Section I – District Information

Information Requested	Responses
List of schools/SAU this plan covers	District - RSU 80/MSAD 04 1. Piscataquis Community High School (PCHS) 2. Piscataquis Community Elementary School (PCES)
List of the members of the planning team that authored the document	Raymond Freve - MSAD 04 Superintendent (Interim) Kelly MacFadyen – MSAD 04 Superintendent (Incoming) Jessica Dunton – MSAD 04 Technology Director Avery Thomas – MSAD 04 Computer Technician John Keane – PCHS Principal Anita Wright – PCES Principal Kathy Jarret – PCES Librarian
Date the plan was approved by the superintendent	
Contact Information for Correspondence about the Plan	Jessica Dunton jdunton@sad4.org 25 Campus Dr. Guilford, ME 04443 (207) 876-4301

| Category | Data point that you want to improve

Include title of data point and snapshot of graphic from BrightBytes | Action Plan

Read through any insights related to the data point, and then list three to five steps your district will take in order to see improvement related to that data point. |
|---|---|---|
| Teacher Use of Technology Related to the 4C's (communication, collaboration, critical thinking, creativity) | Communication | 1. Provide PD in Google Drive & Google Classroom, covering topics on integrating writing & collaboration (47% of PCHS teachers & 21% of PCES teachers have an interest in Online Tools for Collaboration) into instruction, storing documents, and developing ePortfolios. Focus on "anywhere, anytime" learning[1] to supplement to instruction. Also provide PD in Multimedia technology tools such as iMovie, GarageBand, & Camera apps using GoogleDrive as a storage & Google Classroom as a sharing medium.
2. Provide opportunities for teachers to model successes as well as to share questions & concerns related to student online communication.
3. Provide educational app resources with a focus on writing & collaboration, & that can be connected through the school Google account, such as Blogger.
4. Help teachers to develop a meaningful online platform to communicate with & supplement |

---

[1] BrightBytes Article - *Use Discussion Boards to Promote Critical Thinking*

| | | instruction (such as Google Classroom). |
| | | 5. Model Communication via Technology using meaningful things such as teacher portfolio development & delivering webinars to teachers |

Communication – Teacher

🔲 Teachers ask students to use web tools to receive online information

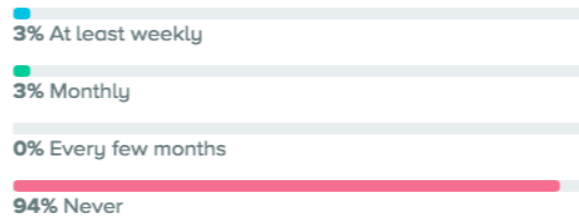Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning   DATA FROM: Apr 23, 2018 - May 8, 2018
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Use Of The 4Cs
VARIABLE: Teacher Communication

6%	3%	18%	73%
At least weekly	Monthly	Every few months	Never

Why This Matters

"To take advantage of online educational opportunities, people need to have a good understanding of how knowledge is constructed and how it represents reality and articulates a point of view" (Hobbs, 2010).

Citation
Hobbs, R. (2010). "Digital and media literacy: A plan of action" [White paper]. The Aspen Institute. Retrieved from http://www.knightcomm.org/wp-content/uploads/2010/12/Digital_and_Media_Literacy_A_Plan_of_Action.pdf

Teachers ask students to write online
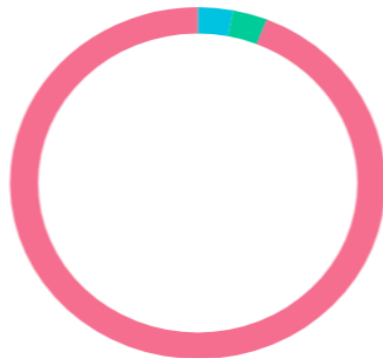
Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Use Of The 4Cs
VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

3% At least weekly

3% Monthly

0% Every few months

94% Never

Why This Matters

Digital communication increases student engagement by connecting them with a broader "real world" audience and encouraging collaboration (Purcell et al., 2013).

Citation

Purcell, K., Buchanan, J., & Friedrich, L. (2013). "The impact of digital tools on student writing and how writing is taught in schools." Retrieved from http://www.pewinternet.org/2013/07/16/the-impact-of-digital-tools-on-student-writing-and-how-writing-is-taught-in-schools/

✎ Teachers ask students to write online
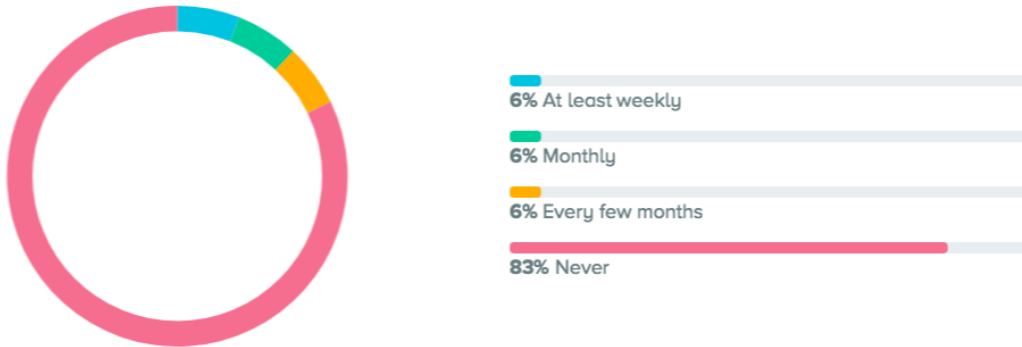
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Use Of The 4Cs
VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

6% At least weekly

6% Monthly

6% Every few months

83% Never

Why This Matters

Digital communication increases student engagement by connecting them with a broader "real world" audience and encouraging collaboration (Purcell et al., 2013).

Citation

Purcell, K., Buchanan, J., & Friedrich, L. (2013). "The impact of digital tools on student writing and how writing is taught in schools." Retrieved from http://www.pewinternet.org/2013/07/16/the-impact-of-digital-tools-on-student-writing-and-how-writing-is-taught-in-schools/

Teachers ask students to receive feedback from others in the classroom
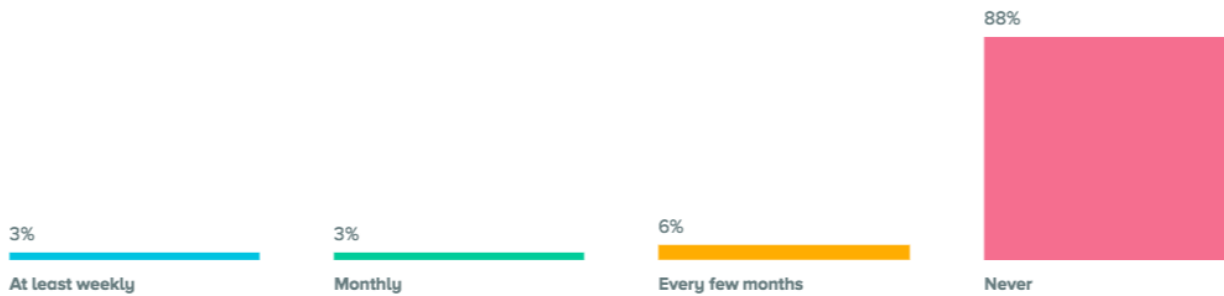
Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Use Of The 4Cs
VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

3%	3%	6%	88%
At least weekly	Monthly	Every few months	Never

Why This Matters

Students in one study agreed that the "diversity and creativity" offered by working in peer groups far outweighed that which is attainable when working alone (Chao & Lo, 2011).

Citation
Chao, Y.C.J., & Lo, H.C. (2011). Students' perceptions of wiki-based collaborative writing for learners of English as a foreign language. "Interactive Learning Environments, 19"(4), 395-411.

