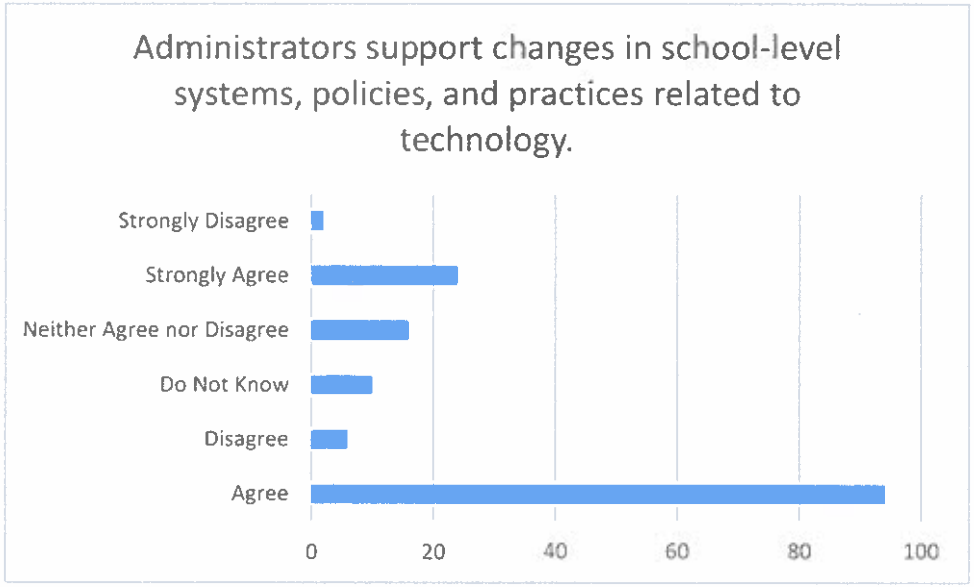



*Supportive Environment*
Vision/Shared Leadership

**Administrators support changes in school-level systems, policies, and practices related to technology.**

**12**

| | |
|---|---|
| Agree | 94 |
| Disagree | 6 |
| Do Not Know | 10 |
| Neither Agree nor Disagree | 16 |
| Strongly Agree | 24 |
| Strongly Disagree | 2 |
| Grand Total | 152 |



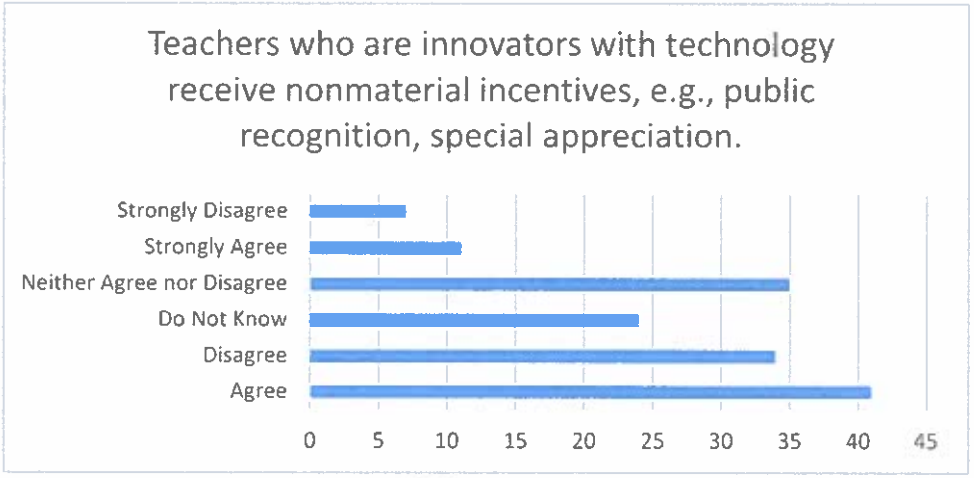

*Supportive Environment*

Vision/Shared Leadership

**Teachers who are innovators with technology receive nonmaterial incentives, e.g., public recognition, special appreciation.**

**13**

| | |
|---|---|
| Agree | 41 |
| Disagree | 34 |
| Do Not Know | 24 |
| Neither Agree nor Disagree | 35 |
| Strongly Agree | 11 |
| Strongly Disagree | 7 |
| Grand Total | 152 |

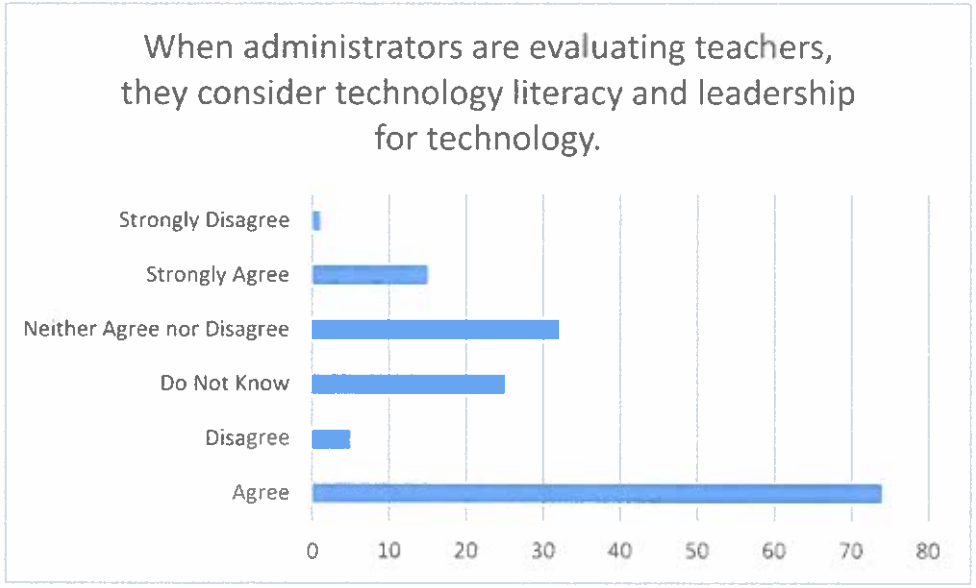



*Supportive Environment*

Vision/Shared Leadership

**When administrators are evaluating teachers, they consider technology literacy and leadership for technology.**

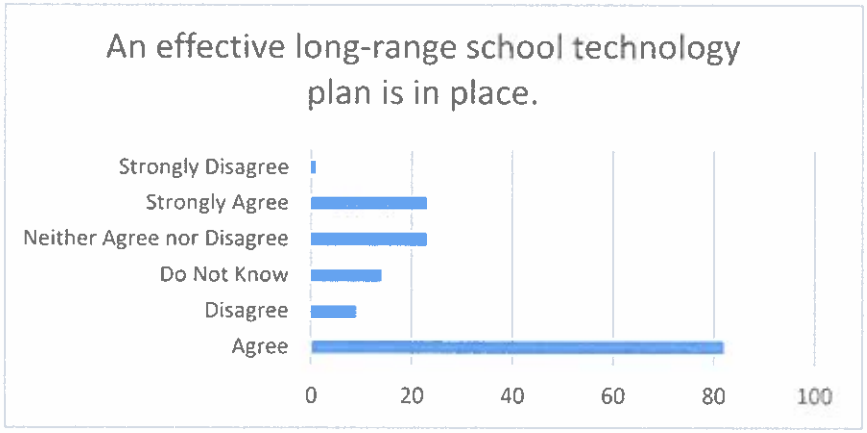
| 14 | |
|---|---|
| Agree | 74 |
| Disagree | 5 |
| Do Not Know | 25 |
| Neither Agree nor Disagree | 32 |
| Strongly Agree | 15 |
| Strongly Disagree | 1 |
| Grand Total | 152 |




Supportive Environment
Vision/Shared Leadership

**An effective long-range school technology plan is in place.**

| 15 | |
|---|---|
| Agree | 82 |
| Disagree | 9 |
| Do Not Know | 14 |
| Neither Agree nor Disagree | 23 |
| Strongly Agree | 23 |
| Strongly Disagree | 1 |
| Grand Total | 152 |

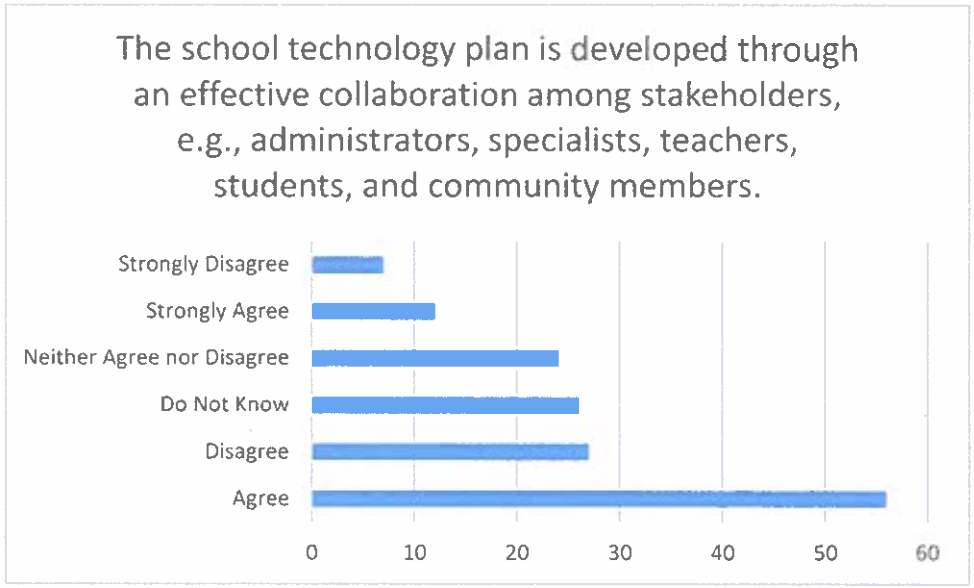



*Supportive Environment*
Organizational Conditions

**The school technology plan is developed through an effective collaboration among stakeholders, e.g., administrators, specialists, teachers, students, and community members.**

**16**

| | |
|---|---|
| Agree | 56 |
| Disagree | 27 |
| Do Not Know | 26 |
| Neither Agree nor Disagree | 24 |
| Strongly Agree | 12 |
| Strongly Disagree | 7 |
| Grand Total | 152 |

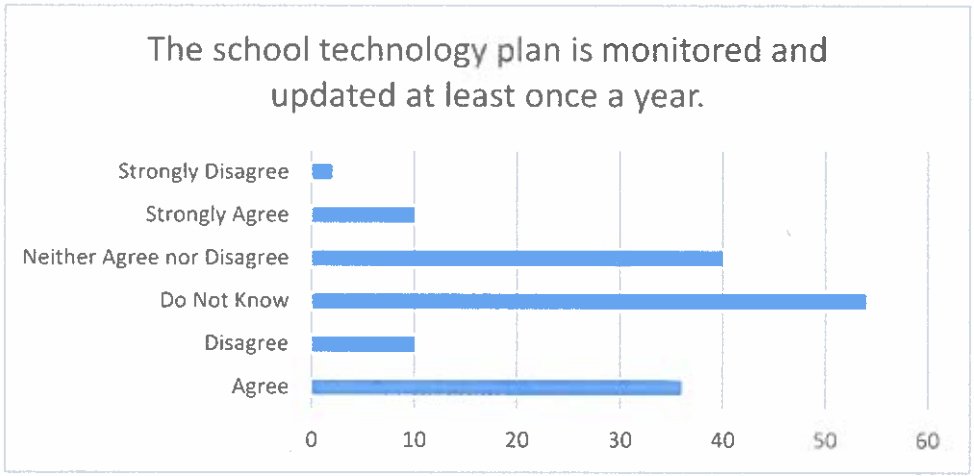



*Supportive Environment*
Organizational Conditions

**The school technology plan is monitored and updated at least once a year.**

**17**

| | |
|---|---|
| Agree | 36 |
| Disagree | 10 |
| Do Not Know | 54 |
| Neither Agree nor Disagree | 40 |
| Strongly Agree | 10 |
| Strongly Disagree | 2 |
| Grand Total | 152 |

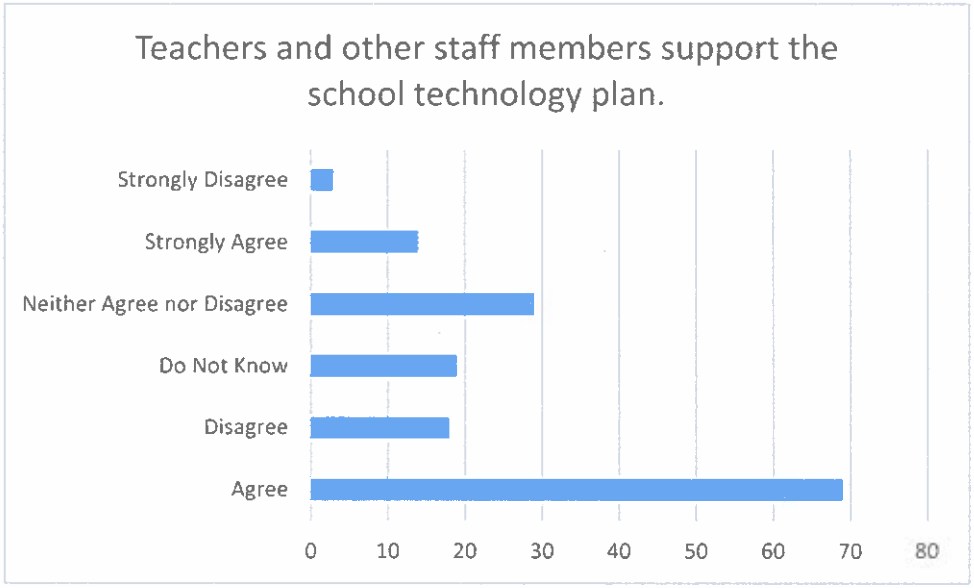



*Supportive Environment*

Organizational Conditions

**Teachers and other staff members support the school technology plan.**

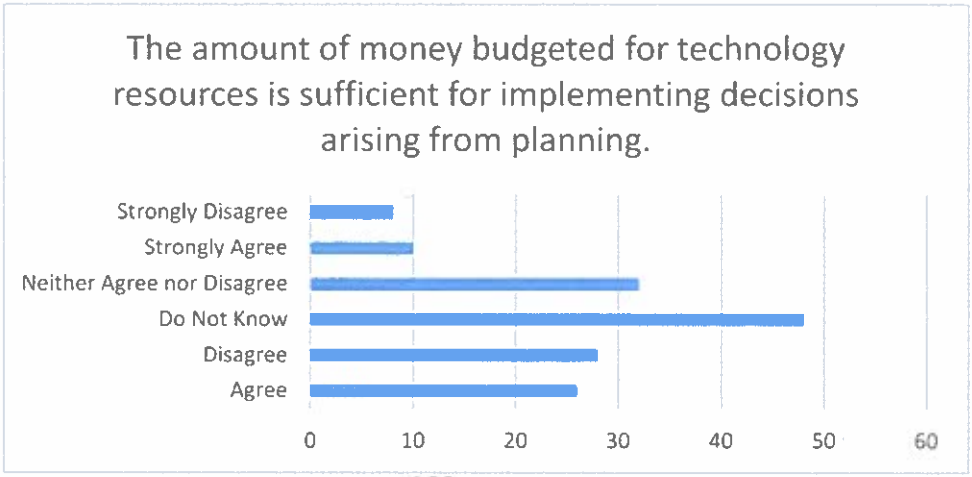
| **18** | |
|---|---|
| Agree | 69 |
| Disagree | 18 |
| Do Not Know | 19 |
| Neither Agree nor Disagree | 29 |
| Strongly Agree | 14 |
| Strongly Disagree | 3 |
| Grand Total | 152 |




*Supportive Environment*
Organizational Conditions

**The amount of money budgeted for technology resources is sufficient for implementing decisions arising from planning.**

| **19** | |
|---|---|
| Agree | 26 |
| Disagree | 28 |
| Do Not Know | 48 |
| Neither Agree nor Disagree | 32 |
| Strongly Agree | 10 |
| Strongly Disagree | 8 |
| Grand Total | 152 |



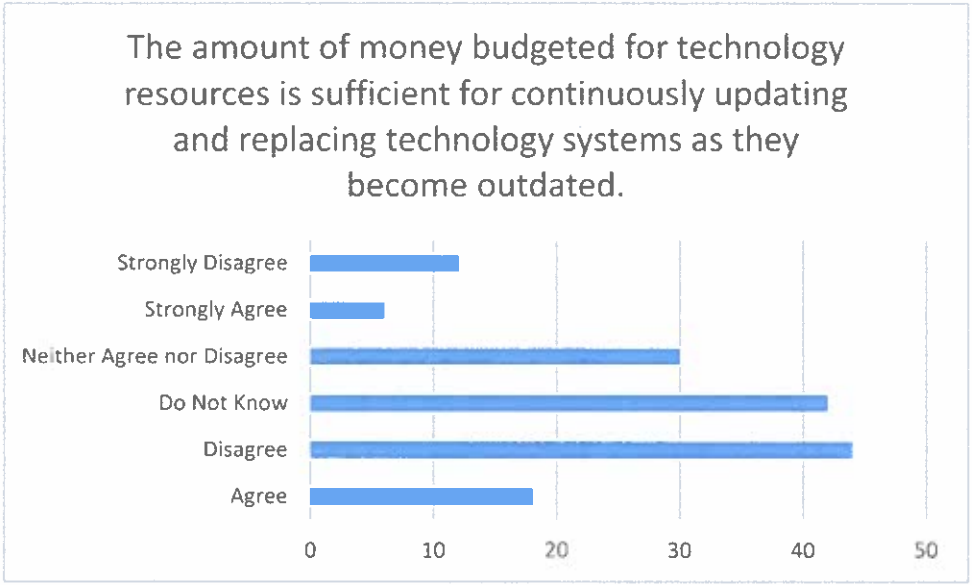

*Supportive Environment*

Organizational Conditions

**The amount of money budgeted for technology resources is sufficient for continuously updating and replacing technology systems as they become outdated.**

**20**

| | |
|---|---|
| Agree | 18 |
| Disagree | 44 |
| Do Not Know | 42 |
| Neither Agree nor Disagree | 30 |
| Strongly Agree | 6 |
| Strongly Disagree | 12 |
| Grand Total | 152 |

