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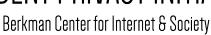
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Youth Perspectives on Tech in Schools: From Mobile Devices to Restrictions and Monitoring

January 15, 2014

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INTRODUCTION

This research brief is a contribution by the Youth and Media team at the Berkman Center to its Student Privacy Initiative, which seeks to explore the opportunities and challenges that may arise as educational institutions adopt cloud computing technologies. In order to understand the implications of cloud services for student privacy more holistically, it might be helpful to examine how technology that is already implemented in academic contexts is used by youth and to explore how students feel about current practices. Towards this goal and informed by our recent research, the brief aims to make visible *the youth perspective* regarding the use of digital technology in the academic context, with focus on privacy-relevant youth practices, limitations on access to information, and youth's relation to educators in a high-tech environment. The brief includes insights and quotes gathered through a series of in-person focus groups as well as data from a questionnaire administered to all focus group participants. In addition, it highlights in a few instances additional research and data.

The overarching study was conducted by the Youth and Media team between February and August 2013. The team conducted 30 focus group interviews with a total of 203 participants across the greater Boston area, Chicago, Greensboro (North Carolina), Los Angeles, and Santa Barbara. Each focus group lasted 90 minutes, including the 15-minute questionnaire, consisting of 20 multiple-choice questions and one open-ended response. Although the research sample was not designed to constitute representative cross-sections of particular populations, the sample includes participants from diverse ethnic, racial, and economic backgrounds. Participants ranged in age from 11 to 19. The mean age of participants is 14.8 (SD = 1.96).

MOBILE TECHNOLOGY IN SCHOOLS

Focus group participants reported a wide variety of school policies concerning laptops, phones, iPads, and other mobile devices. Additionally, focus group participants mentioned differences in school policies and practices around availability and accessibility of wifi networks at school.

Laptops and Tablets

Focus group participants described a variety of official policies about personal laptop use at their schools. According to our youth participants, it appeared that private schools were more open to having students bring their laptop to school than public and charter schools. And while many participants reported positive feelings around the current state of technology in their schools, some students seemed frustrated about ongoing initiatives to provide them with tablets for academic purposes. Several participants stated that they would have preferred new laptops to new tablets.

Female (age 13): "I don't actually think we really need the iPads."

Male (age 14): "Yeah, we don't."

Female (age 14): "I mean, it's nice. We need it for math."

Female (age 13): "I know. It's good to have them, but I don't think it's something necessary. I would rather have a laptop cart, where you can sign one out and take it home and stuff, and just use a class laptop."

Male (age 16): "I understand that they just gave a thirty million grant to [name removed] Schools for tablets. I would prefer if we just got new computers for the whole school."

Other participants objected to restrictions and difficulties inherent to tablet devices, both in physical usage and digital access.

Female (age 13): "I just don't like typing on an iPad. Some websites, you can't access on an iPad."

Female (age 14): "You can't watch any videos."

While some schools are fortunate enough to have the resources to provide their students with tablets or laptops, students from less-privileged schools are envious, particularly because the desktop computers which they do have access to are extremely outdated.

Male (age 14): "I think we should update the computers once every twenty years. Just because it takes — like, I was just in there today doing a paper, and it took ten minutes to log on. No joke...and I'll be reading something online, and I'll see kids in California and New York, and they'll be on brand new MacBooks. And I'm like — why can't our school have this stuff? Just because we're not a major city doesn't mean we don't have feelings too...I just want to be able to do my work well, just like everybody else. Because we've had these computers for a long time...probably ten, twelve years."

Female (age 14): "Yeah, they're the same computers I had in elementary school."

In light of recent district-wide initiatives (in Chicago, Texas, Massachusetts, and North Carolina) to implement tablets in classrooms, youth sentiment may require further investigation.

Mobile Phones

Smartphone adoption among American students has increased substantially and mobile access to the Internet is pervasive. One in four teens are "cell-mostly" Internet users, who say they mostly go online using their phone and not using some other device such as a desktop or laptop computer. 78% of young people now have a cell phone, and almost half (47%) of those own smartphones. That translates into 37% of all teens who have smartphones. ¹

According to our questionnaire data, focus group participants from public schools appear to be more likely to own a smartphone, as compared to private and charter school students, though the difference is not statistically significant [$\chi^2(2)=2.26$, p=.322].