Teachers ask students to receive feedback from others in the classroom
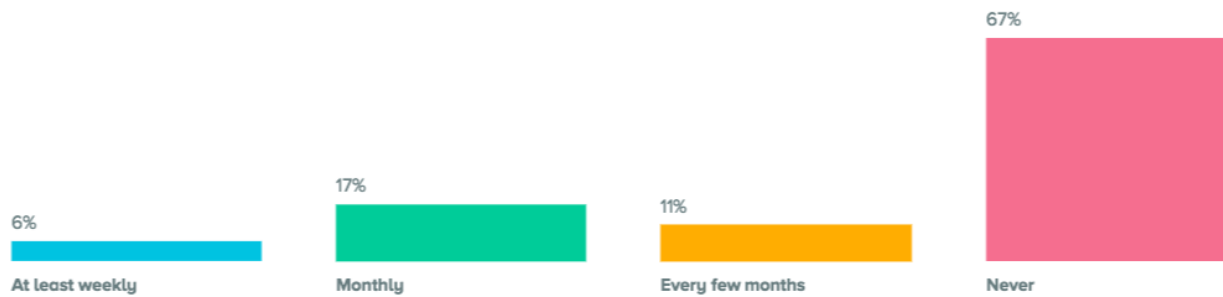
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Teacher Use Of The 4Cs

VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

6%
At least weekly

17%
Monthly

11%
Every few months

67%
Never

Why This Matters

Students in one study agreed that the "diversity and creativity" offered by working in peer groups far outweighed that which is attainable when working alone (Chao & Lo, 2011).

Citation

Chao, Y.C.J., & Lo, H.C. (2011). Students' perceptions of wiki-based collaborative writing for learners of English as a foreign language. *Interactive Learning Environments, 19*(4), 395-411.

📷 **Teachers ask students to get feedback online from someone other than them**

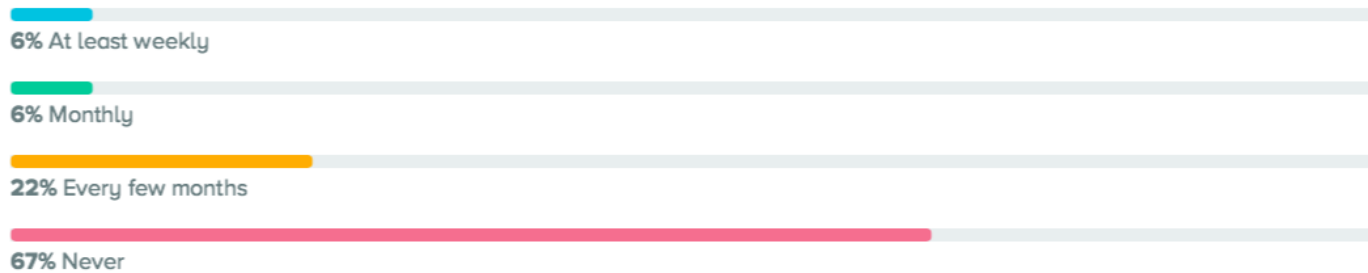### Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Use Of The 4Cs
VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

6% At least weekly

6% Monthly

22% Every few months

67% Never

Why This Matters

"One of the most potentially powerful tools is in-class formative assessments that provide real-time feedback on what students know and understand" (Bushweller, 2014).

Citation
Bushweller, K. (2014). Digital advances reshaping K-12 testing. *Education Week, 33*(25). Retrieved from http://www.edweek.org/ew/articles/2014/03/13/25execsum.h33.html?intc=EW-TC14-TOC

📷 Teachers ask students to get feedback online from someone other than them

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
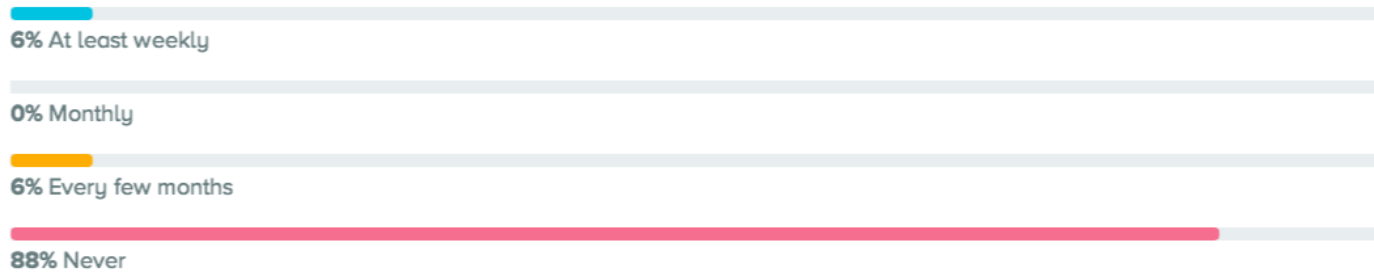**DOMAIN:** Classroom
SUCCESS INDICATOR: Teacher Use Of The 4Cs
VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

6% At least weekly

0% Monthly

6% Every few months

88% Never

Why This Matters

"One of the most potentially powerful tools is in-class formative assessments that provide real-time feedback on what students know and understand" (Bushweller, 2014).

Citation

Bushweller, K. (2014). Digital advances reshaping K-12 testing. *Education Week, 33*(25). Retrieved from http://www.edweek.org/ew/articles/2014/03/13/25execsum.h33.html?intc=EW-TC14-TOC

⊕ Teachers ask students to create e-Portfolios

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Teacher Use Of The 4Cs

VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

13% At least weekly

0% Monthly

13% Every few months

75% Never
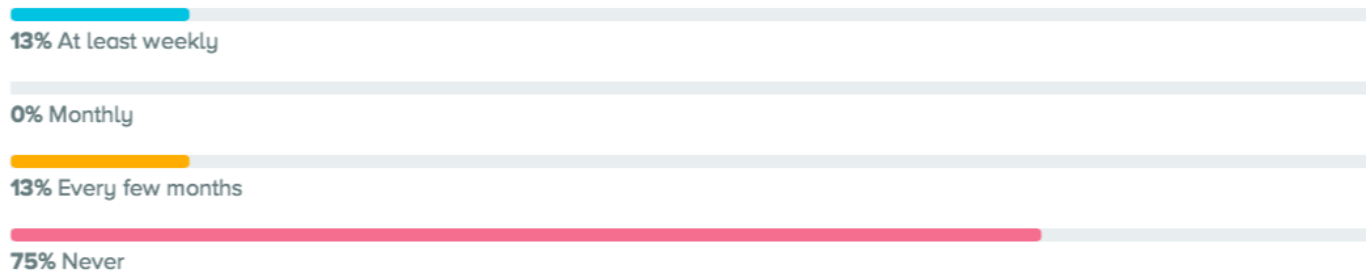
Why This Matters

Electronic portfolios can be "especially advantageous for at-risk children" because they can house a variety of multimedia products that allow a greater range of choice for students to showcase growth and knowledge (Meyer et al., 2010).

Citation

Meyer, E., Wade, A., Pillay, V., Idan, E., & Abrami, P. (2010). Using electronic portfolios to foster communication in K-12 classrooms. In Black, E. (Ed.), "The dynamic classroom: Engaging students in higher education" (125-134). Madison, WI: Atwood Publishing.

Teachers ask students to use chat or video chat applications

Piscataquis Community Elementary School

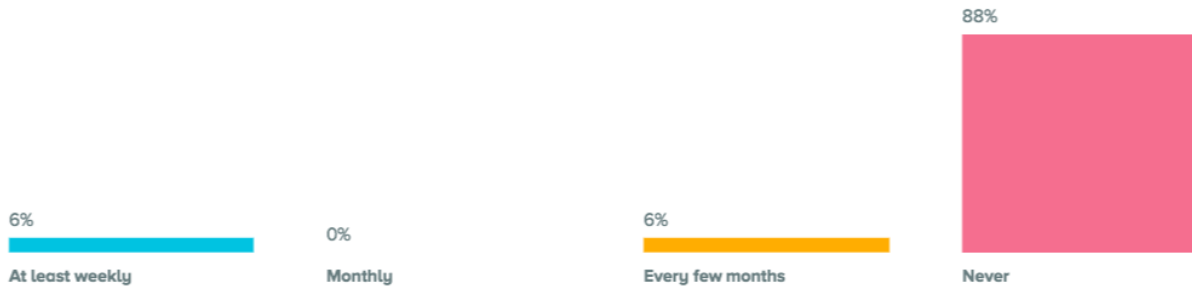FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Teacher Use Of The 4Cs

VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

At least weekly	Monthly	Every few months	Never
6%	0%	6%	88%

Why This Matters

Students can now compose messages without knowing sound-symbol relationships; rather, they can speak and have their message recorded and then sent as a message, allowing them to participate in social media and communicate with others at even younger ages (Barone, 2012).