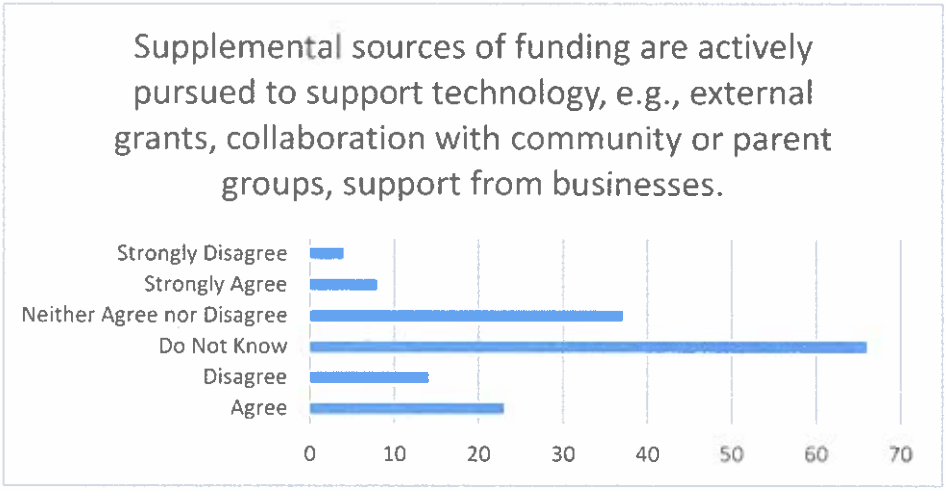



*Supportive Environment*
Organizational Conditions

**Supplemental sources of funding are actively pursued to support technology, e.g., external grants, collaboration with community or parent groups, support from businesses.**

**21**

| | |
|---|---|
| Agree | 23 |
| Disagree | 14 |
| Do Not Know | 66 |
| Neither Agree nor Disagree | 37 |
| Strongly Agree | 8 |
| Strongly Disagree | 4 |
| Grand Total | 152 |



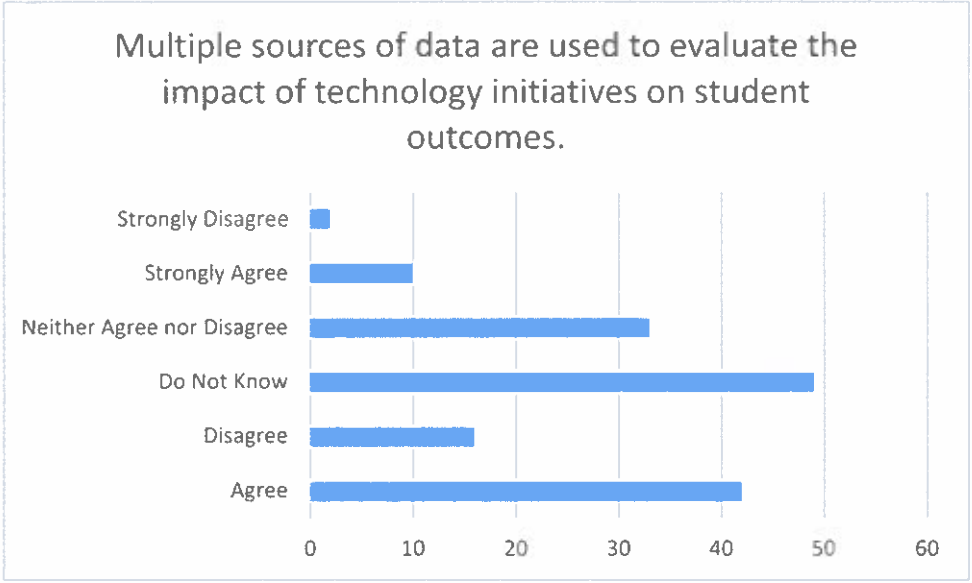

*Supportive Environment*

Organizational Conditions

**Multiple sources of data are used to evaluate the impact of technology initiatives on student outcomes.**

**22**

| | |
|---|---|
| Agree | 42 |
| Disagree | 16 |
| Do Not Know | 49 |
| Neither Agree nor Disagree | 33 |
| Strongly Agree | 10 |
| Strongly Disagree | 2 |
| Grand Total | 152 |

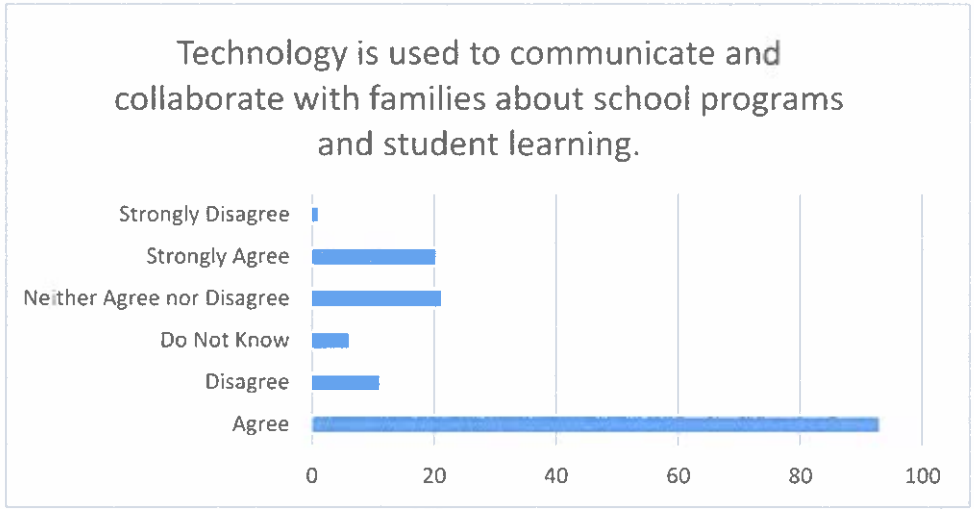



*Supportive Environment*
Organizational Conditions

**Technology is used to communicate and collaborate with families about school programs and student learning.**

**23**

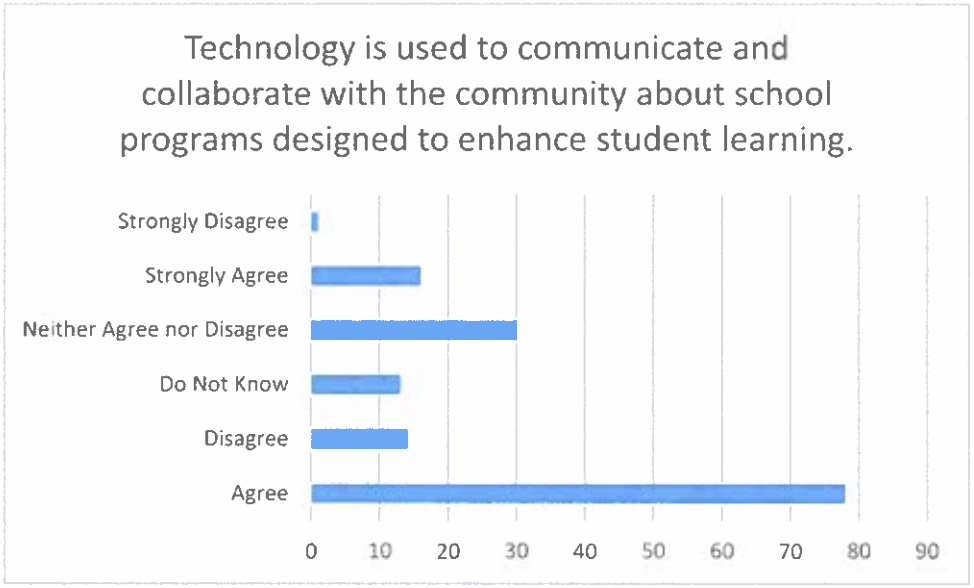
| | |
|---|---|
| Agree | 93 |
| Disagree | 11 |
| Do Not Know | 6 |
| Neither Agree nor Disagree | 21 |
| Strongly Agree | 20 |
| Strongly Disagree | 1 |
| Grand Total | 152 |




*Supportive Environment*
Organizational Conditions

**Technology is used to communicate and collaborate with the community about school programs designed to enhance student learning.**

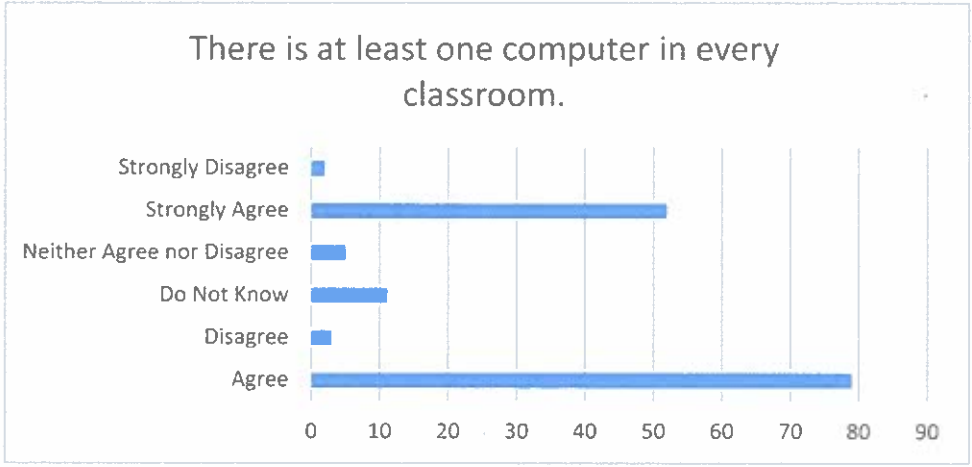
| **24** | |
|---|---|
| Agree | 78 |
| Disagree | 14 |
| Do Not Know | 13 |
| Neither Agree nor Disagree | 30 |
| Strongly Agree | 16 |
| Strongly Disagree | 1 |
| Grand Total | 152 |




Supportive Environment
Organizational Conditions

**There is at least one computer in every classroom.**

| **25** | |
|---|---|
| Agree | 79 |
| Disagree | 3 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 5 |
| Strongly Agree | 52 |
| Strongly Disagree | 2 |
| Grand Total | 152 |

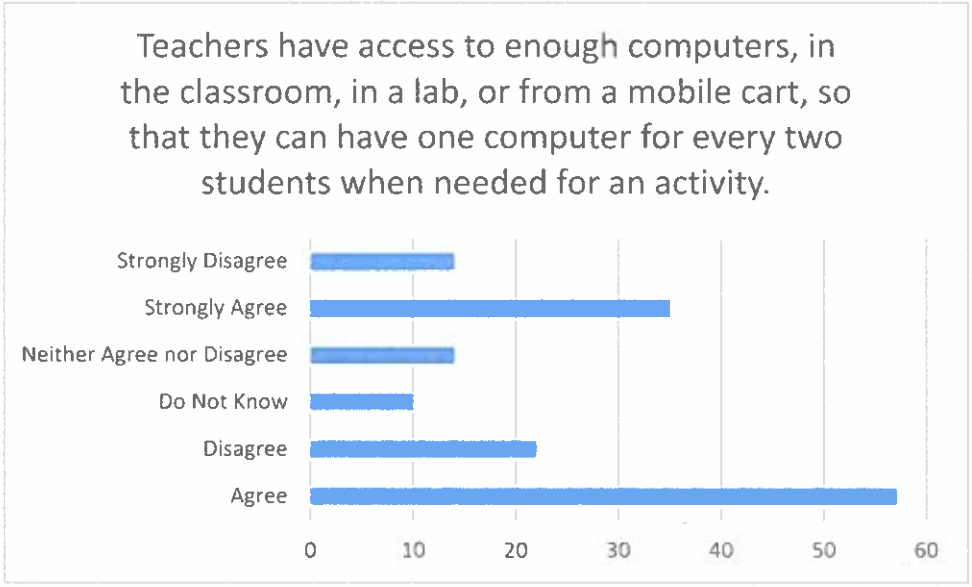



*Supportive Environment*

Infrastructure

**Teachers have access to enough computers, in the classroom, in a lab, or from a mobile cart, so that they can have one computer for every two students when needed for an activity.**

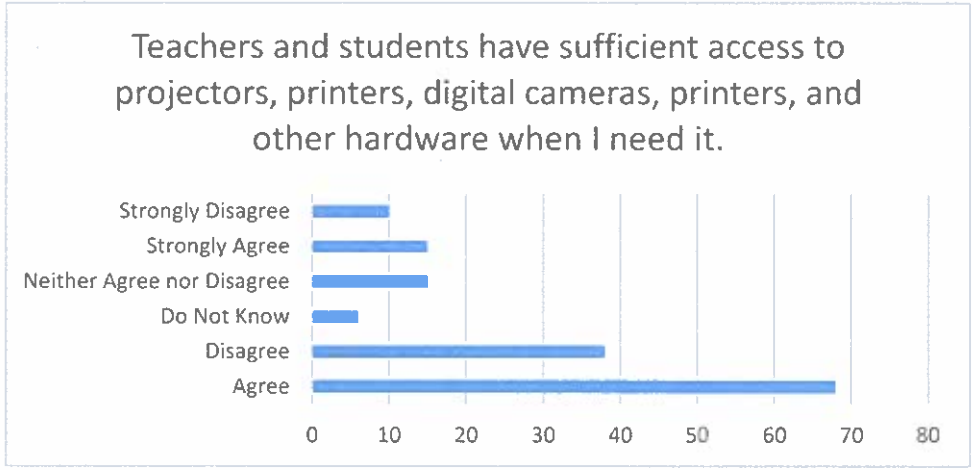
| **26** | |
|---|---|
| Agree | 57 |
| Disagree | 22 |
| Do Not Know | 10 |
| Neither Agree nor Disagree | 14 |
| Strongly Agree | 35 |
| Strongly Disagree | 14 |
| Grand Total | 152 |




*Supportive Environment*
Infrastructure

**Teachers and students have sufficient access to projectors, printers, digital cameras, printers, and other hardware when I need it.**

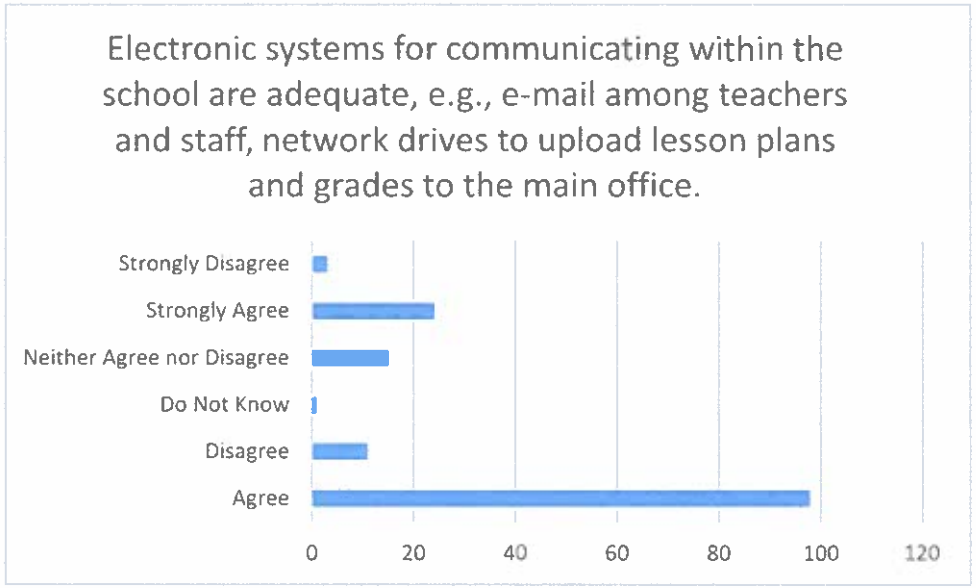
| **27** | |
|---|---|
| Agree | 68 |
| Disagree | 38 |
| Do Not Know | 6 |
| Neither Agree nor Disagree | 15 |
| Strongly Agree | 15 |
| Strongly Disagree | 10 |
| Grand Total | 152 |




*Supportive Environment*
Infrastructure

**Electronic systems for communicating within the school are adequate, e.g., e-mail among teachers and staff, network drives to upload lesson plans and grades to the main office.**

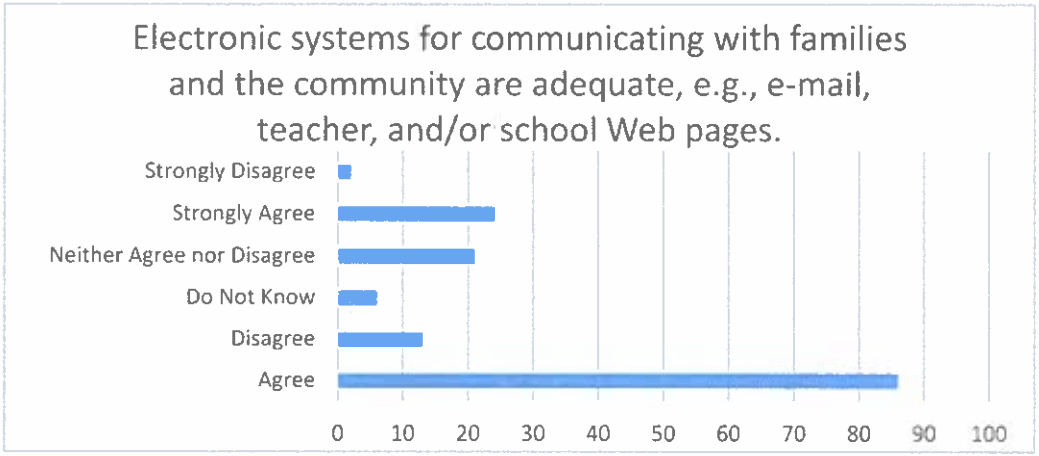
| **28** | |
|---|---|
| Agree | 98 |
| Disagree | 11 |
| Do Not Know | 1 |
| Neither Agree nor Disagree | 15 |
| Strongly Agree | 24 |
| Strongly Disagree | 3 |
| Grand Total | 152 |




*Supportive Environment*
Infrastructure

**Electronic systems for communicating with families and the community are adequate, e.g., e-mail, teacher, and/or school Web pages.**

| **29** | |
|---|---|
| Agree | 86 |
| Disagree | 13 |
| Do Not Know | 6 |
| Neither Agree nor Disagree | 21 |
| Strongly Agree | 24 |
| Strongly Disagree | 2 |
| Grand Total | 152 |

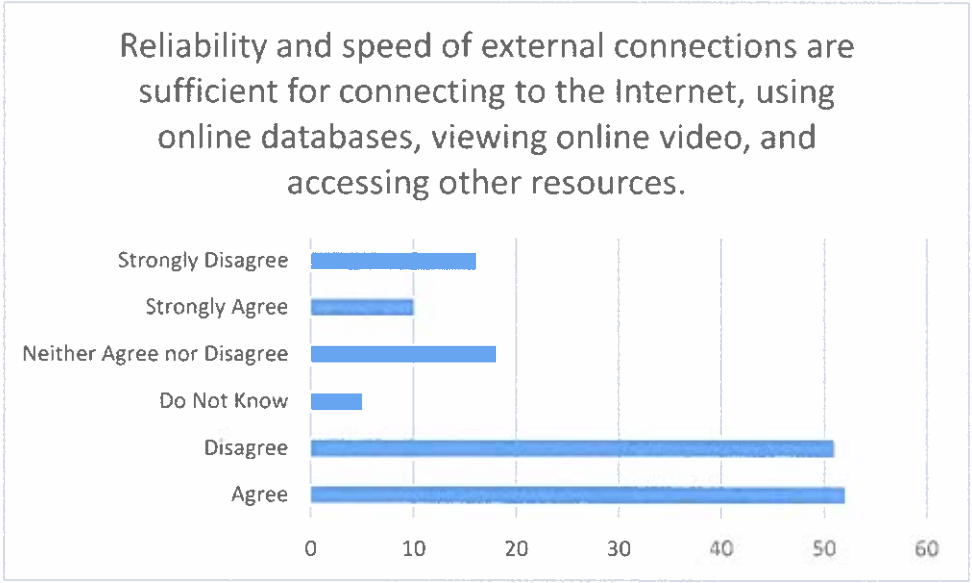



*Supportive Environment*
Infrastructure

**Reliability and speed of external connections are sufficient for connecting to the Internet, using online databases, viewing online video, and accessing other resources.**

**30**

| | |
|---|---|
| Agree | 52 |
| Disagree | 51 |
| Do Not Know | 5 |
| Neither Agree nor Disagree | 18 |
| Strongly Agree | 10 |
| Strongly Disagree | 16 |
| Grand Total | 152 |



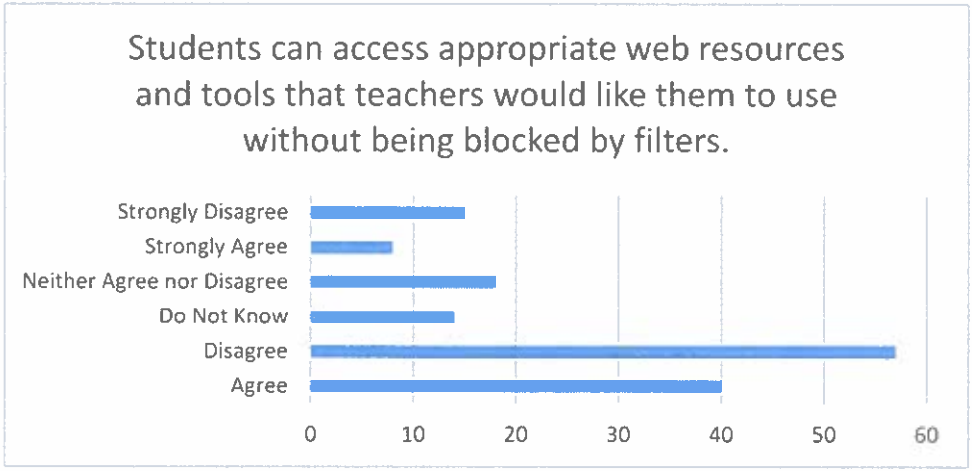

*Supportive Environment*

Infrastructure

**Students can access appropriate web resources and tools that teachers would like them to use without being blocked by filters.**

**31**

| | |
|---|---|
| Agree | 40 |
| Disagree | 57 |
| Do Not Know | 14 |
| Neither Agree nor Disagree | 18 |
| Strongly Agree | 8 |
| Strongly Disagree | 15 |
| Grand Total | 152 |



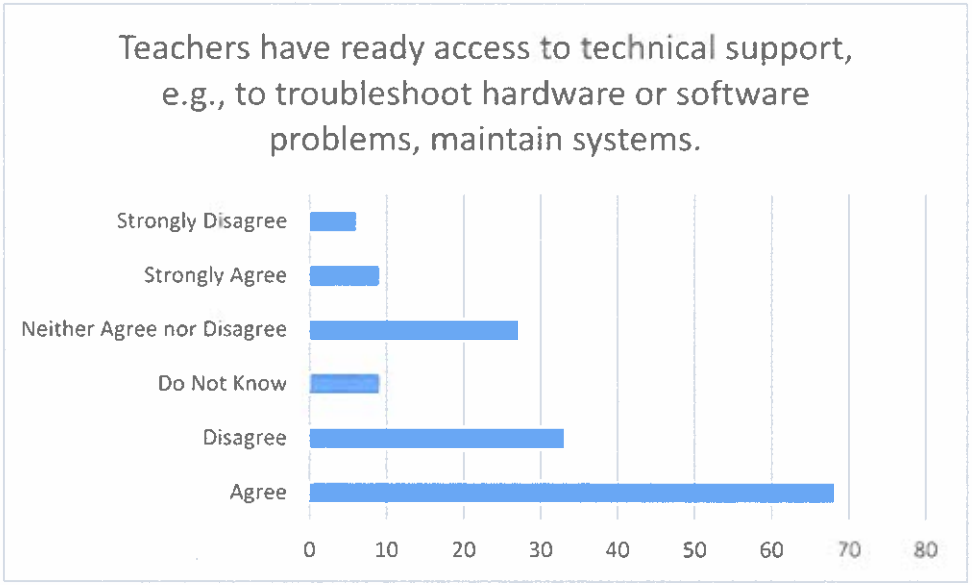

*Supportive Environment*

Infrastructure

**Teachers have ready access to technical support, e.g., to troubleshoot hardware or software problems, maintain systems.**

**32**

| | |
|---|---|
| Agree | 68 |
| Disagree | 33 |
| Do Not Know | 9 |
| Neither Agree nor Disagree | 27 |
| Strongly Agree | 9 |
| Strongly Disagree | 6 |
| Grand Total | 152 |



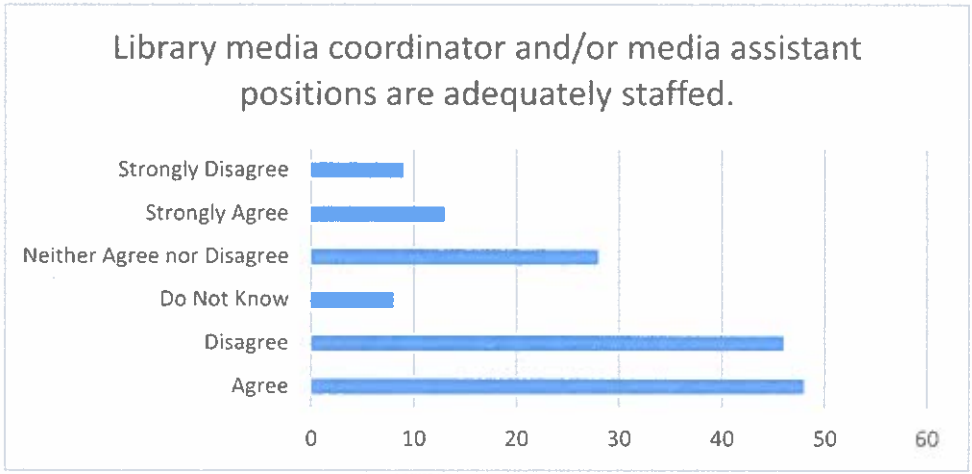

Supportive Environment

Staff Support

**Library media coordinator and/or media assistant positions are adequately staffed.**

**33**

| | |
|---|---|
| Agree | 48 |
| Disagree | 46 |
| Do Not Know | 8 |
| Neither Agree nor Disagree | 28 |
| Strongly Agree | 13 |
| Strongly Disagree | 9 |
| Grand Total | 152 |



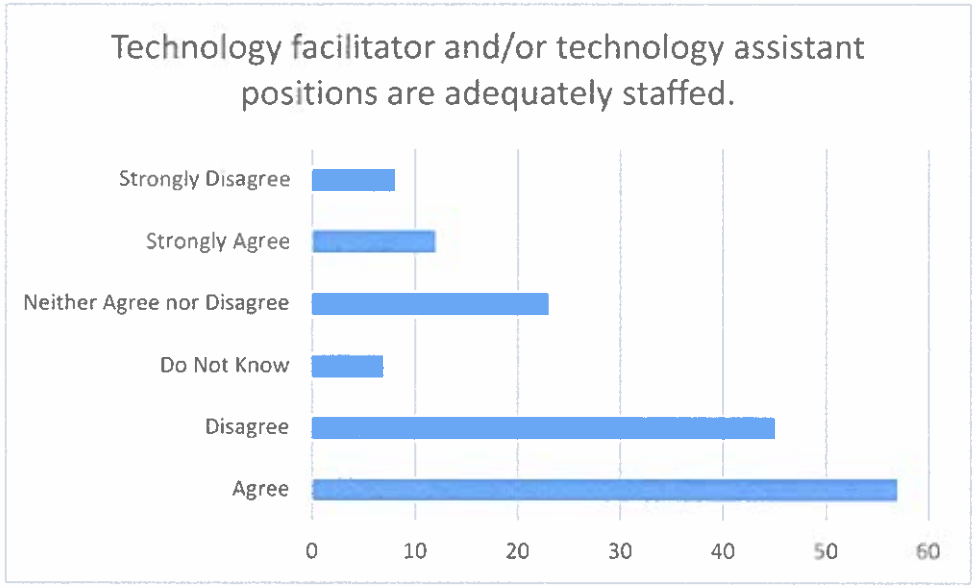

*Supportive Environment*

Staff Support

**Technology facilitator and/or technology assistant positions are adequately staffed.**

**34**

| | |
|---|---|
| Agree | 57 |
| Disagree | 45 |
| Do Not Know | 7 |
| Neither Agree nor Disagree | 23 |
| Strongly Agree | 12 |
| Strongly Disagree | 8 |
| Grand Total | 152 |



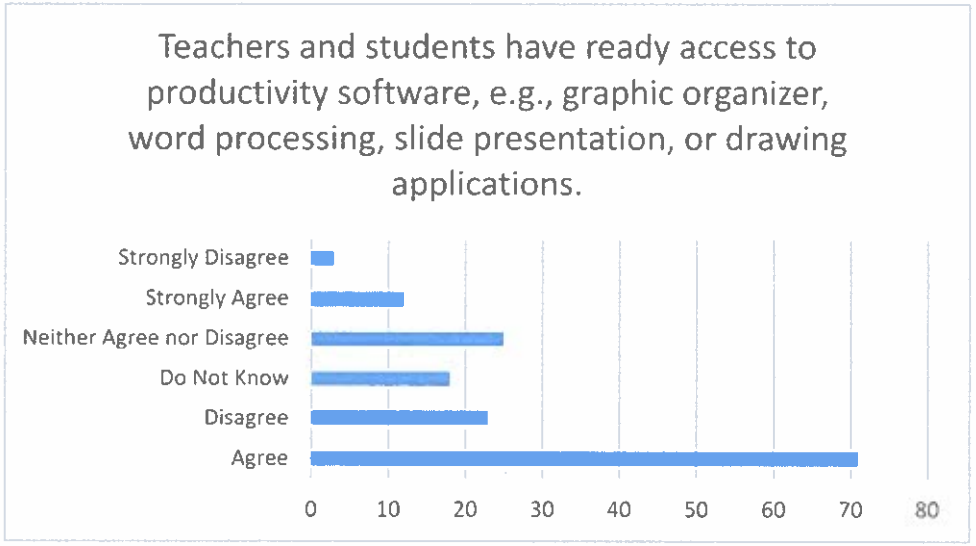

*Supportive Environment*

Staff Support

**Teachers and students have ready access to productivity software, e.g., graphic organizer, word processing, slide presentation, or drawing applications.**

**35**

| | |
|---|---|
| Agree | 71 |
| Disagree | 23 |
| Do Not Know | 18 |
| Neither Agree nor Disagree | 25 |
| Strongly Agree | 12 |
| Strongly Disagree | 3 |
| Grand Total | 152 |



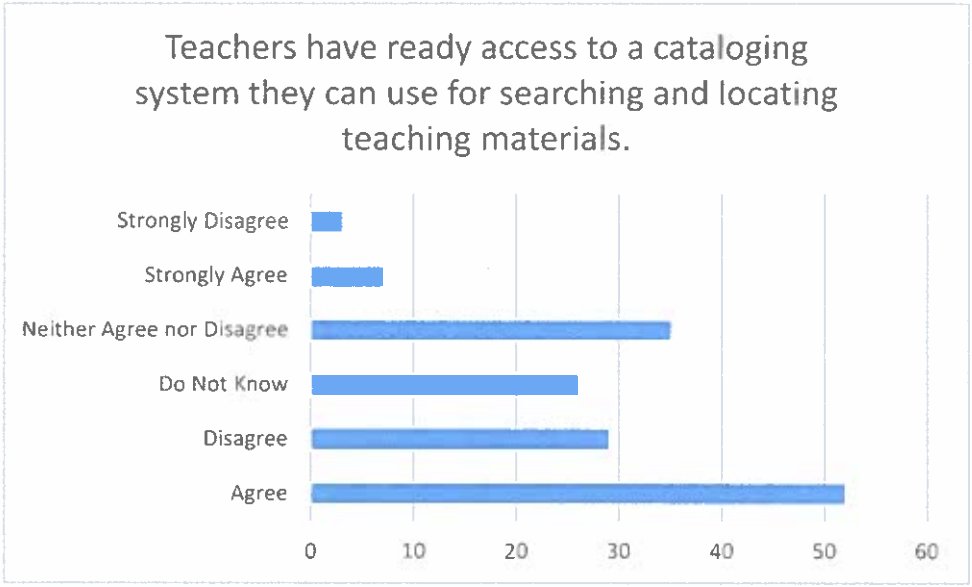

*Supportive Environment*

Media and Software

**Teachers have ready access to a cataloging system they can use for searching and locating teaching materials.**

**36**

| | |
|---|---|
| Agree | 52 |
| Disagree | 29 |
| Do Not Know | 26 |
| Neither Agree nor Disagree | 35 |
| Strongly Agree | 7 |
| Strongly Disagree | 3 |
| Grand Total | 152 |

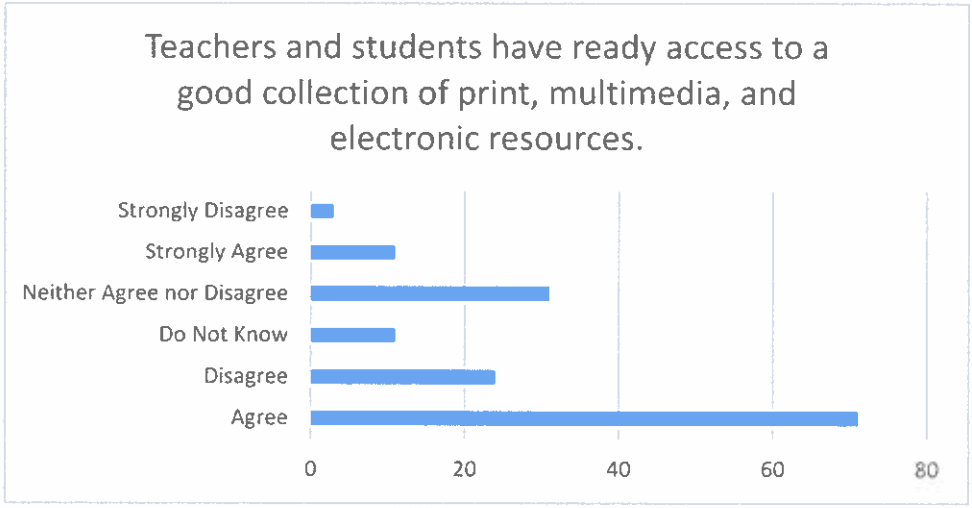



*Supportive Environment*
Media and Software

**Teachers and students have ready access to a good collection of print, multimedia, and electronic resources.**

**37**

| | |
|---|---|
| Agree | 71 |
| Disagree | 24 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 31 |
| Strongly Agree | 11 |
| Strongly Disagree | 3 |
| Grand Total | 151 |

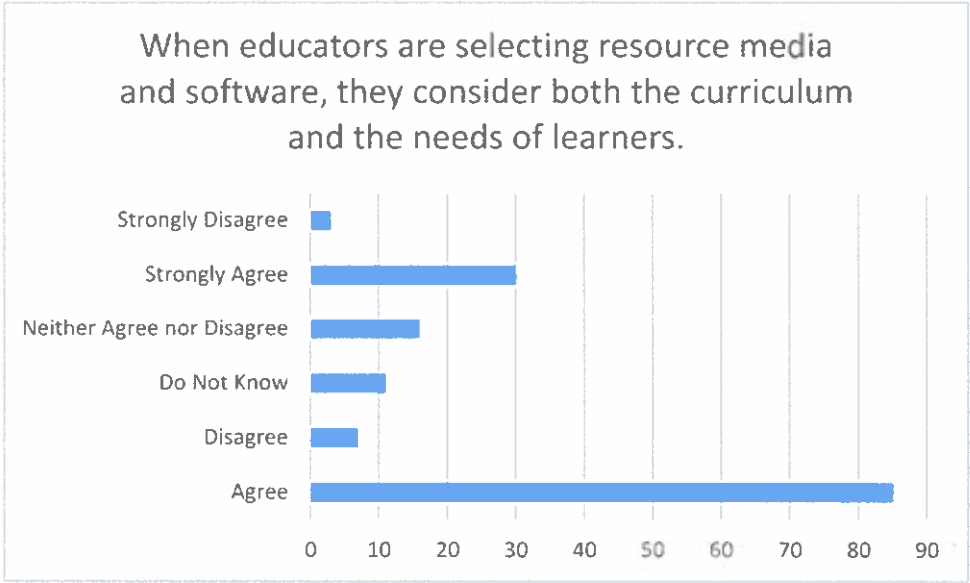



*Supportive Environment*
Media and Software

**When educators are selecting resource media and software, they consider both the curriculum and the needs of learners.**

**38**

| | |
|---|---|
| Agree | 85 |
| Disagree | 7 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 16 |
| Strongly Agree | 30 |
| Strongly Disagree | 3 |
| Grand Total | 152 |



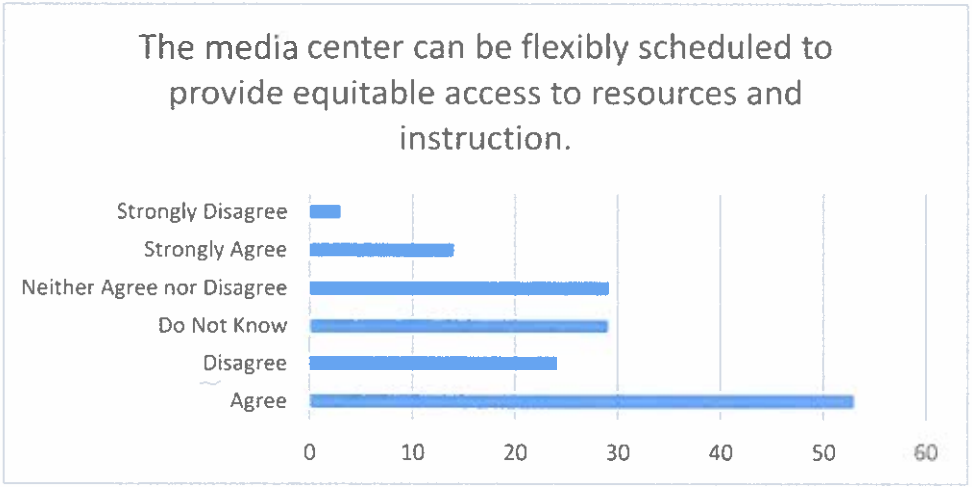

*Supportive Environment*

Media and Software

**The media center can be flexibly scheduled to provide equitable access to resources and instruction.**

**39**

| | |
|---|---|
| Agree | 53 |
| Disagree | 24 |
| Do Not Know | 29 |
| Neither Agree nor Disagree | 29 |
| Strongly Agree | 14 |
| Strongly Disagree | 3 |
| Grand Total | 152 |