Citation

Barone, D. (2012). Exploring home and school involvement of young children with web 2.0 and social media. *Research in the Schools, 19*(1), 1-11.

Teachers ask students to use chat or video chat applications
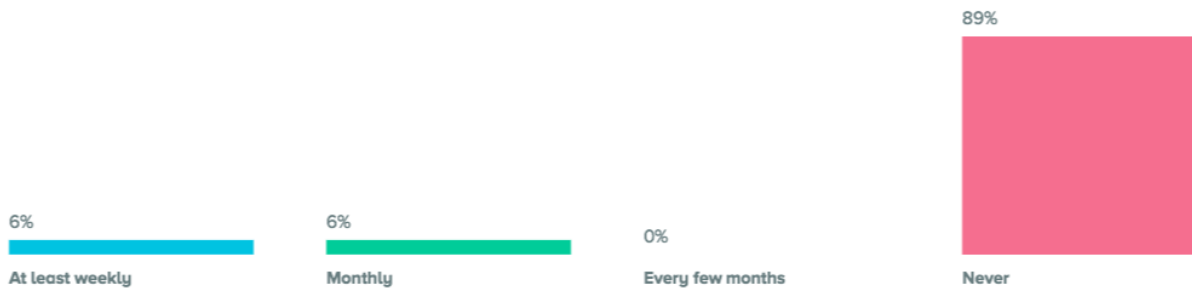
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Teacher Use Of The 4Cs

VARIABLE: Teacher Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

6%	6%	0%	89%
At least weekly	Monthly	Every few months	Never

Why This Matters

Students can now compose messages without knowing sound-symbol relationships; rather, they can speak and have their message recorded and then sent as a message, allowing them to participate in social media and communicate with others at even younger ages (Barone, 2012).

Citation

Barone, D. (2012). Exploring home and school involvement of young children with web 2.0 and social media. *Research in the Schools, 19*(1), 1-11.

Student Use of Technology Related to the 4C's (communication, collaboration, critical thinking, creativity)	Communication	1. Provide PD for teachers in the use of Google Drive & Google Classroom to create an educational environment that more positively fosters students' use communication & collaboration 2. Provide workshop style opportunities & interventions for students to foster independence & responsibility when communicating online 3. Provide opportunities for students to share concerns related to online communication, as well as a plan to address these. 4. Provide resources to help students differentiate between social media for educational use and that of their own personal use. 5. Provide opportunities for student digital leadership.

Communication – Student

☁ Elementary students are asked to share their work with someone online

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Student Use Of The 4Cs
VARIABLE: Elementary Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

18%
Weekly

12%
Monthly

70%
Never

Why This Matters

Young children will develop traditional literacy skills of speaking, listening, reading, and writing with digital media and they will also learn about keyboarding, problem solving, and communication when using Web 2.0 technologies (Barone, 2012).

Citation
Barone, D. (2012). Exploring home and school involvement of young children with web 2.0 and social media. *Research in the Schools, 19*(1), 1-11.

Students are asked to use chat or video chat applications
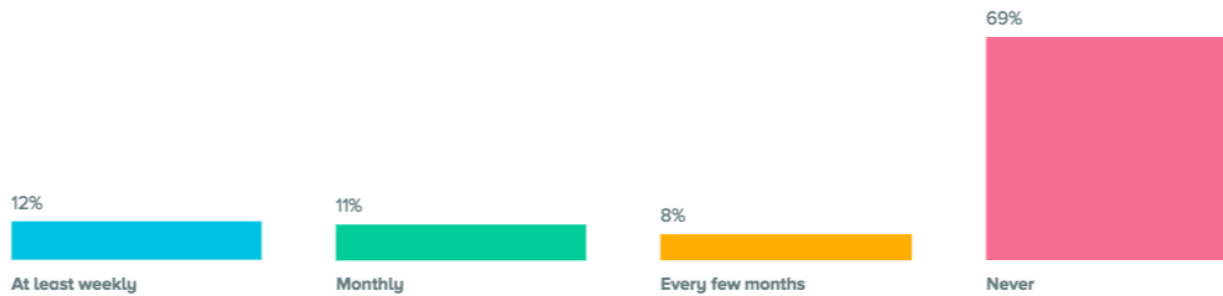
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Student Use Of The 4Cs
VARIABLE: Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

At least weekly	Monthly	Every few months	Never
12%	11%	8%	69%

Why This Matters

Live online chats can offer a fun, yet immersive educational environment—informally requiring both partners to participate and eliminating much of the fear of being judged or corrected (Chen & Eslami, 2013).

Citation
Chen, W., & Eslami, Z. (2013). Focus on form in live chat. *Journal of Educational Technology & Society, 16*(1), 147-158.

Elementary students are asked to use chat or video chat applications

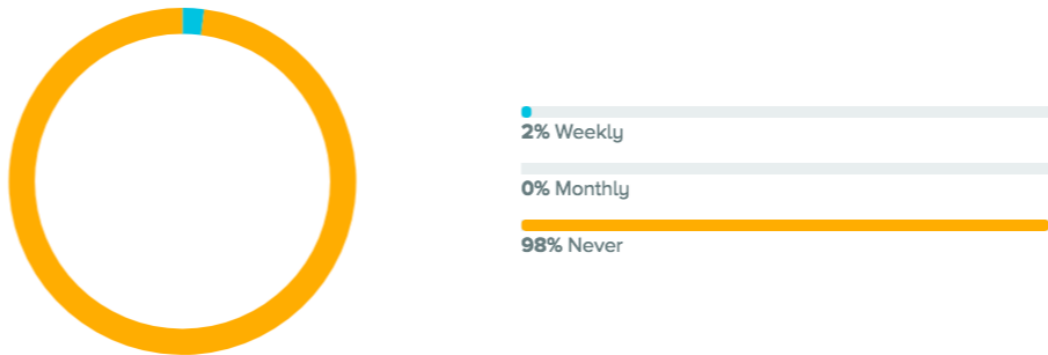### Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning   DATA FROM: Apr 23, 2018 - May 8, 2018
DOMAIN: Classroom
SUCCESS INDICATOR: Student Use Of The 4Cs
VARIABLE: Elementary Student Communication

2% Weekly

0% Monthly

98% Never

Why This Matters

Apps or programs like virtual worlds allow students to interact with other children and converse with them through instant messaging, supporting and increasing children's literate abilities (Barone, 2012).

Citation
Barone, D. (2012). Exploring home and school involvement of young children with web 2.0 and social media. *Research in the Schools, 19*(1), 1-11.

Students are asked to use web tools to receive online information

Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Student Use Of The 4Cs

VARIABLE: Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

7%
At least weekly

13%
Monthly

9%
Every few months

71%
Never

Why This Matters

Because internet and social networking applications are not going anywhere and can be used on most any device (both in school and out), teaching students how to use web tools (even to those as young as pre-K) are likely to become a priority for schools (Ribble, 2012).

Citation

Ribble, M. (2012). Digital citizenship for educational change. *Kappa Delta Pi Record, 48,* 148-151.

🌐📁 Students are asked to create e-Portfolios

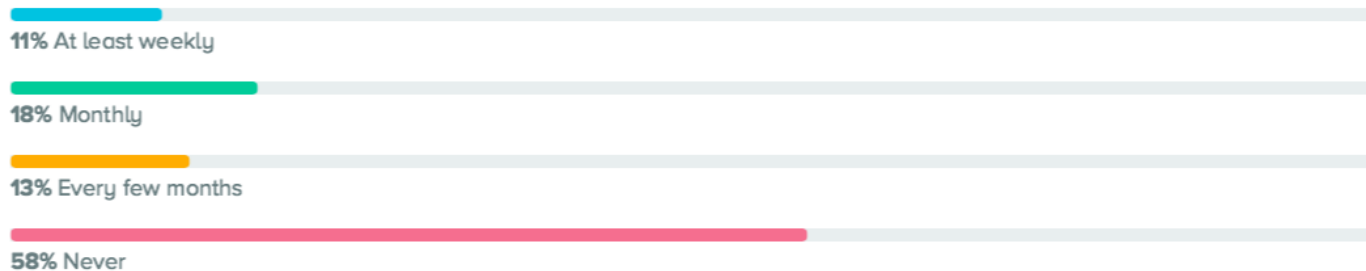### Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Student Use Of The 4Cs

VARIABLE: Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

11% At least weekly

18% Monthly

13% Every few months

58% Never

Why This Matters

Electronic portfolios allow students to personalize their work through dynamic links, provide opportunities for digital self-reflection and peer feedback, and offer ongoing storage, organization, and progress tracking (Meyer et al., 2010).