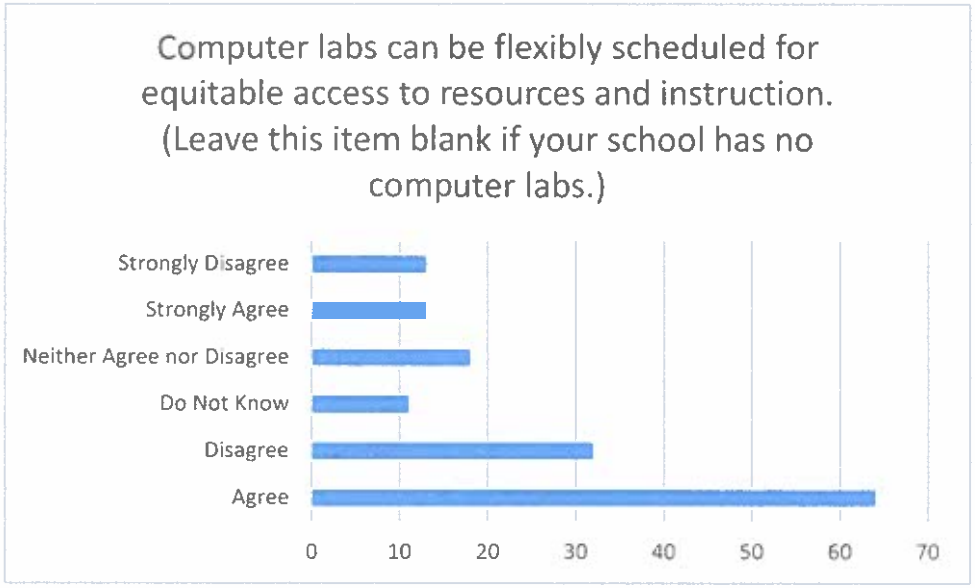

*Supportive Environment*

Flexible Scheduling

**Computer labs can be flexibly scheduled for equitable access to resources and instruction. (Leave this item blank if your school has no computer labs.)**

**40**

| | |
|---|---|
| Agree | 64 |
| Disagree | 32 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 18 |
| Strongly Agree | 13 |
| Strongly Disagree | 13 |
| Grand Total | 151 |



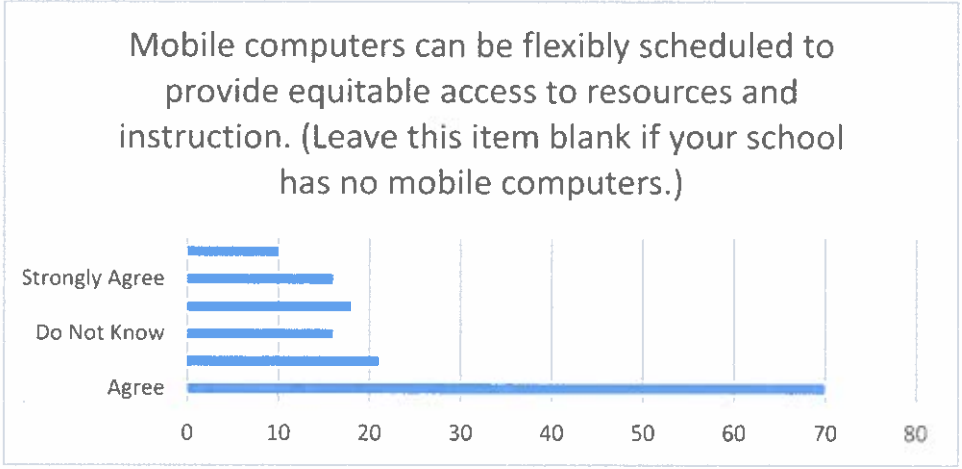

*Supportive Environment*

Flexible Scheduling

**Mobile computers can be flexibly scheduled to provide equitable access to resources and instruction. (Leave this item blank if your school has no mobile computers.)**

**41**

| | |
|---|---|
| Agree | 70 |
| Disagree | 21 |
| Do Not Know | 16 |
| Neither Agree nor Disagree | 18 |
| Strongly Agree | 16 |
| Strongly Disagree | 10 |
| Grand Total | 151 |




*Supportive Environment*

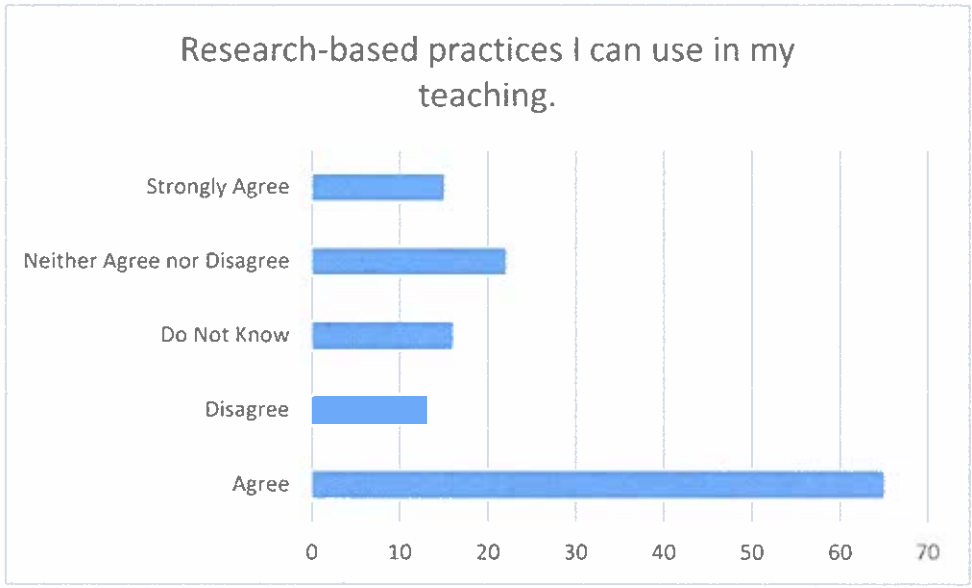
Flexible Scheduling

## "I would benefit from professional development on..."

**Research-based practices I can use in my teaching.**

**42**

| | |
|---|---|
| Agree | 65 |
| Disagree | 13 |
| Do Not Know | 16 |
| Neither Agree nor Disagree | 22 |
| Strongly Agree | 15 |
| Grand Total | 131 |

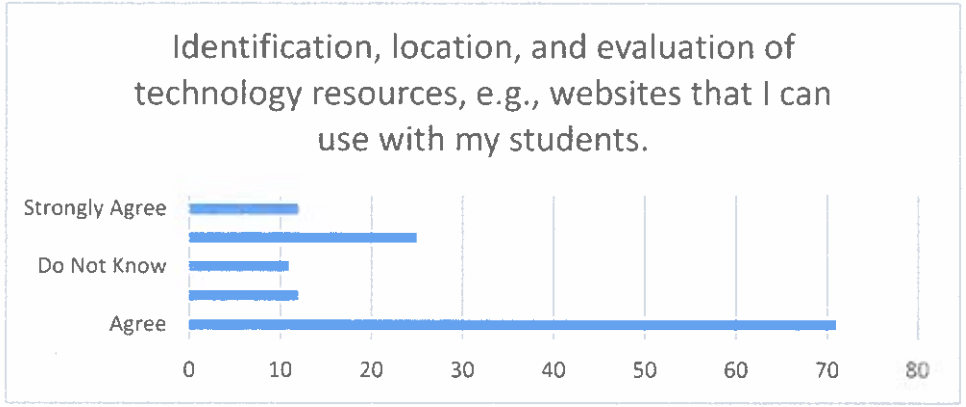



*Professional Development*
Instruction

**Identification, location, and evaluation of technology resources, e.g., websites that I can use with my students.**

**43**

| | |
|---|---|
| Agree | 71 |
| Disagree | 12 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 25 |
| Strongly Agree | 12 |
| Grand Total | 131 |

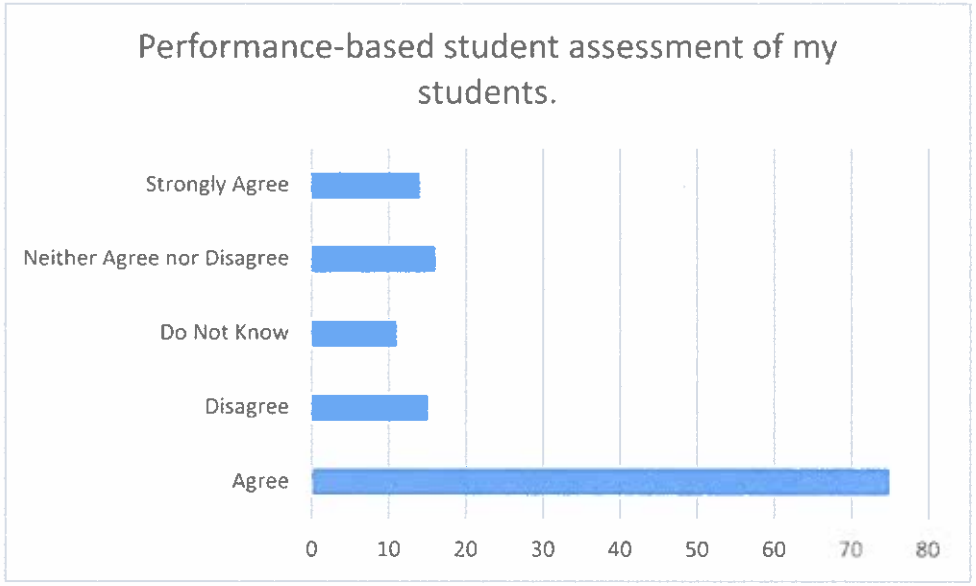



*Professional Development*
Instruction

**Performance-based student assessment of my students.**

**44**

| | |
|---|---|
| Agree | 75 |
| Disagree | 15 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 16 |
| Strongly Agree | 14 |
| Grand Total | 131 |

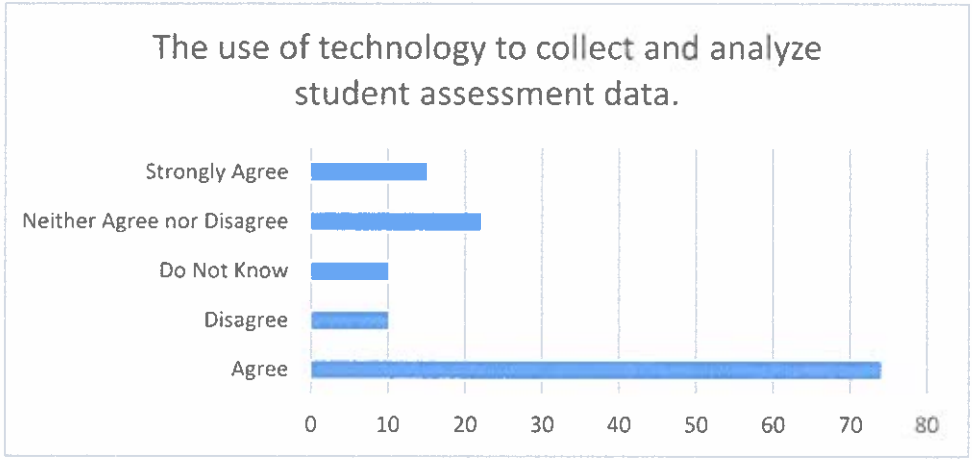



*Professional Development*
Instruction

**The use of technology to collect and analyze student assessment data.**

**45**

| | |
|---|---|
| Agree | 74 |
| Disagree | 10 |
| Do Not Know | 10 |
| Neither Agree nor Disagree | 22 |
| Strongly Agree | 15 |
| Grand Total | 131 |

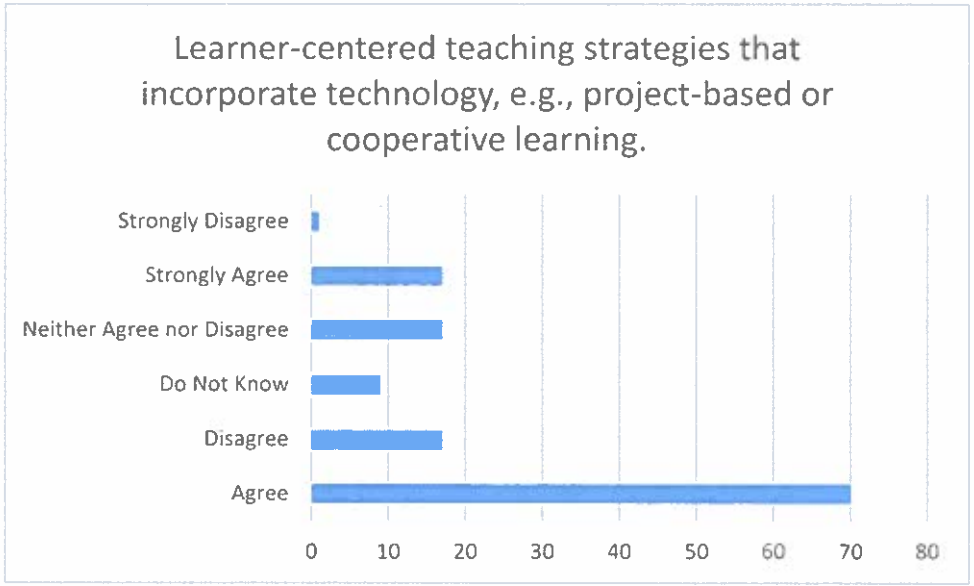



*Professional Development*
Instruction

**Learner-centered teaching strategies that incorporate technology, e.g., project-based or cooperative learning.**

**46**

| | |
|---|---|
| Agree | 70 |
| Disagree | 17 |
| Do Not Know | 9 |
| Neither Agree nor Disagree | 17 |
| Strongly Agree | 17 |
| Strongly Disagree | 1 |
| Grand Total | 131 |

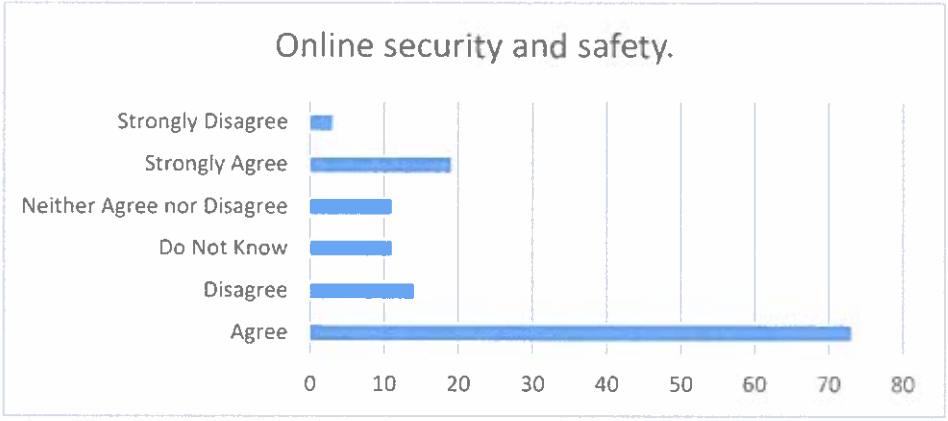



*Professional Development*
Instruction

**Online security and safety.**

**47**

| | |
|---|---|
| Agree | 73 |
| Disagree | 14 |
| Do Not Know | 11 |
| Neither Agree nor Disagree | 11 |
| Strongly Agree | 19 |
| Strongly Disagree | 3 |
| Grand Total | 131 |

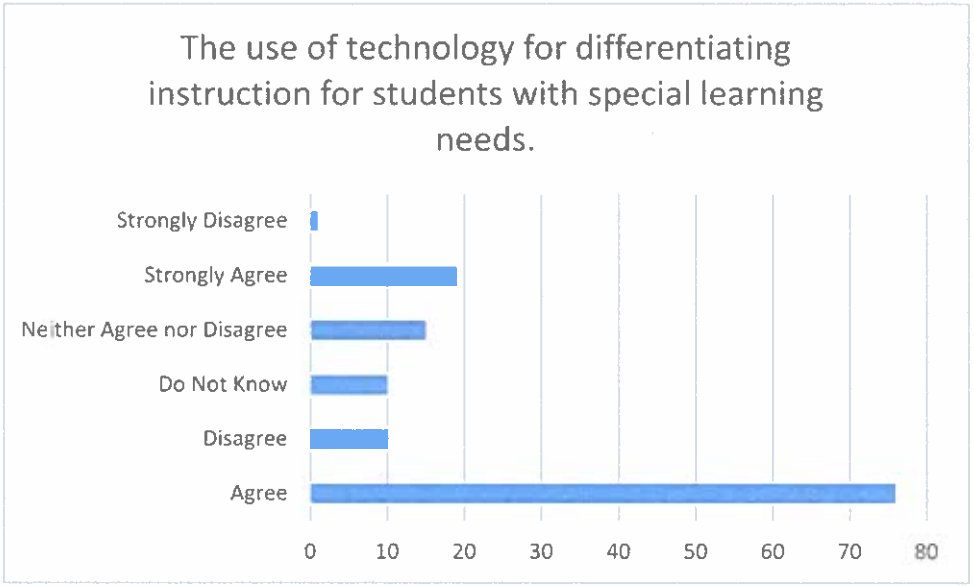



*Professional Development*
Instruction

**The use of technology for differentiating instruction for students with special learning needs.**

**48**

| | |
|---|---|
| Agree | 76 |
| Disagree | 10 |
| Do Not Know | 10 |
| Neither Agree nor Disagree | 15 |
| Strongly Agree | 19 |
| Strongly Disagree | 1 |
| Grand Total | 131 |