Citation

Meyer, E., Wade, A., Pillay, V., Idan, E., & Abrami, P. (2010). Using electronic portfolios to foster communication in K-12 classrooms. In Black, E. (Ed.), *The Dynamic Classroom: Engaging Students in Higher Education* (125-134). Madison, WI: Atwood Publishing.

🌐📁 Students are asked to create e-Portfolios

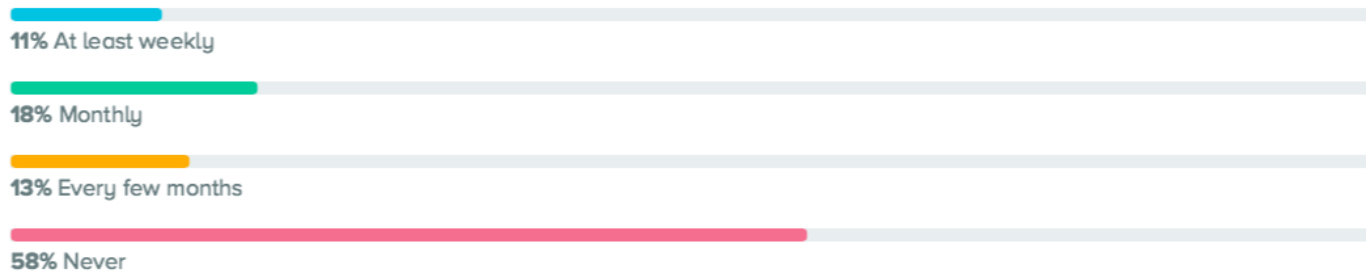### Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Student Use Of The 4Cs
VARIABLE: Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

11% At least weekly

18% Monthly

13% Every few months

58% Never

Why This Matters

Electronic portfolios allow students to personalize their work through dynamic links, provide opportunities for digital self-reflection and peer feedback, and offer ongoing storage, organization, and progress tracking (Meyer et al., 2010).

Citation

Meyer, E., Wade, A., Pillay, V., Idan, E., & Abrami, P. (2010). Using electronic portfolios to foster communication in K-12 classrooms. In Black, E. (Ed.), *The Dynamic Classroom: Engaging Students in Higher Education* (125-134). Madison, WI: Atwood Publishing.

🌐📁 Elementary students are asked to create e-Portfolios
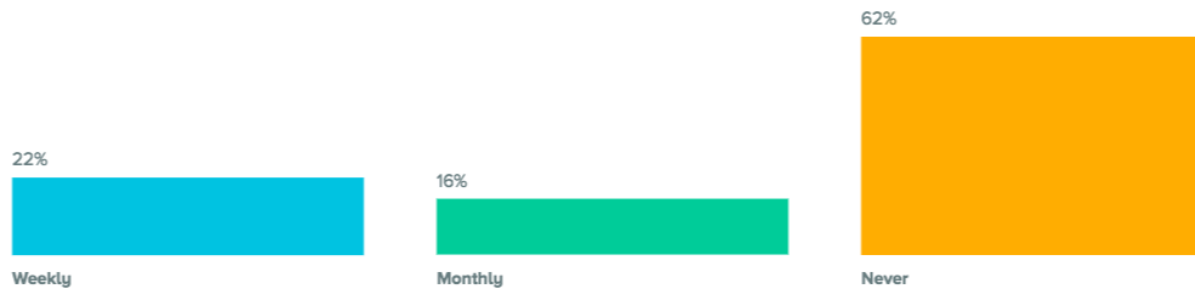
Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Student Use Of The 4Cs

VARIABLE: Elementary Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

22%
Weekly

16%
Monthly

62%
Never

Why This Matters

Researchers have found that older elementary students who are taught to use regularly the affordances of electronic portfolio tools showed greater improvements in writing skills than students who were not (Abrami et al., 2013).

Citation
Abrami, P., Venkatesh, V., Meyer, E., Wade, C. (2013). Using electronic portfolios to foster literacy and self-regulated learning skills in elementary students. *Journal of Educational Psychology, 105*(4), 1188–1209.

📷 Students are asked to receive feedback online from someone other than a teacher

Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Student Use Of The 4Cs
VARIABLE: Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

16% At least weekly

17% Monthly

18% Every few months

49% Never

Why This Matters

Moving away from lecture-style teaching "allows teachers to pose gripping questions, problems, and challenges so compelling that students have to reach out to others to solve them using collaborative methods" that are more reflective of 21st century learning experiences (Wardlow, n.d.).

Citation
Wardlow, L. (n.d.). "The science behind better collaboration and student groupings and technology: Teaching in a digital age" [White paper]. Pearson. Retrieved from
http://researchnetwork.pearson.com/wp-content/uploads/DigitalAge_CollaborationScience_0930131.pdf

🏫 Students are asked to receive feedback from others in the classroom

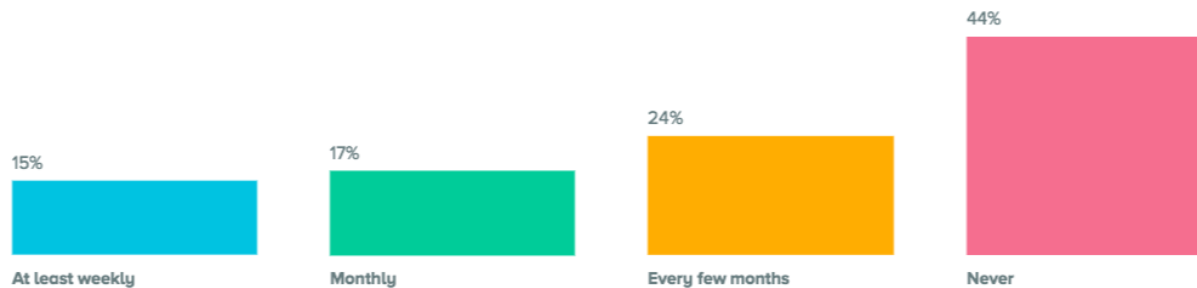**Piscataquis Community Secondary School**

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Student Use Of The 4Cs

VARIABLE: Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

At least weekly	Monthly	Every few months	Never
15%	17%	24%	44%

Why This Matters

Students who collaborate in online spaces to provide feedback "learn from each other, improve their work, and develop their skills," making such interactions beneficial to students of all ability levels (Thomas et al., 2014).

Citation

Thomas, E., Rosewell, J., Kear, K., & Donelan, H. (2014). Learning and peer feedback in shared online spaces. "Ninth International Conference on Networked Learning 2014," 7-9 April, 2014, Edinburgh, UK, 382–385.

Elementary students are asked to receive feedback from others in the classroom
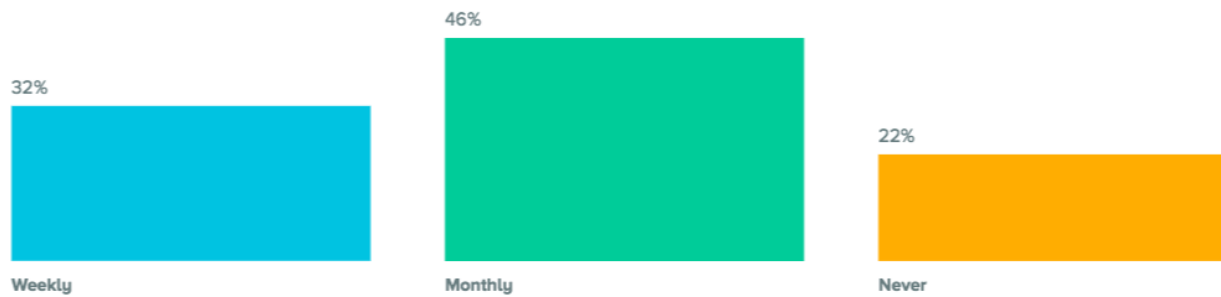
Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Student Use Of The 4Cs

VARIABLE: Elementary Student Communication

DATA FROM: Apr 23, 2018 - May 8, 2018

32%
46%
22%

Weekly
Monthly
Never

Why This Matters

Students who are given general guidelines and time to practice improve in their abilities to provide digital, critical—yet positive—peer feedback (Casey & Evans, 2011).