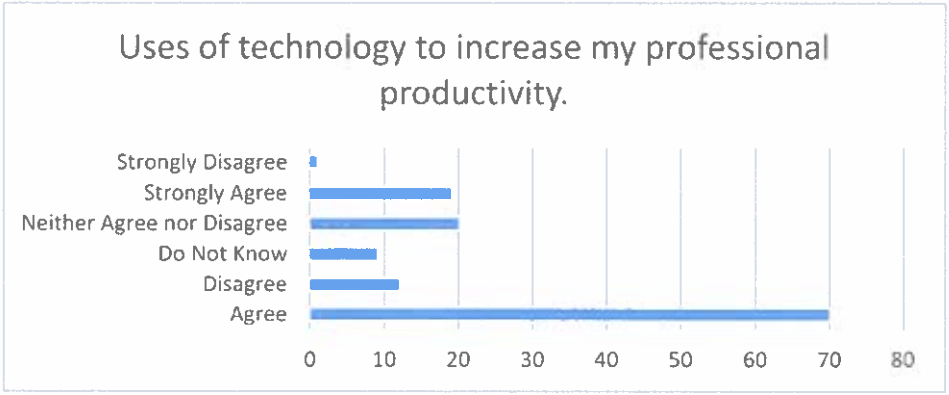



*Professional Development*
Instruction

**Uses of technology to increase my professional productivity.**

**49**

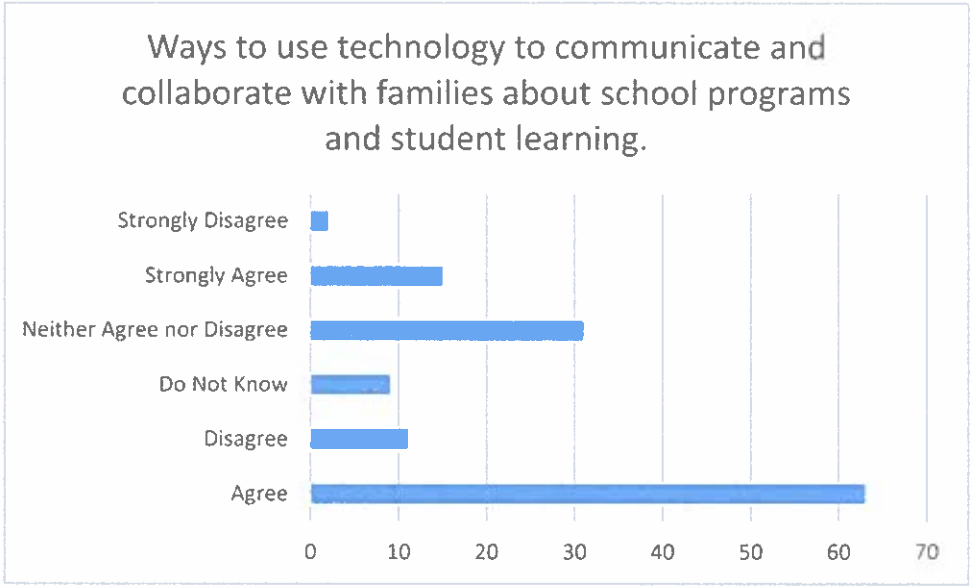
| | |
|---|---|
| Agree | 70 |
| Disagree | 12 |
| Do Not Know | 9 |
| Neither Agree nor Disagree | 20 |
| Strongly Agree | 19 |
| Strongly Disagree | 1 |
| Grand Total | 131 |




*Professional Development*
Planning

**Ways to use technology to communicate and collaborate with families about school programs and student learning.**

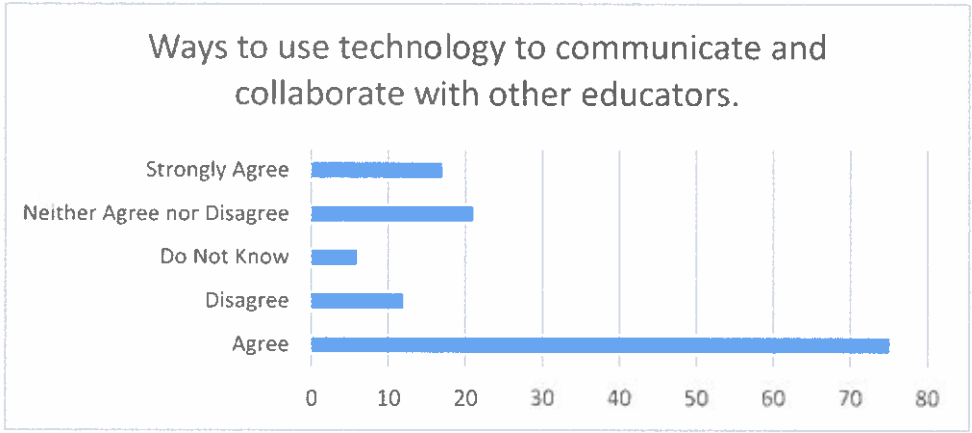
| **50** | |
|---|---|
| Agree | 63 |
| Disagree | 11 |
| Do Not Know | 9 |
| Neither Agree nor Disagree | 31 |
| Strongly Agree | 15 |
| Strongly Disagree | 2 |
| Grand Total | 131 |




*Professional Development*
Planning

**Ways to use technology to communicate and collaborate with other educators.**

| **51** | |
|---|---|
| Agree | 75 |
| Disagree | 12 |
| Do Not Know | 6 |
| Neither Agree nor Disagree | 21 |
| Strongly Agree | 17 |
| Grand Total | 131 |

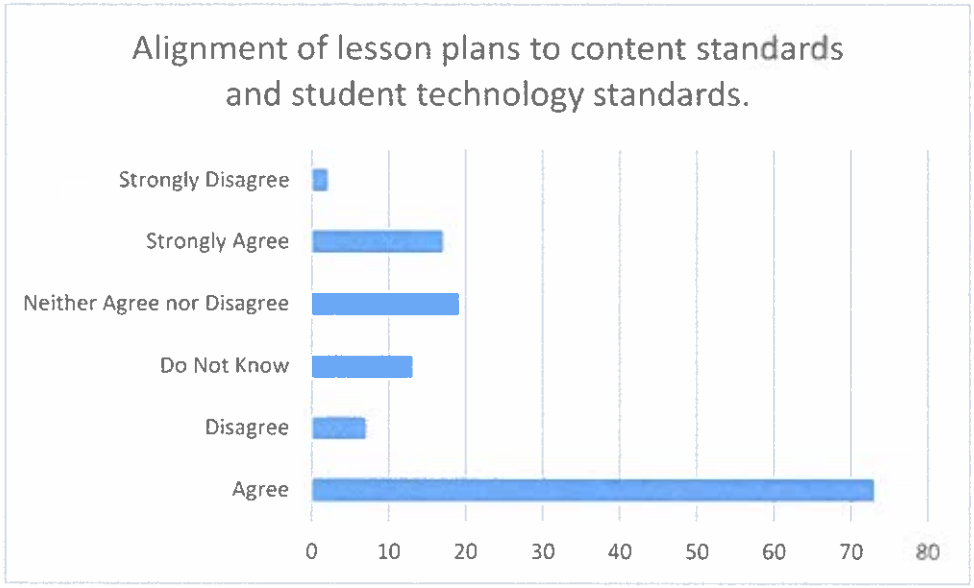



*Professional Development*
Planning

**Alignment of lesson plans to content standards and student technology standards.**

**52**

| | |
|---|---|
| Agree | 73 |
| Disagree | 7 |
| Do Not Know | 13 |
| Neither Agree nor Disagree | 19 |
| Strongly Agree | 17 |
| Strongly Disagree | 2 |
| Grand Total | 131 |

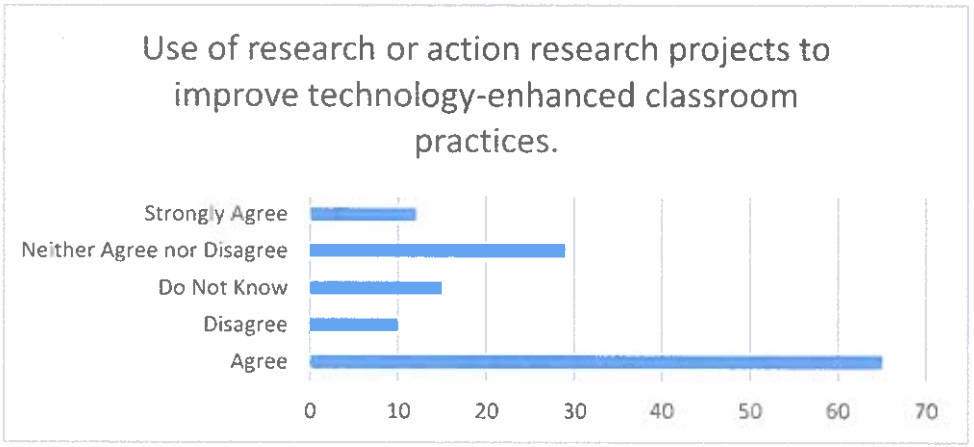



*Professional Development*
Planning

**Use of research or action research projects to improve technology-enhanced classroom practices.**

**53**

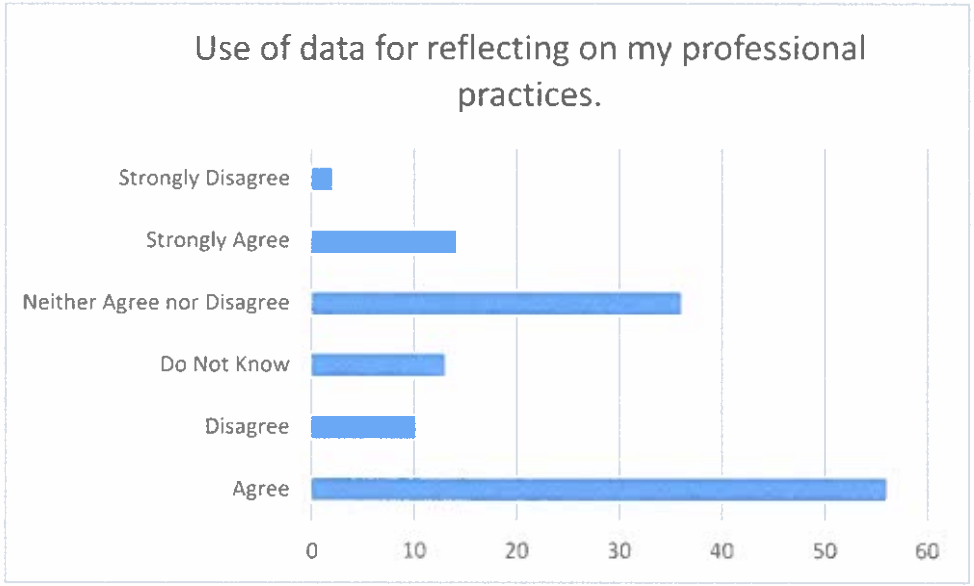
| | |
|---|---|
| Agree | 65 |
| Disagree | 10 |
| Do Not Know | 15 |
| Neither Agree nor Disagree | 29 |
| Strongly Agree | 12 |
| Grand Total | 131 |




*Professional Development*
Planning

**Use of data for reflecting on my professional practices.**

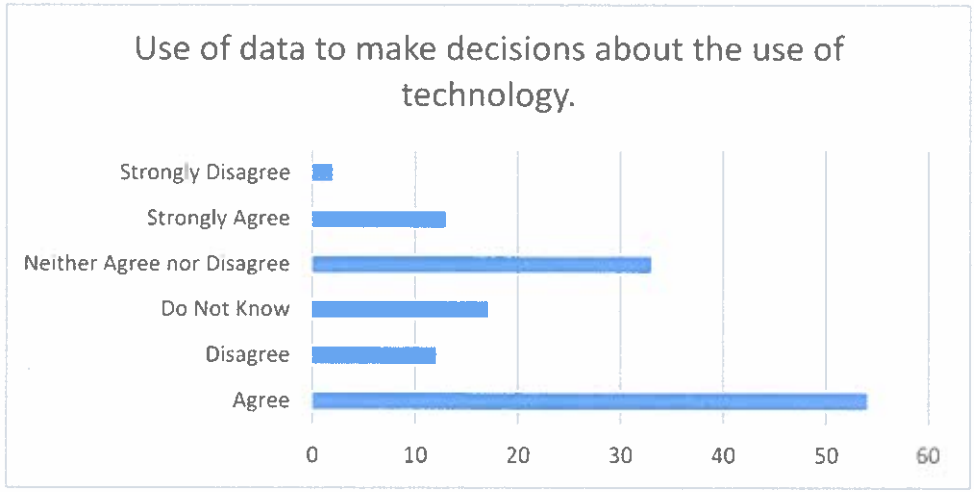
| **54** | |
|---|---|
| Agree | 56 |
| Disagree | 10 |
| Do Not Know | 13 |
| Neither Agree nor Disagree | 36 |
| Strongly Agree | 14 |
| Strongly Disagree | 2 |
| Grand Total | 131 |




*Professional Development*
Planning

**Use of data to make decisions about the use of technology.**

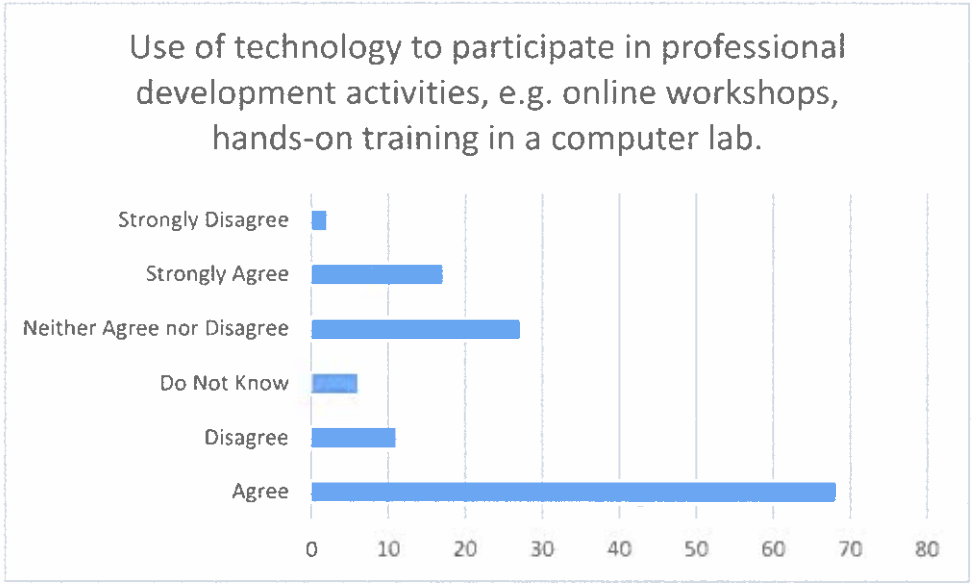
| **55** | |
|---|---|
| Agree | 54 |
| Disagree | 12 |
| Do Not Know | 17 |
| Neither Agree nor Disagree | 33 |
| Strongly Agree | 13 |
| Strongly Disagree | 2 |
| Grand Total | 131 |




*Professional Development*
Planning

**Use of technology to participate in professional development activities, e.g. online workshops, hands-on training in a computer lab.**

| **56** | |
|---|---|
| Agree | 68 |
| Disagree | 11 |
| Do Not Know | 6 |
| Neither Agree nor Disagree | 27 |
| Strongly Agree | 17 |
| Strongly Disagree | 2 |
| Grand Total | 131 |

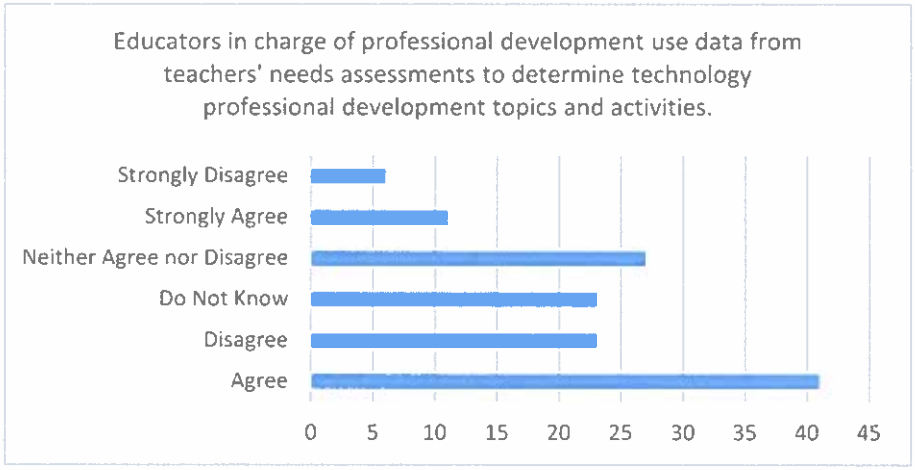



*Professional Development*
Planning

## "In my school..."

**Educators in charge of professional development use data from teachers' needs assessments to determine technology professional development topics and activities.**

| **57** | |
|---|---|
| Agree | 41 |
| Disagree | 23 |
| Do Not Know | 23 |
| Neither Agree nor Disagree | 27 |
| Strongly Agree | 11 |
| Strongly Disagree | 6 |
| Grand Total | 131 |



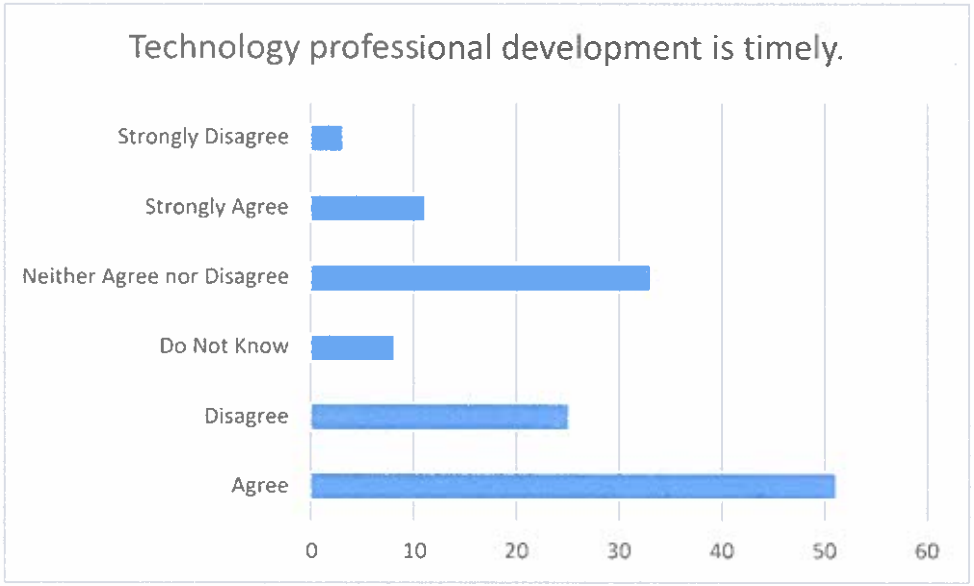

*Professional Development*

Quality

**Technology professional development is timely.**

**58**

| | |
|---|---|
| Agree | 51 |
| Disagree | 25 |
| Do Not Know | 8 |
| Neither Agree nor Disagree | 33 |
| Strongly Agree | 11 |
| Strongly Disagree | 3 |
| Grand Total | 131 |