Citation
Casey, G., & Evans, T. (2011). Designing for learning: Online social networks as a classroom environment. *International Review of Research in Open and Distance Learning, 12*(7), 1-26.

Digital Citizenship	Cyber Bullying	1. Provide PD Opportunities for both staff & students to help them not only know how to recognize cyberbullying, but to share strategies on how to teach this to students. Although only 7% of teachers in both schools are interested in PD on social media, 47% of PCHS teachers & 59% of PCES are interested in PD on using technology for Classroom Management, which includes appropriate use of social media. 2. Provide both students & teachers with a reliable reporting method to report potential incidents of cyber bullying, as well as a procedure to follow up on these. 3. Provide resources for both staff & students to better create an environment of shared responsibility to recognize & combat cyber bullying. 4. Involve families in the cyber bullying discussion, & include the family as a key component in the responsibility of maintaining devices shared between home & school.

🔒 Time spent per year teaching about online safety

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Yearly Time Spent Teaching Digital Citizenship

DATA FROM: Apr 23, 2018 - May 8, 2018

0%	**10%**	**13%**	**23%**	**55%**
More than 5 hours	3-5 hours	1-3 hours	1 hour or less	I don't teach this
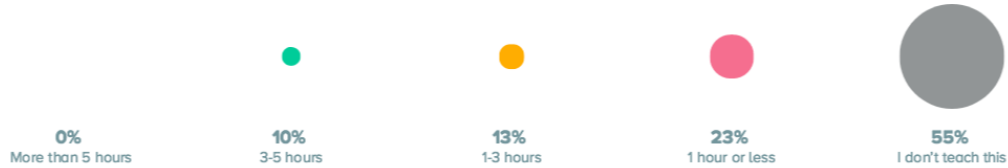
Why This Matters

Students who have access to the internet only "at school to retrieve specific information from pre-approved websites" are at a disadvantage when compared to Web-confident children, compelling increased instruction and discussion about online safety and protection (Sharples et al., 2009).

Citation

Sharples, M., Graber, R., Harrison, C., & Logan, K. (2009). E-safety and web 2.0 for children aged 11-16. "Journal of Computer Assisted Learning, 25," 70-84.

ⓘ DATA HIGHLIGHT

90%
of teachers spend less 3 hours or less on this per year

🔒 Teacher knowledge of online safety
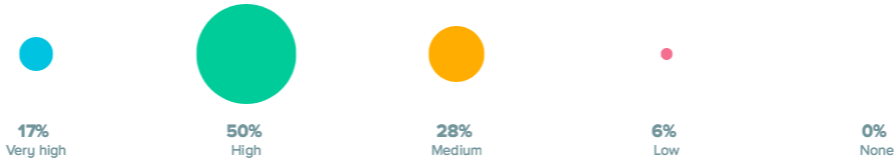
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DOMAIN: Classroom

SUCCESS INDICATOR: Teacher Digital Citizenship

VARIABLE: Teacher Knowledge Of Digital Citizenship Topics

DATA FROM: Apr 23, 2018 - May 8, 2018

17%	**50%**	**28%**	**6%**	**0%**
Very high	High	Medium	Low	None

Why This Matters

Cyberbullying and sexting are the unanticipated result of technological innovation and taking a proactive and aggressive approach to digital character education is necessary to combat such behavior (Ohler, 2011).

Citation

Ohler, J. (2011). Digital citizenship means character education for the digital age. *Kappa Delta Pi, 48*(1), 25-27.

ⓘ DATA HIGHLIGHT

94% of teachers know about this

85% of parents are comfortable with this

🔒 Teacher knowledge of online safety

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Knowledge Of Digital Citizenship Topics

DATA FROM: Apr 23, 2018 - May 8, 2018

13%	**42%**	**39%**	**0%**	**6%**
Very high	High	Medium	Low	None

Why This Matters

Cyberbullying and sexting are the unanticipated result of technological innovation and taking a proactive and aggressive approach to digital character education is necessary to combat such behavior (Ohler, 2011).

Citation
Ohler, J. (2011). Digital citizenship means character education for the digital age. *Kappa Delta Pi, 48*(1), 25-27.

ⓘ DATA HIGHLIGHT

94%
of teachers know about this

100%
of parents are comfortable with this

🌐 **Teacher knowledge of how to recognize and prevent cyberbullying**

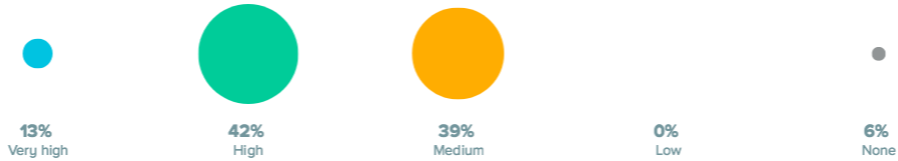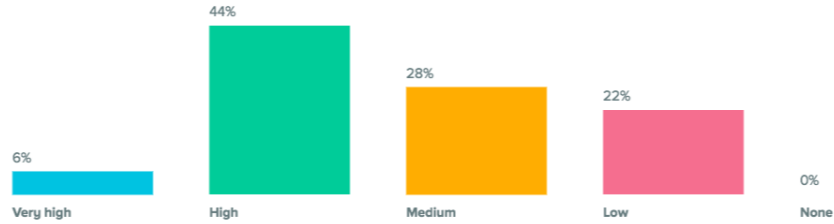**Piscataquis Community Secondary School**

FRAMEWORK: Technology & Learning   DATA FROM: Apr 23, 2018 - May 8, 2018
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Knowledge Of Digital Citizenship Topics

	44%			
6%		28%	22%	0%
Very high	High	Medium	Low	None

Why This Matters

All digital issues (e.g., sexting, cyberbullying, privacy) are ultimately related, and the reality of students' cyber lives means teaching digital citizenship holistically and not just as cyber issues come up (Ohler, 2011).

Citation
Ohler, J. (2011). Digital citizenship means character education for the digital age. *Kappa Delta Pi, 48*(1), 25-27.

ⓘ DATA HIGHLIGHT

78%
of teachers know about this

85%
of parents are comfortable with this

🌐 Teacher knowledge of how to recognize and prevent cyberbullying

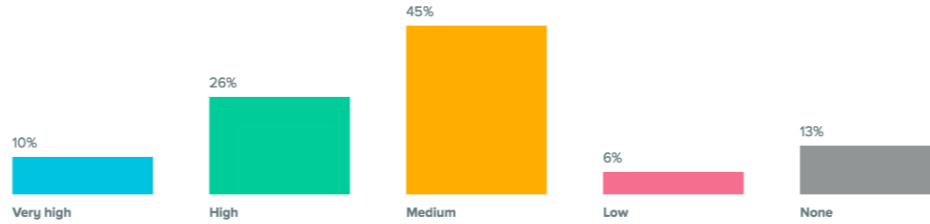### Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning   DATA FROM: Apr 23, 2018 - May 8, 2018
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Knowledge Of Digital Citizenship Topics

Very high	High	Medium	Low	None
10%	26%	45%	6%	13%

Why This Matters

All digital issues (e.g., sexting, cyberbullying, privacy) are ultimately related, and the reality of students' cyber lives means teaching digital citizenship holistically and not just as cyber issues come up (Ohler, 2011).

Citation
Ohler, J. (2011). Digital citizenship means character education for the digital age. *Kappa Delta Pi*, 48*(1), 25-27.