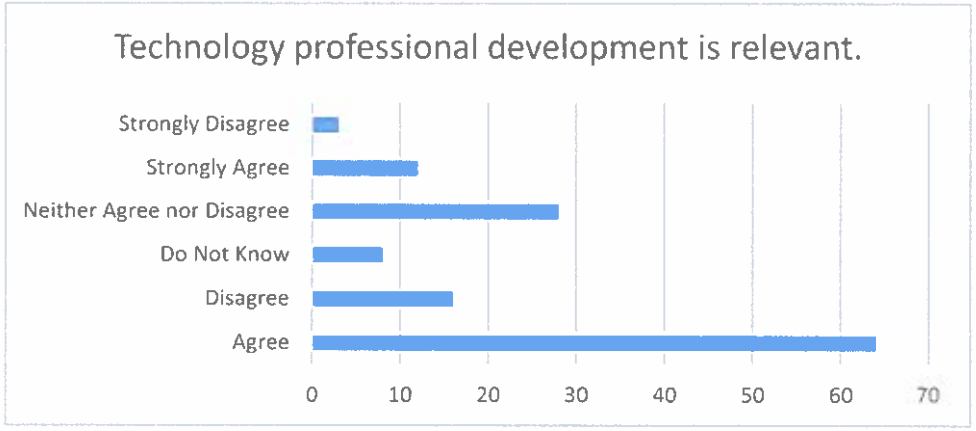

*Professional Development*

Quality

**Technology professional development is relevant.**

**59**

| | |
|---|---|
| Agree | 64 |
| Disagree | 16 |
| Do Not Know | 8 |
| Neither Agree nor Disagree | 28 |
| Strongly Agree | 12 |
| Strongly Disagree | 3 |
| Grand Total | 131 |



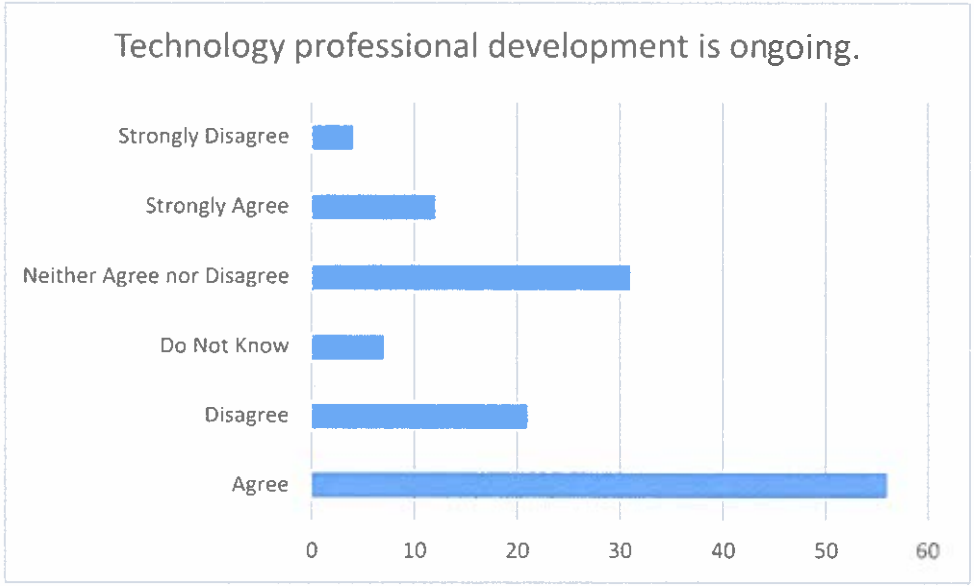

*Professional Development*

Quality

**Technology professional development is ongoing.**

**60**

| | |
|---|---|
| Agree | 56 |
| Disagree | 21 |
| Do Not Know | 7 |
| Neither Agree nor Disagree | 31 |
| Strongly Agree | 12 |
| Strongly Disagree | 4 |
| Grand Total | 131 |

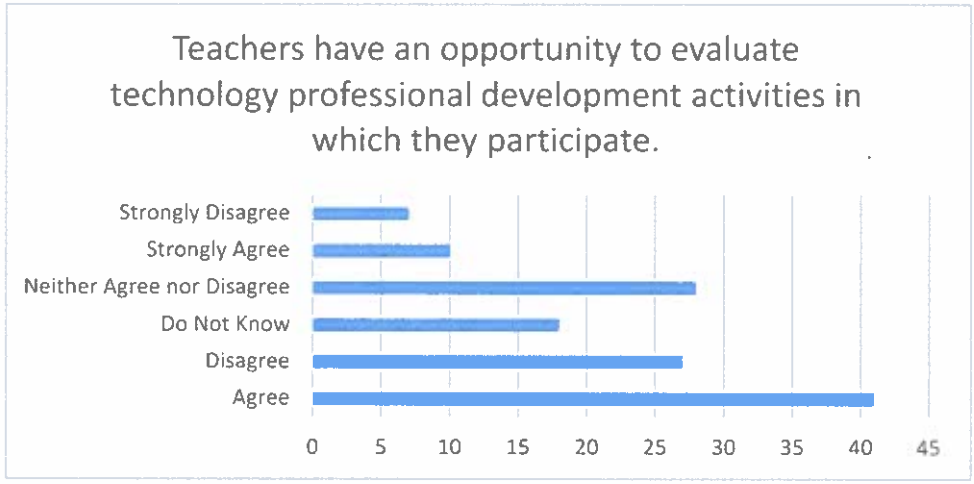



*Professional Development*
Quality

**Teachers have an opportunity to evaluate technology professional development activities in which they participate.**

**61**

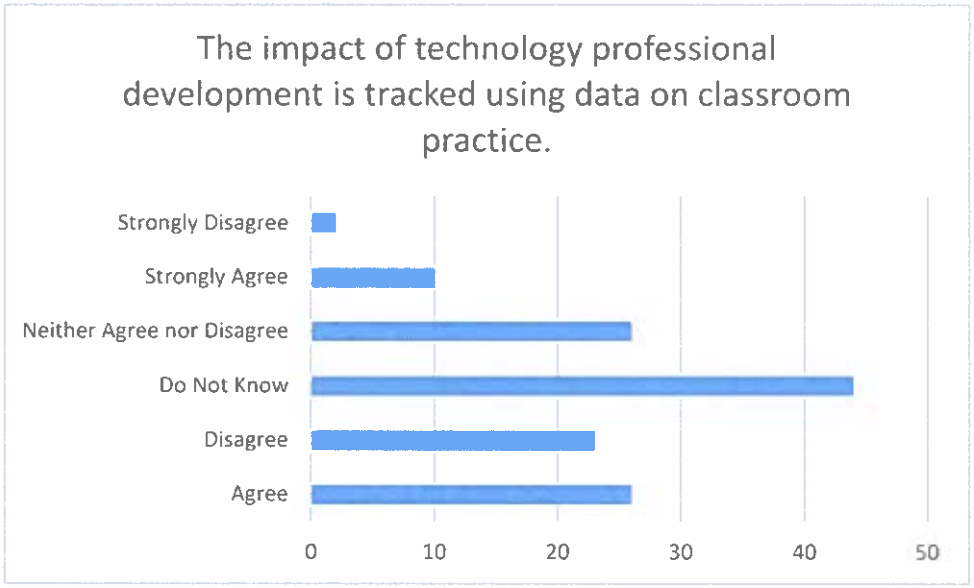
| | |
|---|---|
| Agree | 41 |
| Disagree | 27 |
| Do Not Know | 18 |
| Neither Agree nor Disagree | 28 |
| Strongly Agree | 10 |
| Strongly Disagree | 7 |
| Grand Total | 131 |




*Professional Development*
Quality

**The impact of technology professional development is tracked using data on classroom practice.**

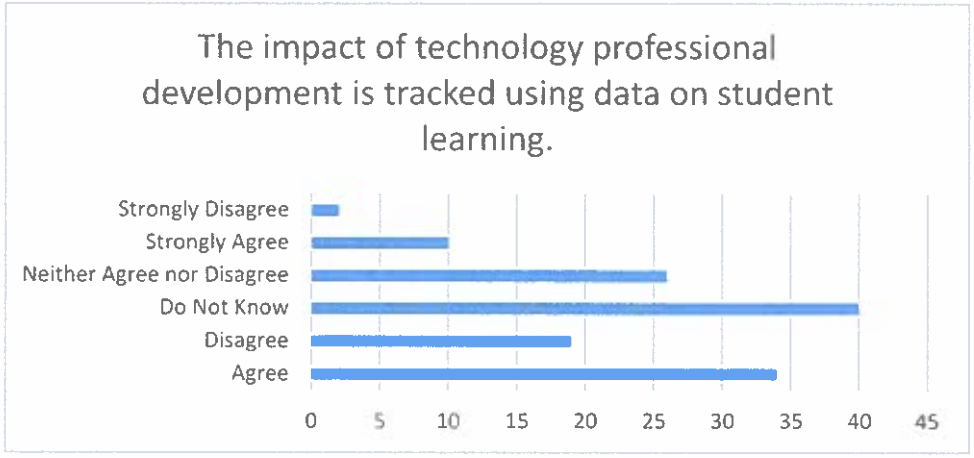
| 62 | |
|---|---|
| Agree | 26 |
| Disagree | 23 |
| Do Not Know | 44 |
| Neither Agree nor Disagree | 26 |
| Strongly Agree | 10 |
| Strongly Disagree | 2 |
| Grand Total | 131 |




*Professional Development*
Quality

**The impact of technology professional development is tracked using data on student learning.**

| 63 | |
|---|---|
| Agree | 34 |
| Disagree | 19 |
| Do Not Know | 40 |
| Neither Agree nor Disagree | 26 |
| Strongly Agree | 10 |
| Strongly Disagree | 2 |
| Grand Total | 131 |

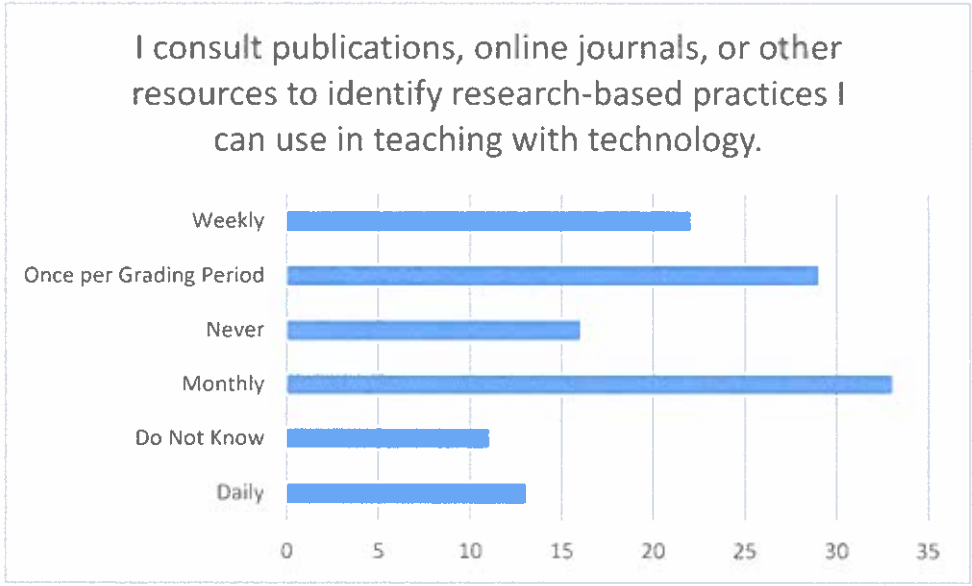



*Professional Development*
Quality

**I consult publications, online journals, or other resources to identify research-based practices I can use in teaching with technology.**

**64**

| | |
|---|---|
| Daily | 13 |
| Do Not Know | 11 |
| Monthly | 33 |
| Never | 16 |
| Once per Grading Period | 29 |
| Weekly | 22 |
| Grand Total | 124 |

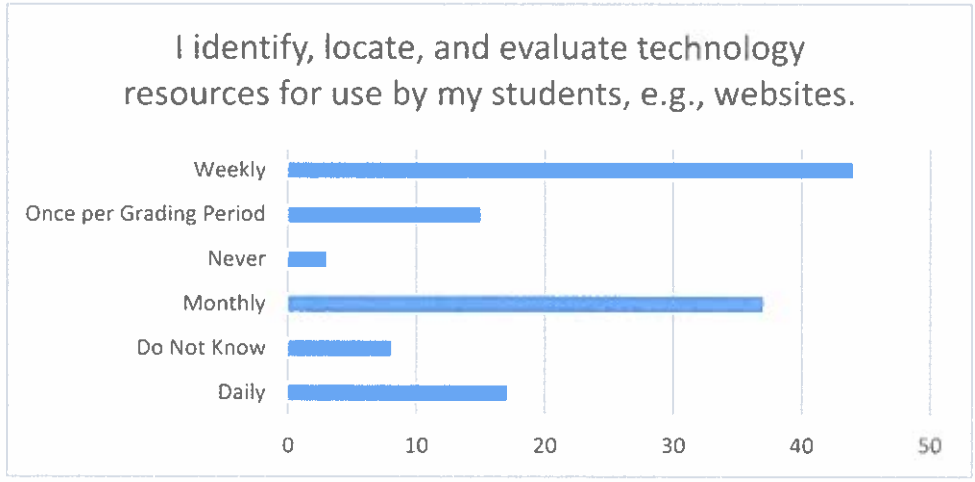



*Teaching and Learning*
Instruction

**I identify, locate, and evaluate technology resources for use by my students, e.g., websites.**

**65**

| | |
|---|---|
| Daily | 17 |
| Do Not Know | 8 |
| Monthly | 37 |
| Never | 3 |
| Once per Grading Period | 15 |
| Weekly | 44 |
| Grand Total | 124 |

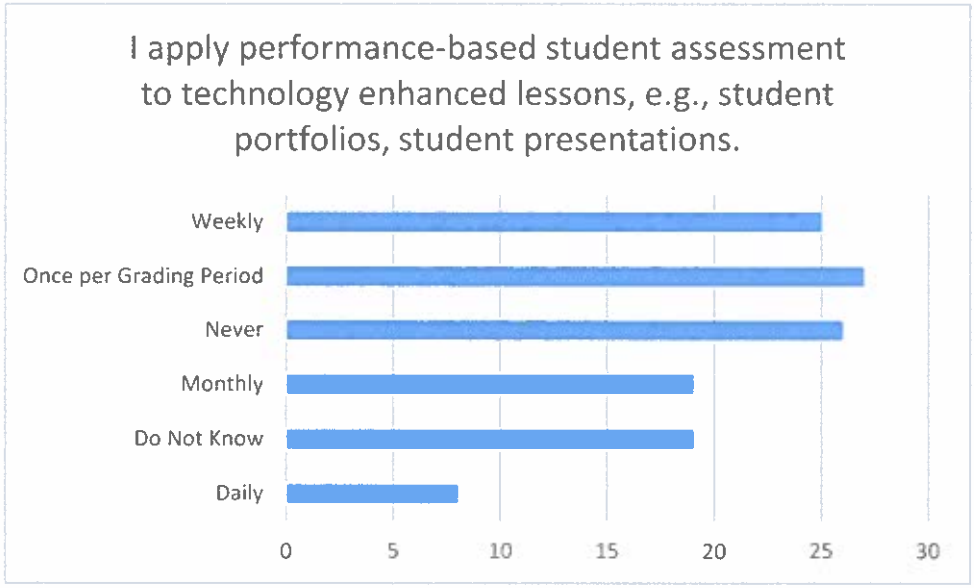



*Teaching and Learning*
Instruction

**I apply performance-based student assessment to technology enhanced lessons, e.g., student portfolios, student presentations.**

**66**

| | |
|---|---|
| Daily | 8 |
| Do Not Know | 19 |
| Monthly | 19 |
| Never | 26 |
| Once per Grading Period | 27 |
| Weekly | 25 |
| Grand Total | 124 |

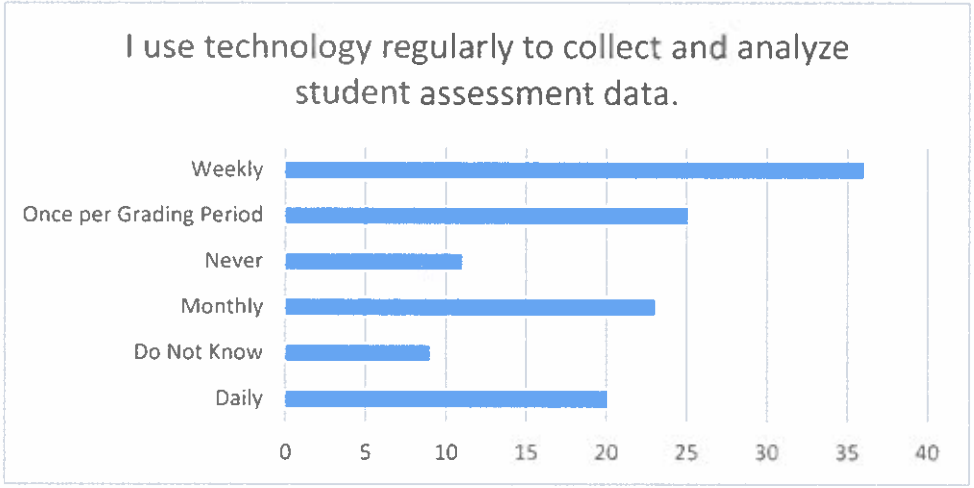



*Teaching and Learning*
Instruction

**I use technology regularly to collect and analyze student assessment data.**

**67**

| | |
|---|---|
| Daily | 20 |
| Do Not Know | 9 |
| Monthly | 23 |
| Never | 11 |
| Once per Grading Period | 25 |
| Weekly | 36 |
| Grand Total | 124 |

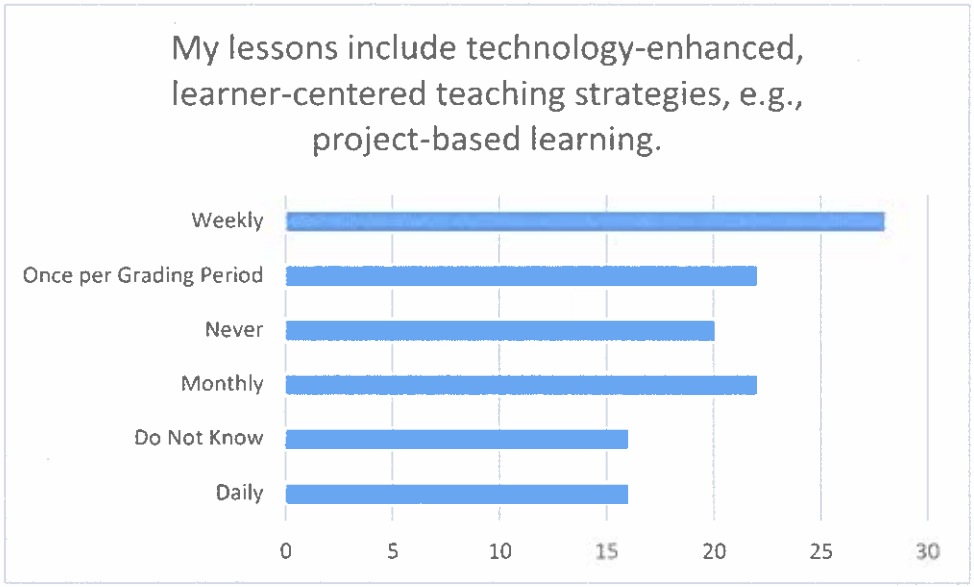



*Teaching and Learning*
Instruction

**My lessons include technology-enhanced, learner-centered teaching strategies, e.g., project-based learning.**

**68**

| | |
|---|---|
| Daily | 16 |
| Do Not Know | 16 |
| Monthly | 22 |
| Never | 20 |
| Once per Grading Period | 22 |
| Weekly | 28 |
| Grand Total | 124 |