ⓘ DATA HIGHLIGHT

81%
of teachers know about this

92%
of parents are comfortable with this

🌐 Time spent per year teaching about prevention of cyberbullying

Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Yearly Time Spent Teaching Digital Citizenship

DATA FROM: Apr 23, 2018 - May 8, 2018

0% More than 5 hours

17% 3-5 hours

17% 1-3 hours

39% 1 hour or less

28% I don't teach this

Why This Matters

Cyberbullying is preventable. Schools must take responsibility to create a culture of respect and tolerance among students as well as create and enforce a code of conduct related to appropriate technology use (Battista, 2013).

Citation

Battista, L. (2013). Cyberbullying—What schools can do about it. Kaplan University. Retrieved from http://www.kaplanuniversity.edu/arts-sciences/articles/cyberbullying-schools.aspx

ⓘ DATA HIGHLIGHT

0%
of teachers spend more than 5 hours on this per year

Time spent per year teaching about prevention of cyberbullying

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Yearly Time Spent Teaching Digital Citizenship

DATA FROM: Apr 23, 2018 - May 8, 2018

3% More than 5 hours

6% 3-5 hours

6% 1-3 hours

19% 1 hour or less

65% I don't teach this

Why This Matters

Cyberbullying is preventable. Schools must take responsibility to create a culture of respect and tolerance among students as well as create and enforce a code of conduct related to appropriate technology use (Battista, 2013).

Citation

Battista, L. (2013). Cyberbullying—What schools can do about it. Kaplan University. Retrieved from http://www.kaplanuniversity.edu/arts-sciences/articles/cyberbullying-schools.aspx
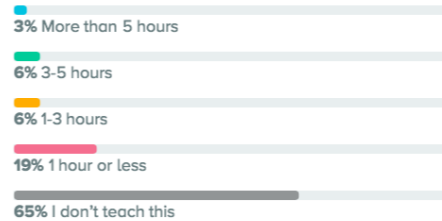
ⓘ DATA HIGHLIGHT

3%
of teachers spend more than 5 hours on this per year

Time spent per year teaching about using social networks for learning

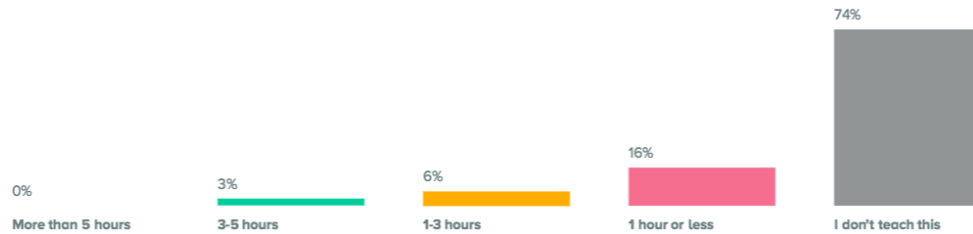### Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Classroom
SUCCESS INDICATOR: Teacher Digital Citizenship
VARIABLE: Teacher Yearly Time Spent Teaching Digital Citizenship

DATA FROM: Apr 23, 2018 - May 8, 2018

0%	3%	6%	16%	74%
More than 5 hours	3-5 hours	1-3 hours	1 hour or less	I don't teach this

Why This Matters

When used for the purpose of communicating about school-related matters, social media can be a valuable and effective tool for connecting with students and parents (University of Phoenix, 2014).

Citation

University of Phoenix College of Education. (2014). K-12 teachers uncertain about how to connect with students and parents via social media [Press release]. Retrieved from http://www.phoenix.edu/news/releases/2014/01/new-survey-shows-teachers-uncertain-on-social-media.html.

ⓘ DATA HIGHLIGHT

90%
of teachers spend 1 hour or less on this per year

🌐😠 Students are taught how to respond to online bullying

Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning   DATA FROM: Apr 23, 2018 - May 8, 2018
DOMAIN: Classroom
SUCCESS INDICATOR: Student Digital Citizenship
VARIABLE: Student Frequency Of Learning Digital Citizenship

19%
At least weekly

19%
Monthly

30%
Every few months

32%
Never

Why This Matters

Teachers are one of the "biggest sources for general advice about internet" safety, but teens who are bullied online are still more likely to seek guidance from parents and peers (Lenhart et al., 2011).

Citation
Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., & Rainie, L. (2011). Teens, kindness, and cruelty on social network sites. Retrieved from http://www.pewinternet.org/files/old-media//Files/Reports/2011/PIP_Teens_Kindness_Cruelty_SNS_Report_Nov_2011_FINAL_110711.pdf

ⓘ DATA HIGHLIGHT   **62%**
of students are rarely taught this, if ever.

🌐 Elementary students are taught how to respond to online bullying

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning

DATA FROM: Apr 23, 2018 - May 8, 2018

DOMAIN: Classroom

SUCCESS INDICATOR: Student Digital Citizenship

VARIABLE: Elementary Student Frequency Of Learning Digital Citizenship

12%
At least weekly

20%
Monthly

67%
Never

Why This Matters

As schools increasingly adopt 1:1 initiatives, teachers and students "must understand digital citizenship and the issues it entails" (Kiker as quoted in Ribble, 2012).

Citation
Ribble, M. (2012). Digital citizenship for educational change. "Kappa Delta Pi Record, 48," 148-151.

🌐 Students are taught how to act respectfully online

Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DATA FROM: Apr 23, 2018 - May 8, 2018

DOMAIN: Classroom

SUCCESS INDICATOR: Student Digital Citizenship

VARIABLE: Student Frequency Of Learning Digital Citizenship

28% At least weekly

22% Monthly

28% Every few months

22% Never

Why This Matters

"Instead of restricting access, we should educate young people to participate [in the digital world] responsibly, ethically, and safely. Through proper use of social networking sites, students learn social media etiquette and cultivate their digital citizenship" (Wang et al., 2013).

Citation

Wang, S., Hsu, H., & Green, S. (2013). Using social networking sites to facilitate teaching and learning in the science classroom. *Science Scope*, 36*(7), 74-80.

ⓘ DATA HIGHLIGHT

50%
of students are taught this on a regular basis

🌐☺ Elementary students are taught how to act respectfully online

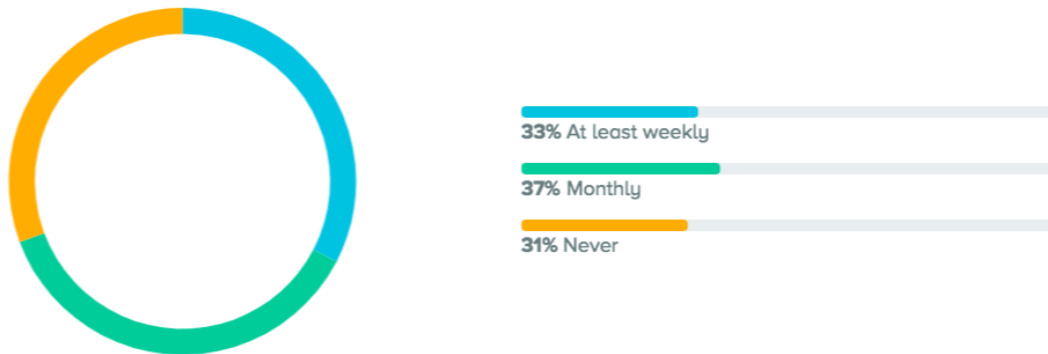## Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning

DATA FROM: Apr 23, 2018 - May 8, 2018

DOMAIN: Classroom

SUCCESS INDICATOR: Student Digital Citizenship

VARIABLE: Elementary Student Frequency Of Learning Digital Citizenship

33% At least weekly

37% Monthly

31% Never

Why This Matters

Elementary students need ongoing exploration of what digital citizenship means, especially when personal devices are to be implemented in public settings (Crichton et al., 2012).

Citation

Crichton, S., Pegler, K., & White, D. (2012). Personal devices in public settings: Lessons learned from an iPod touch / iPad project. *The Electronic Journal of e-Learning, 10*(1), 23-31.

| Opportunity for Teacher Professional Learning or Skill Development | Online Collaboration | 1. Continue to provide access to Online Collaboration Platforms such as Google Drive & Google Classroom.
2. Provide PD Opportunities on Online Collaboration, specifically on Google Drive & Google Classroom.
3. Provide ongoing support & individualized planning for teachers to help structure lessons and units with online collaboration in mind.
4. Model online collaboration by integrating district wide PD opportunities into the Google Classroom & similar formats. |

🏫 Teacher-reported time spent per year participating in school-sponsored PD

Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
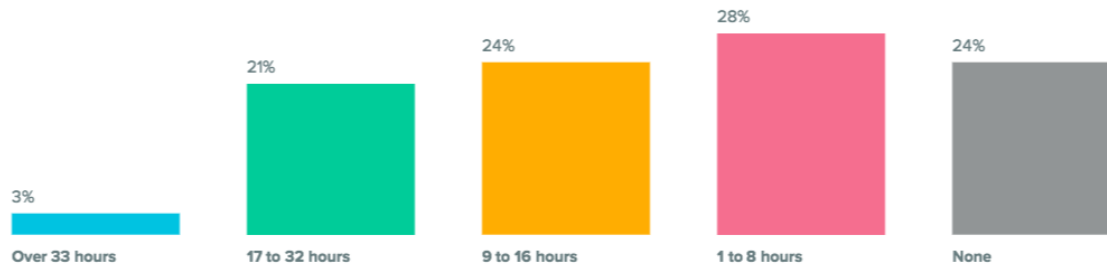
DOMAIN: Environment

SUCCESS INDICATOR: Professional Learning

VARIABLE: Teacher Ed Tech Professional Development

DATA FROM: Apr 23, 2018 - May 8, 2018

3%	21%	24%	28%	24%
Over 33 hours	17 to 32 hours	9 to 16 hours	1 to 8 hours	None

↓ OF WHICH THE QUALITY IS

0%	**21%**	**55%**	**3%**	**0%**	**21%**
Excellent	Above average	Average	Below average	Poor	N/A

🏫 **Teacher-reported time spent per year participating in school-sponsored PD**
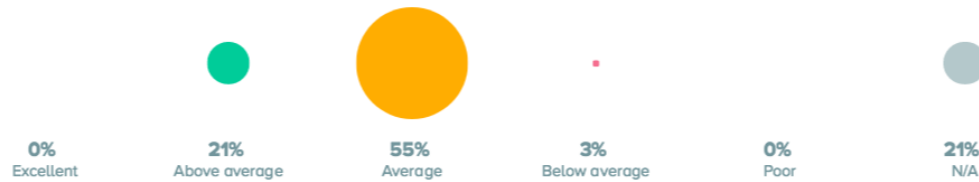
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning

DOMAIN: Environment

SUCCESS INDICATOR: Professional Learning

VARIABLE: Teacher Ed Tech Professional Development

DATA FROM: Apr 23, 2018 - May 8, 2018

Over 33 hours	17 to 32 hours	9 to 16 hours	1 to 8 hours	None
0%	13%	31%	44%	13%

↓ OF WHICH THE QUALITY IS

Excellent	Above average	Average	Below average	Poor	N/A
0%	6%	69%	6%	0%	19%

Teacher-reported time spent per year participating in non-school-sponsored formal PD

Piscataquis Community Elementary School
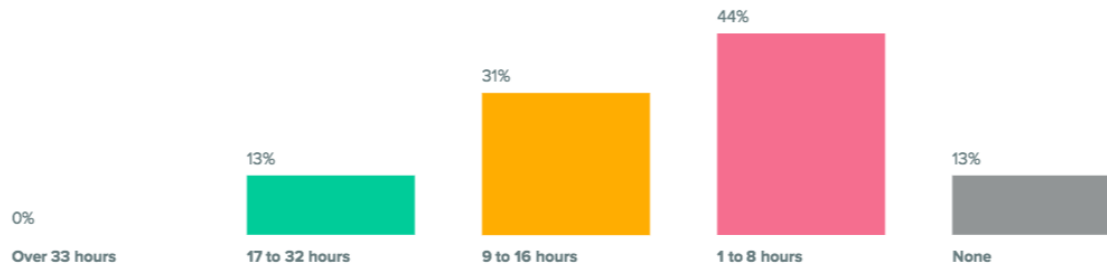
FRAMEWORK: Technology & Learning
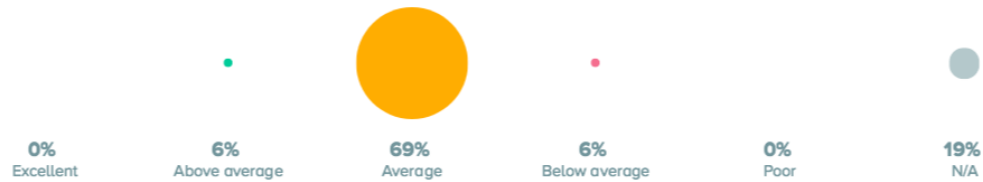DOMAIN: Environment
SUCCESS INDICATOR: Professional Learning
VARIABLE: Teacher Ed Tech Professional Development

DATA FROM: Apr 23, 2018 - May 8, 2018

3%	7%	7%	48%	34%
Over 33 hours	17 to 32 hours	9 to 16 hours	1 to 8 hours	None

↓ OF WHICH THE QUALITY IS

7%	17%	28%	3%	0%	45%
Excellent	Above average	Average	Below average	Poor	N/A

Teacher-reported time spent per year participating in non-school-sponsored formal PD

Piscataquis Community Secondary School

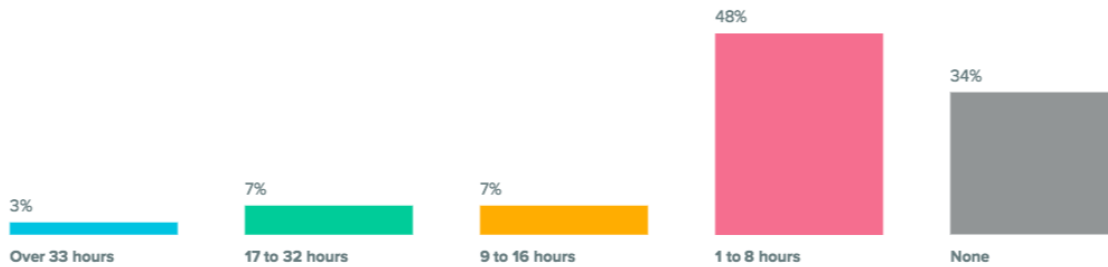**FRAMEWORK:** Technology & Learning
DOMAIN: Environment
SUCCESS INDICATOR: Professional Learning
VARIABLE: Teacher Ed Tech Professional Development

DATA FROM: Apr 23, 2018 - May 8, 2018

Over 33 hours	17 to 32 hours	9 to 16 hours	1 to 8 hours	None
13%	0%	13%	31%	44%

↓ OF WHICH THE QUALITY IS

Excellent	Above average	Average	Below average	Poor	N/A
0%	6%	63%	0%	0%	31%

Piscataquis Community Elementary School
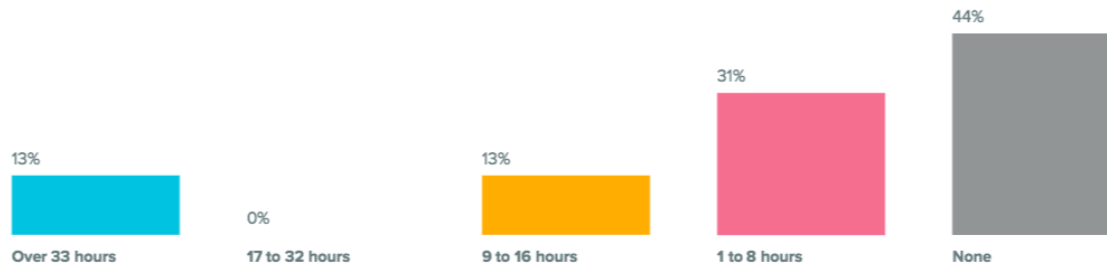
FRAMEWORK: Technology & Learning
DOMAIN: Environment
SUCCESS INDICATOR: Professional Learning
VARIABLE: Teacher Interest In Educational Technology PD Topics

DATA FROM: Apr 23, 2018 - May 8, 2018

Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Environment
SUCCESS INDICATOR: Professional Learning
VARIABLE: Teacher Interest In Educational Technology PD Topics