*Teaching and Learning*
Instruction

**I apply policies and practices to enhance online security and safety.**

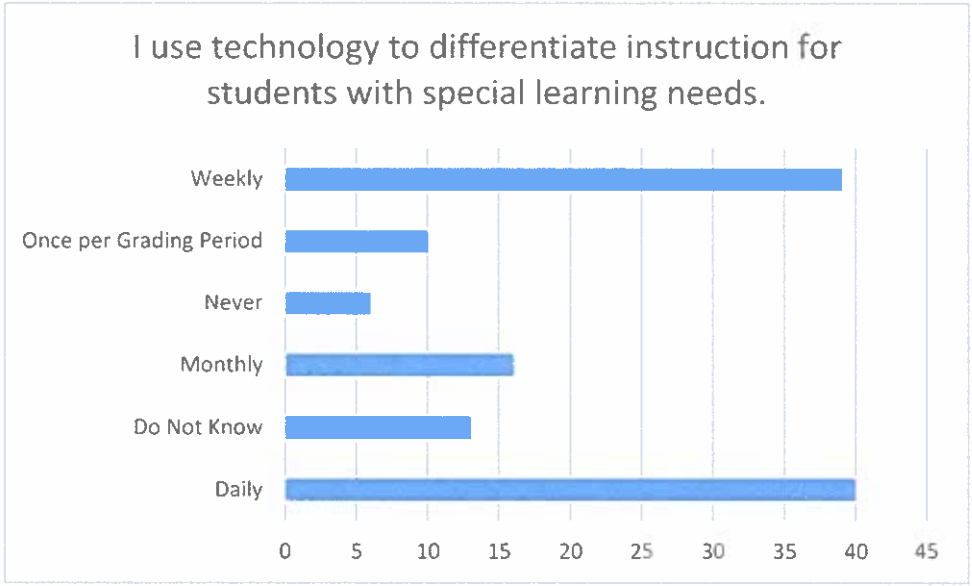
**69**

| | |
|---|---|
| Daily | 58 |
| Do Not Know | 16 |
| Monthly | 11 |
| Never | 7 |
| Once per Grading Period | 5 |
| Weekly | 27 |
| Grand Total | 124 |


*Teaching and Learning*
Instruction

**I use technology to differentiate instruction for students with special learning needs.**

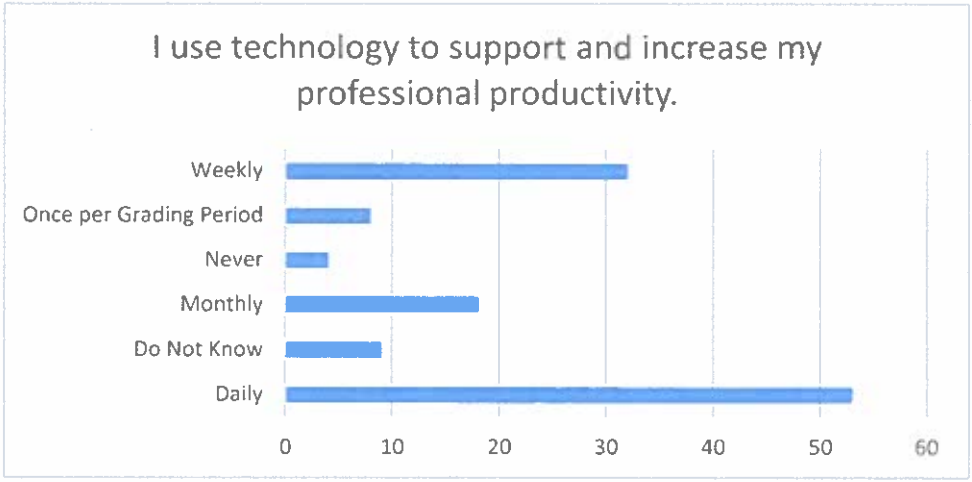
| **70** | |
|---|---|
| Daily | 40 |
| Do Not Know | 13 |
| Monthly | 16 |
| Never | 6 |
| Once per Grading Period | 10 |
| Weekly | 39 |
| Grand Total | 124 |




*Teaching and Learning*
Instruction

**I use technology to support and increase my professional productivity.**

| **71** | |
|---|---|
| Daily | 53 |
| Do Not Know | 9 |
| Monthly | 18 |
| Never | 4 |
| Once per Grading Period | 8 |
| Weekly | 32 |
| Grand Total | 124 |

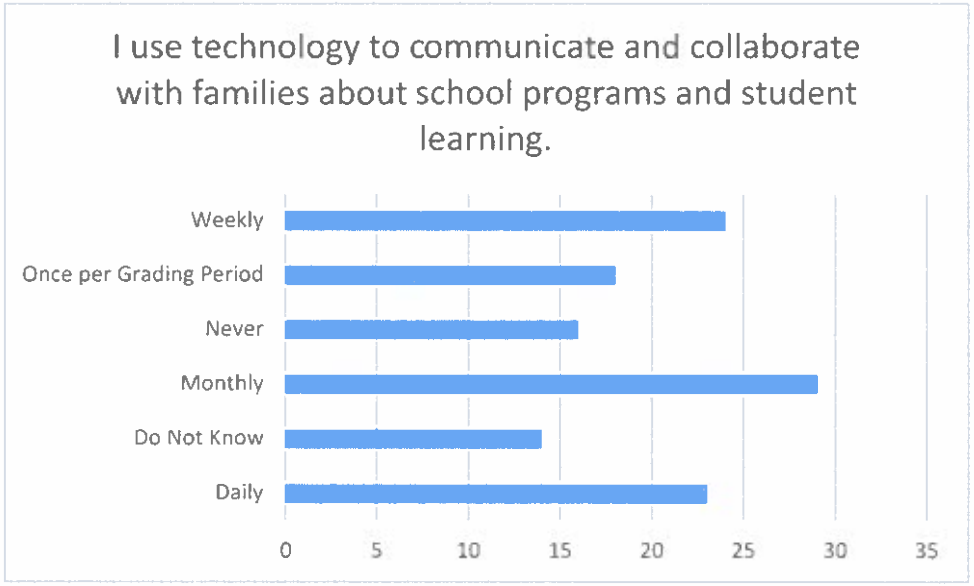



*Teaching and Learning*
Planning

**I use technology to communicate and collaborate with families about school programs and student learning.**

**72**

| | |
|---|---|
| Daily | 23 |
| Do Not Know | 14 |
| Monthly | 29 |
| Never | 16 |
| Once per Grading Period | 18 |
| Weekly | 24 |
| Grand Total | 124 |

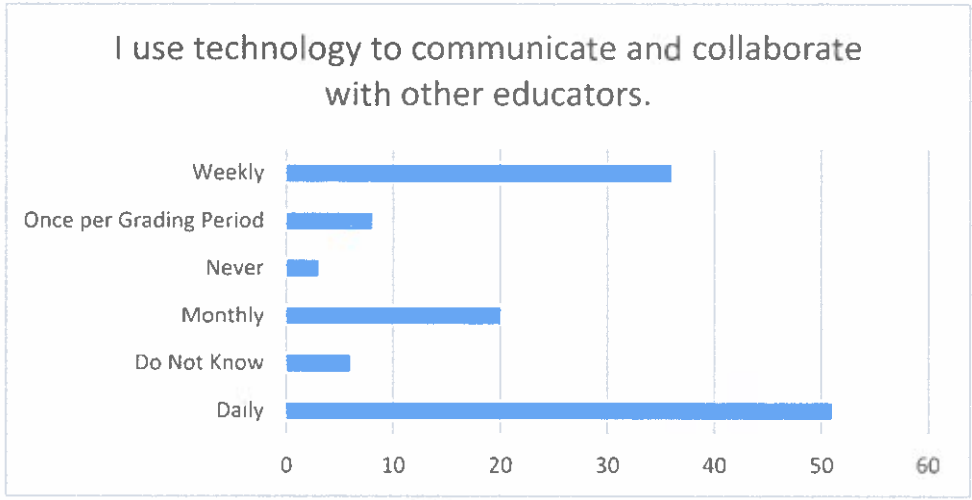



*Teaching and Learning*
Planning

**I use technology to communicate and collaborate with other educators.**

**73**

| | |
|---|---|
| Daily | 51 |
| Do Not Know | 6 |
| Monthly | 20 |
| Never | 3 |
| Once per Grading Period | 8 |
| Weekly | 36 |
| Grand Total | 124 |

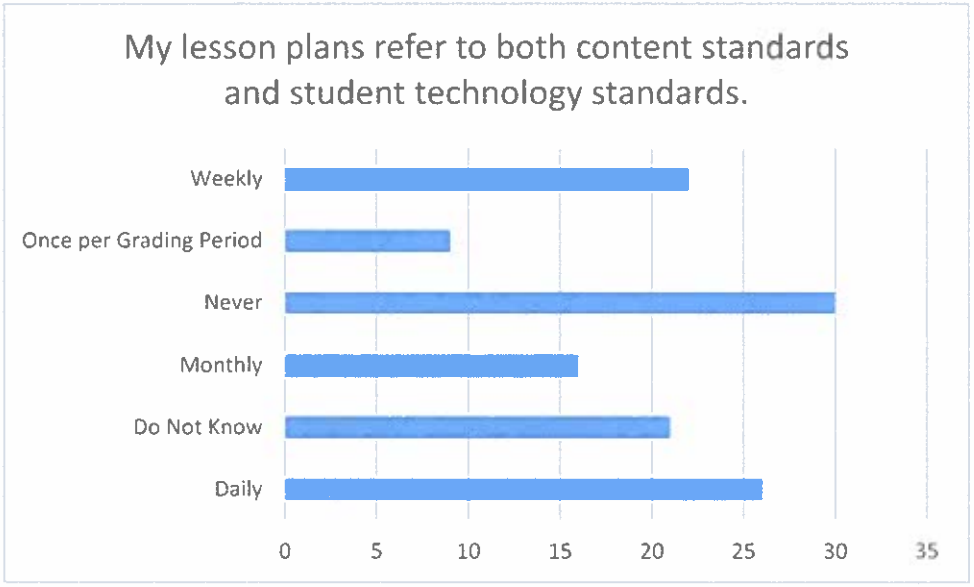



*Teaching and Learning*
Planning

**My lesson plans refer to both content standards and student technology standards.**

**74**

| | |
|---|---|
| Daily | 26 |
| Do Not Know | 21 |
| Monthly | 16 |
| Never | 30 |
| Once per Grading Period | 9 |
| Weekly | 22 |
| Grand Total | 124 |

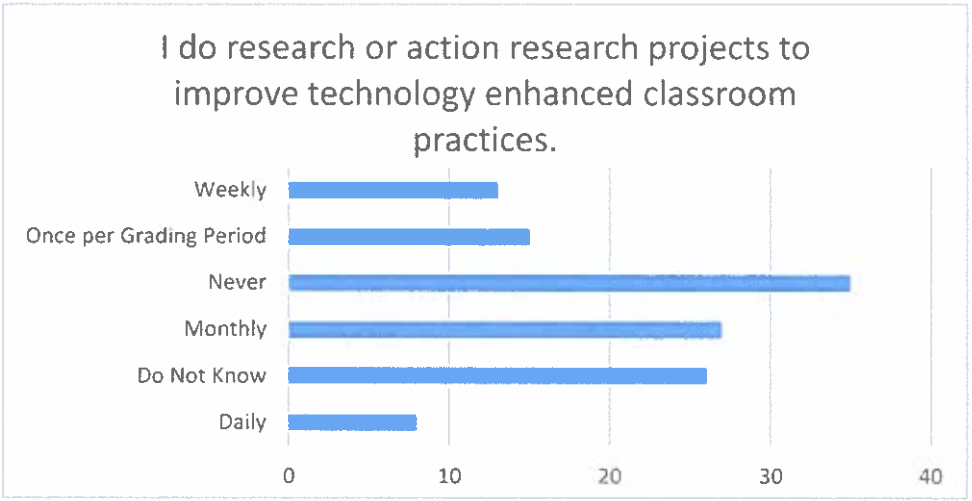



*Teaching and Learning*
Planning

**I do research or action research projects to improve technology enhanced classroom practices.**

**75**

| | |
|---|---|
| Daily | 8 |
| Do Not Know | 26 |
| Monthly | 27 |
| Never | 35 |
| Once per Grading Period | 15 |
| Weekly | 13 |
| Grand Total | 124 |

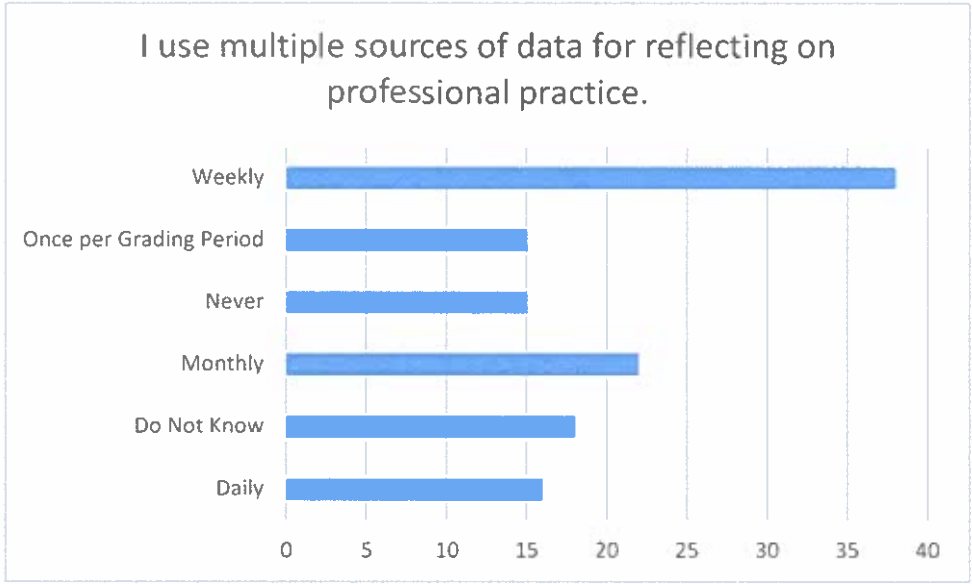



*Teaching and Learning*
Planning

**I use multiple sources of data for reflecting on professional practice.**

**76**

| | |
|---|---|
| Daily | 16 |
| Do Not Know | 18 |
| Monthly | 22 |
| Never | 15 |
| Once per Grading Period | 15 |
| Weekly | 38 |
| Grand Total | 124 |

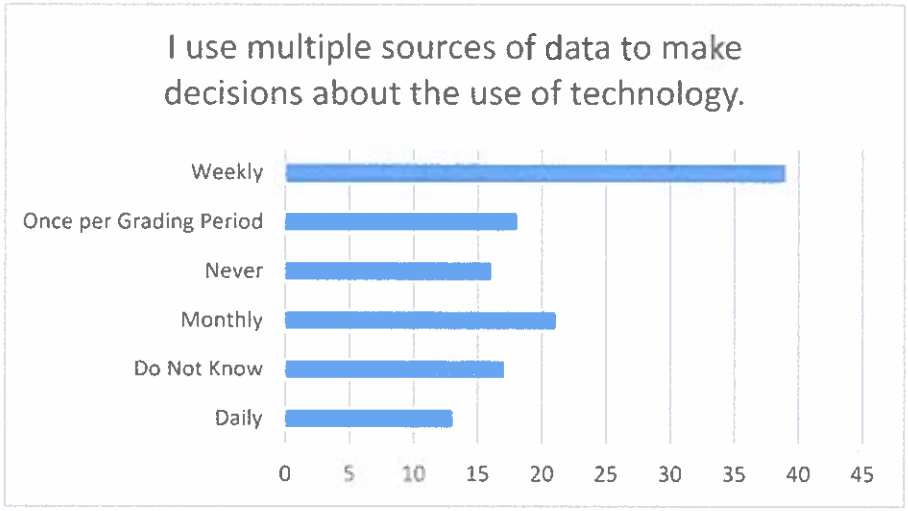



*Teaching and Learning*
Planning

**I use multiple sources of data to make decisions about the use of technology.**

**77**

| | |
|---|---|
| Daily | 13 |
| Do Not Know | 17 |
| Monthly | 21 |
| Never | 16 |
| Once per Grading Period | 18 |
| Weekly | 39 |
| Grand Total | 124 |

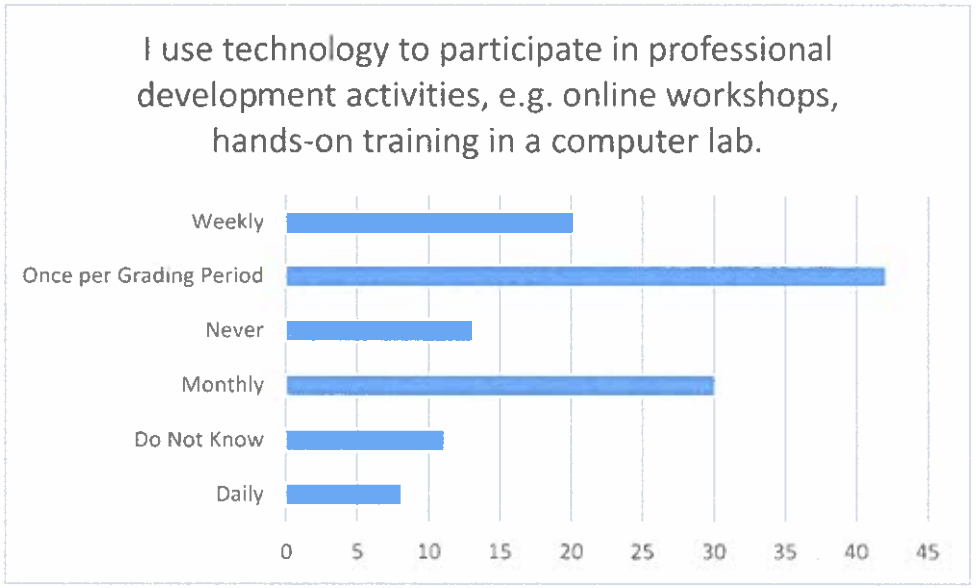



*Teaching and Learning*
Planning

**I use technology to participate in professional development activities, e.g. online workshops, hands-on training in a computer lab.**