DATA FROM: Apr 23, 2018 - May 8, 2018
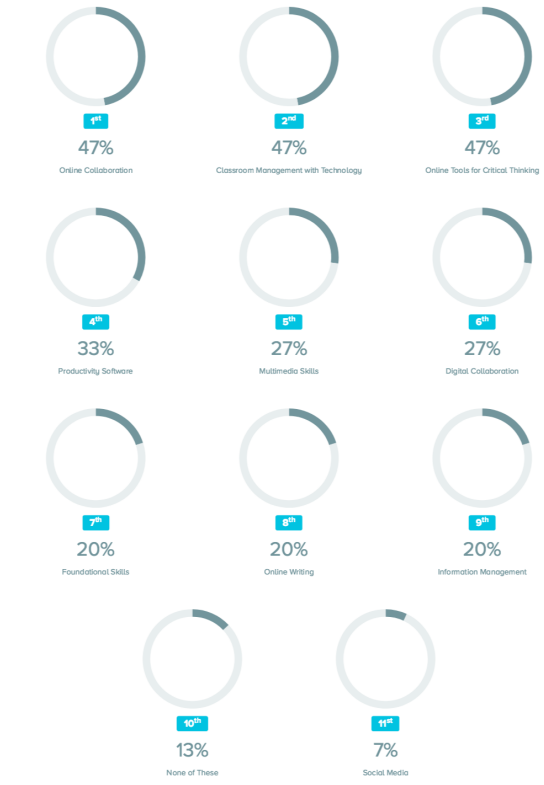
	Piscataquis Community Elementary School	
1st — 59% Classroom Management with Technology	2nd — 38% Multimedia Skills	3rd — 31% Productivity Software
4th — 28% Online Tools for Critical Thinking	5th — 21% Foundational Skills	6th — 21% Online Writing
7th — 21% Online Collaboration	8th — 21% Information Management	9th — 21% None of These
10th — 10% Digital Collaboration	11st — 7% Social Media	

	Piscataquis Community Secondary School	
1st — 47% Online Collaboration	2nd — 47% Classroom Management with Technology	3rd — 47% Online Tools for Critical Thinking
4th — 33% Productivity Software	5th — 27% Multimedia Skills	6th — 27% Digital Collaboration
7th — 20% Foundational Skills	8th — 20% Online Writing	9th — 20% Information Management
10th — 13% None of These	11st — 7% Social Media	

Why This Matters

For both new and experienced teachers, professional development in technology develops competencies, influences teacher attitudes about technology in the classroom, and helps them find new tools to support student learning (Buabeng-Andoh, 2012).

Citation

Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. "International Journal of Education and Development using Information and Communication Technology (IJEDICT), 8"(1), 136-155.

Why This Matters

For both new and experienced teachers, professional development in technology develops competencies, influences teacher attitudes about technology in the classroom, and helps them find new tools to support student learning (Buabeng-Andoh, 2012).

Citation

Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. "International Journal of Education and Development using Information and Communication Technology (IJEDICT), 8"(1), 136-155.

| School Environment (in particular, policies and procedures that support student learning with technology) | Teacher Frequency of Technology Discussions | 56% of teachers in PCSS & 76% of teachers at PCES feel rewarded for integrating technology into teaching only less than half the time. 24% of teachers at PCSS & 59% of teachers at PCES feel rewarded only rarely or never. This indicates we need to do more with recognizing teachers who are integrating technology.
1. Read through the *Insights* articles from Clarity 3.0.
2. Develop a district plan for goals with technology integration & recognition for teachers meeting those goals.
3. Work with teachers to have as many as possible reach Apple Teacher Certified status, & provide some sort of recognition with that. |

🏆 Teachers feel rewarded for integrating technology into teaching
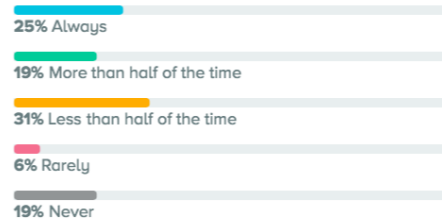
Piscataquis Community Secondary School

FRAMEWORK: Technology & Learning
DOMAIN: Environment
SUCCESS INDICATOR: The 3 Ps: Policies, Procedures, And Practices
VARIABLE: Teacher Frequency Of Technology Discussions

DATA FROM: Apr 23, 2018 - May 8, 2018

25% Always

19% More than half of the time

31% Less than half of the time

6% Rarely

19% Never

Why This Matters

Teachers who are "selective adopters" of technology are more likely to use digital tools when they feel like the school system rewards "varied types of student learning" (Donnelly et al., 2011).

Citation
Donnelly, D., McGarr, O., & O'Reilly, J. (2011). A framework for teachers' integration of ICT into their classroom practice. *Computers & Education, 57*(1), 1469-1483.

ⓘ **DATA HIGHLIGHT**

44%
feel frequently rewarded for tech

🏆 Teachers feel rewarded for integrating technology into teaching

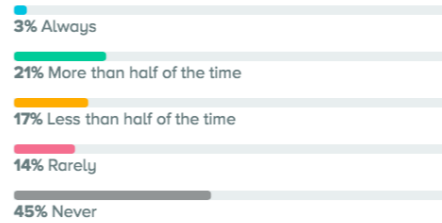## Piscataquis Community Elementary School

FRAMEWORK: Technology & Learning
DOMAIN: Environment
SUCCESS INDICATOR: The 3 Ps: Policies, Procedures, And Practices
VARIABLE: Teacher Frequency Of Technology Discussions

DATA FROM: Apr 23, 2018 - May 8, 2018

3% Always

21% More than half of the time

17% Less than half of the time

14% Rarely

45% Never

Why This Matters

Teachers who are "selective adopters" of technology are more likely to use digital tools when they feel like the school system rewards "varied types of student learning" (Donnelly et al., 2011).

Citation

Donnelly, D., McGarr, O., & O'Reilly, J. (2011). A framework for teachers' integration of ICT into their classroom practice. *Computers & Education, 57*(1), 1469-1483.

ⓘ DATA HIGHLIGHT   **24%**
                         feel frequently rewarded for tech

Section III: Additional Questions

1. Tell us about some examples of purposeful and intentional use of technology for learning that can be found in your schools and district that you would like to celebrate and that could be shared with others.

MSAD 04 teachers & students are doing some innovative things with technology for learning. We celebrated these, & they could also be shared with others. Some of these things include:

     -Using assistive technology to support students with reading, writing and math disabilities
     -3D Printing
     -Lego Robotics
     -Recording to assess student skills
     -Access of Literacy Apps such as Epic, Readworks.org, & NEWSELA
     -Virtual Field Trips
     -Creation of Storyboards using apps
     -Google Drive & Google Classroom for storing, turning in, & receiving work
     -SeeSaw App for Parent Communication
     -Notability for research & gathering information
     -Keynote to create animations
     -Recording student language for articulation errors in speech
     -MobyMax
     -IXL
     -Prodigy
     -Origo Math
     -Lexia
     -NoRedInk
     -Apple TVs
     -1-1 iPads
     -Quizlet
     -Kahoot
     -Digital Photography

-Phet Simulations
-3D Cell viewing app
-Apps for learning states & countries
-iMovie

2. What can the Department do to further support your work of purposeful and intentional use of technology for learning?

We have several suggestions of how the Department can further support the work of MSAD 04's purposeful and intentional use of technology for learning. Some of our suggestions include:
-Provide more funding opportunities for districts tied to technology implementation
- Continue to provide engaging material that can be accessed to use in class, specifically in math, literacy, & science.
-Provide more information, support, & training on how to use technology with PreK-2 students
-Provide professional development on new & emerging technologies available to educators
-Provide training & technology integration strategies geared specifically toward classroom teachers who are working to help students meet both state learning standards, Common Core Learning Standards, & NextGen Science Standards.

Section IV: Certifications:

The Superintendent must submit their district's plan to the Department. In doing so, the Superintendent is acknowledging the following:

- The Superintendent and school leadership have read the plan and agrees to support staff in its implementation.
- The district has CIPA Compliance Documentation on file.

Superintendent's Signature: _____ Date: _____

To Submit Your Data-based Plan:

Submit completed plans as a Word document and the signature page (Section IV) as a PDF to:

Amanda.Nguyen@maine.gov (amanda dot nguyen at maine dot gov) AND
MLTI.Project@maine.gov (mlti dot project at maine dot gov)