**78**

| | |
|---|---|
| Daily | 8 |
| Do Not Know | 11 |
| Monthly | 30 |
| Never | 13 |
| Once per Grading Period | 42 |
| Weekly | 20 |
| Grand Total | 124 |

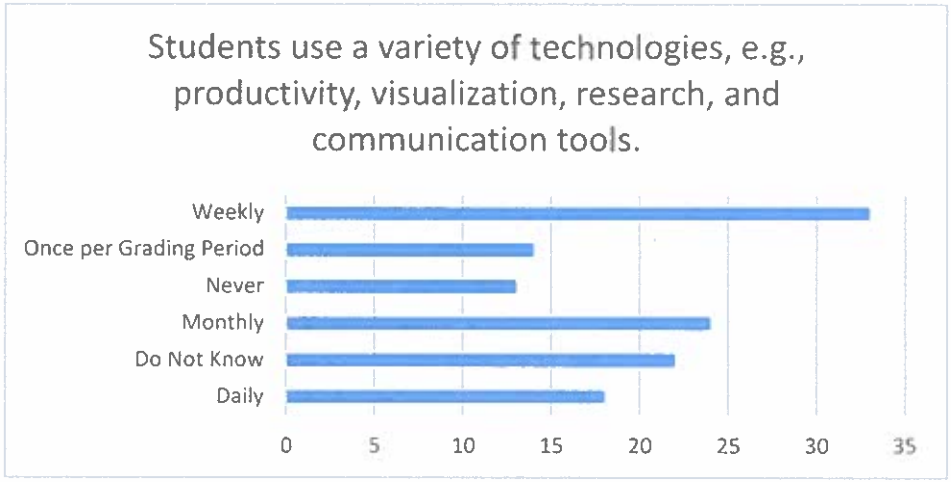



*Teaching and Learning*
Planning

**Students use a variety of technologies, e.g., productivity, visualization, research, and communication tools.**

**79**

| | |
|---|---|
| Daily | 18 |
| Do Not Know | 22 |
| Monthly | 24 |
| Never | 13 |
| Once per Grading Period | 14 |
| Weekly | 33 |
| Grand Total | 124 |

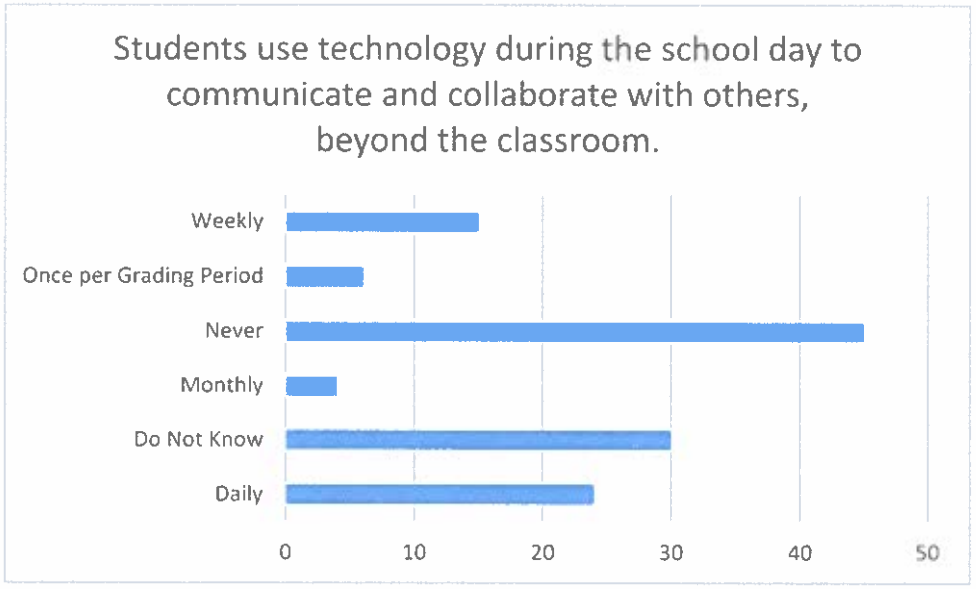



*Teaching and Learning*
Information and Communication Technologies

**Students use technology during the school day to communicate and collaborate with others, beyond the classroom.**

**80**

| | |
|---|---|
| Daily | 24 |
| Do Not Know | 30 |
| Monthly | 4 |
| Never | 45 |
| Once per Grading Period | 6 |
| Weekly | 15 |
| Grand Total | 124 |

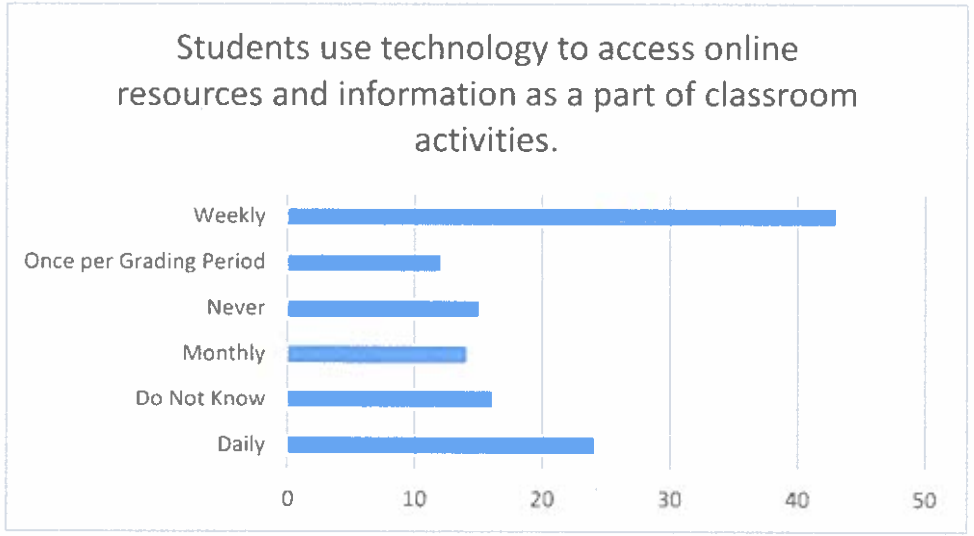



*Teaching and Learning*
Information and Communication Technologies

**Students use technology to access online resources and information as a part of classroom activities.**

**81**

| | |
|---|---|
| Daily | 24 |
| Do Not Know | 16 |
| Monthly | 14 |
| Never | 15 |
| Once per Grading Period | 12 |
| Weekly | 43 |
| Grand Total | 124 |

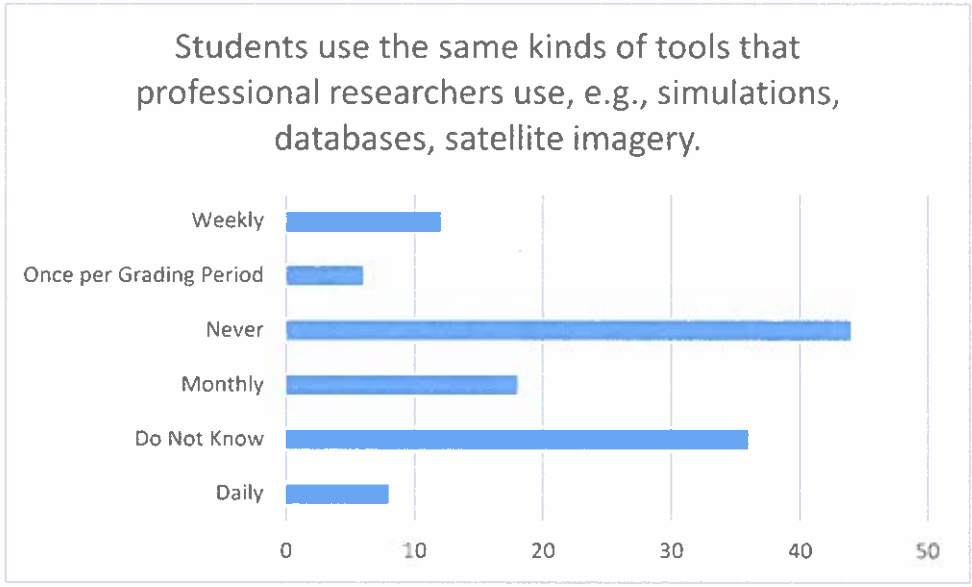



*Teaching and Learning*
Information and Communication Technologies

**Students use the same kinds of tools that professional researchers use, e.g., simulations, databases, satellite imagery.**

**82**

| | |
|---|---|
| Daily | 8 |
| Do Not Know | 36 |
| Monthly | 18 |
| Never | 44 |
| Once per Grading Period | 6 |
| Weekly | 12 |
| Grand Total | 124 |

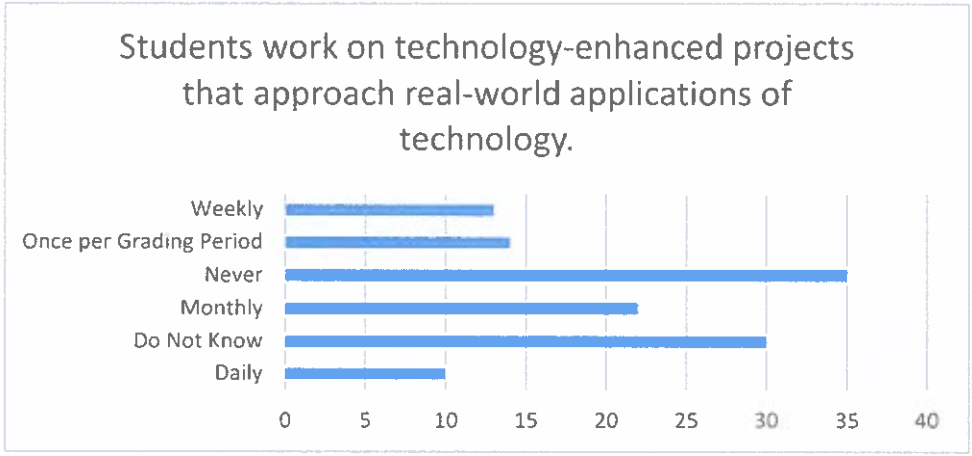



*Teaching and Learning*
Information and Communication Technologies

**Students work on technology-enhanced projects that approach real-world applications of technology.**

**83**

| | |
|---|---|
| Daily | 10 |
| Do Not Know | 30 |
| Monthly | 22 |
| Never | 35 |
| Once per Grading Period | 14 |
| Weekly | 13 |
| Grand Total | 124 |

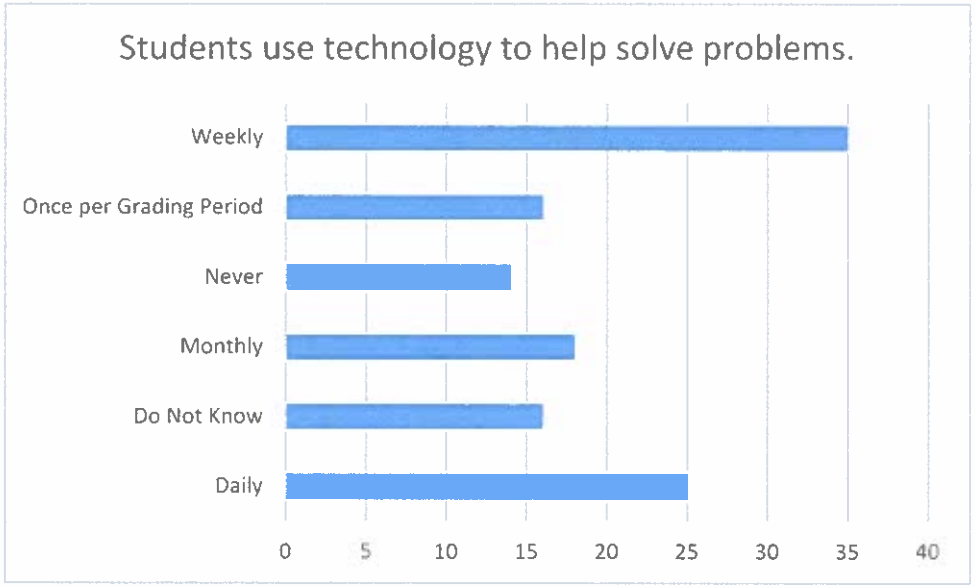



*Teaching and Learning*
Information and Communication Technologies

**Students use technology to help solve problems.**

**84**

| | |
|---|---|
| Daily | 25 |
| Do Not Know | 16 |
| Monthly | 18 |
| Never | 14 |
| Once per Grading Period | 16 |
| Weekly | 35 |
| Grand Total | 124 |

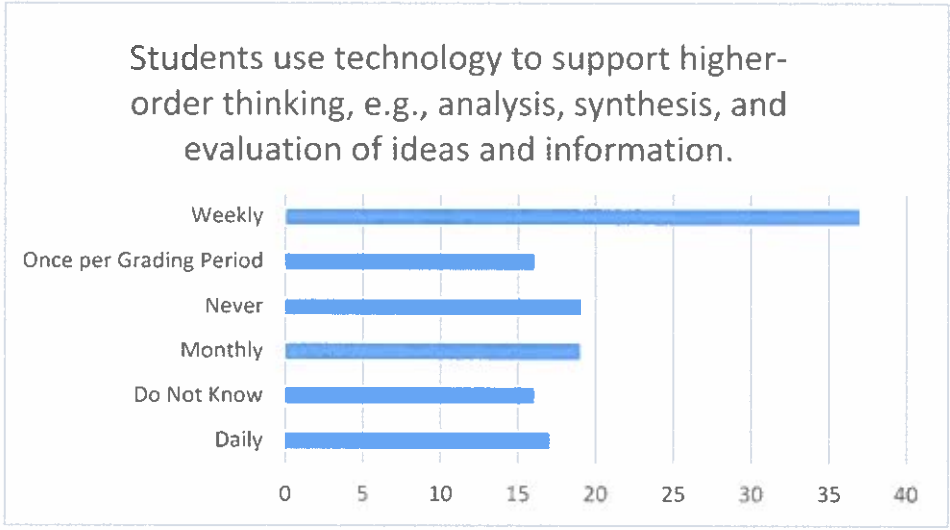



*Teaching and Learning*
Information and Communication Technologies

**Students use technology to support higher-order thinking, e.g., analysis, synthesis, and evaluation of ideas and information.**

**85**

| | |
|---|---|
| Daily | 17 |
| Do Not Know | 16 |
| Monthly | 19 |
| Never | 19 |
| Once per Grading Period | 16 |
| Weekly | 37 |
| Grand Total | 124 |

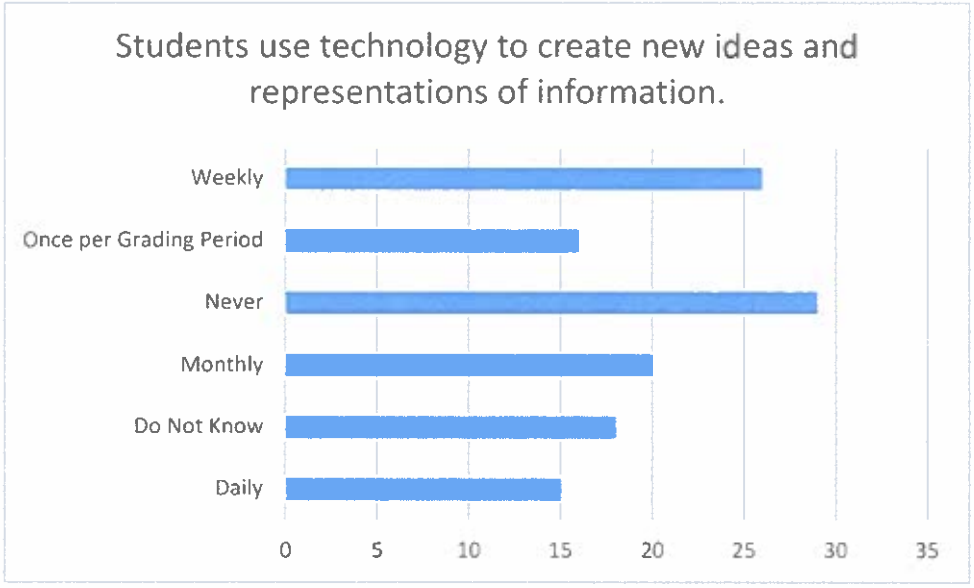



*Teaching and Learning*
Information and Communication Technologies

**Students use technology to create new ideas and representations of information.**

**86**

| | |
|---|---|
| Daily | 15 |
| Do Not Know | 18 |
| Monthly | 20 |
| Never | 29 |
| Once per Grading Period | 16 |
| Weekly | 26 |
| Grand Total | 124 |

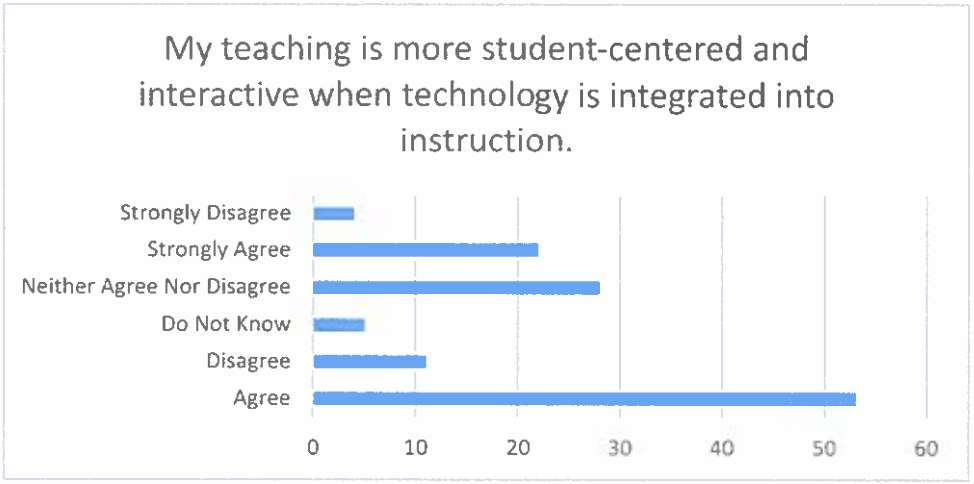



*Teaching and Learning*
Information and Communication Technologies

**My teaching is more student-centered and interactive when technology is integrated into instruction.**

**87**

| | |
|---|---|
| Agree | 53 |
| Disagree | 11 |
| Do Not Know | 5 |
| Neither Agree Nor Disagree | 28 |
| Strongly Agree | 22 |
| Strongly Disagree | 4 |
| Grand Total | 123 |




*Impact of Technology*
Teaching Practices