Smartphone Ownership	Public	Private	Charter	Total
	School	School	School	
Yes	64%	23%	14%	100%

Figure 1. Percentage of youth who report owning a smartphone by type of school.

Some participants reported that their schools allow them to bring their phones to school, although because their schools filter many popular websites, phone apps and Internet access are restricted unless accessed through a cellular data plan (as opposed to their school's wireless Internet). Other participants mentioned that their school had recently instituted an Acceptable Use Policy (AUP), requiring phones to be out of sight during the school day, while others reported that their teachers collect phones at the beginning of the day. Not all participants reported compliance with school policies.

Female (age 14) "We have to put our phones in a box at the beginning of the day, and then we can get them at the end of the day."

Male (age 13): "I just feel like we shouldn't have to put our phone in a box at the beginning of the day."

Female (age 14): "Yeah, that's stupid. Because the other class doesn't have to."

Male (age 13): "Last year, I pretty much carried my phone in my pocket all year. It's not like I used it in class."

Male (age 14): "Don't tell anyone. I still have my phone in my bag."

Other participants pointed out that, because all of their friends were in class, there was no one to text or Facebook chat with. Participants stated a preference for keeping their phones with them, even if they were not using them.

Interviewer: "So, how do you feel about this "no phone, no pictures in school" policy?"

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¹ Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013, August 15). Teens and Technology 2013. Pew Internet & American Life Project. http://pewinternet.org/Reports/2013/Teens-and-Tech.aspx

Male (age 14): "It doesn't really change anything."

Female (age 13): "Yeah, but it's still stupid."

Female (age 13): "There's no one, really, to text in the middle of the day. Or check Facebook. Because everyone's in class."

Male (age 13): "If this school is so big on trust and integrity and all that—"

Female (age 14): "They should just let us leave it in our bag."

Male (age 13): "Yeah. Or in our cubby."

Female (age 13): "And I don't think, though – knowing kids at this school, I don't think they would do anything. It's pointless to use your phone. Because someone's going to see you using your phone in the class, and what would you do [with your phone]? Because all of your friends are in school."

Some participants appeared to be particularly frustrated by their teachers' reactions to what they perceived to be minor infractions of school mobile device policies (e.g., collecting phones if a student took a picture, or if the phone was seen at all), which led to further questioning of the policies.

Internet Access / WiFi

Wireless access to the Internet and/or mobile phone reception were not reported to be consistently reliable, or even available, at different schools. When wifi was available, some schools kept those networks password-locked, and some participants reported using a neighbor's wifi network instead.

Interviewer: "So even if you use your own device? Let's say you use your—well, for those of you who don't have data plans on your phones, do you use the school's wireless?"

Male (age 18): "No, they block everything."

Male (age 16): "The school wireless is set up like the guest account is the only way you can use. And you gotta be one of the first 150 people to get on it. So if you're not here by eight o'clock, you're not gonna get on it."

Female (age 16) "One of the pluses of getting here early."

Interviewer: "But if you're one of the 150 first ones, you use the wireless as a guest."

Male (age 16): "That's what I use. I use it on my iPod 'cause I don't have a phone."

Female (age 17): "Well, there's one of the Wi-Fis that you can connect with. I think the password's whirly."

Male (age 16): "GHS whirly."

Female (age 17): "Yeah, yeah. So you can get on that. But then they still don't have the Internet in some spots of the school. So if you're sitting in one spot, you might have Wi-Fi. But if you're not, you don't."

RESTRICTIONS

Blocking and Filtering

While the availability of Internet-enabled devices and access to wireless networks enables youth to access the Internet in an educational context, schools have also adopted policies to control which content youth can access on school grounds. In order to receive certain federal funds, K-12 schools must comply with the Children's Internet Protection Act (CIPA), which requires that schools implement Internet filtering measures. Consequently, nearly all schools filter certain websites considered to be "inappropriate." Websites considered pornographic, or likely to lead to pornographic content, are regularly blocked. Schools also often block social media platforms, although the specific platforms blocked can vary from school to school. Many schools attempt to filter out all blacklisted websites or content which contains keywords considered to be "inappropriate for school." Sometimes, these filtering and blocking methods prevent access to appropriate content; some focus group participants reported irritation at the blocking of websites based on lists of banned search terms, in particular, which sometimes led to assignments being difficult or impossible to complete:

Interviewer: "Sometimes you are required to use the Internet for school work." Male (age 13): "A lot of the time if we're at school, those websites were blocked." Female (age 14): "Yeah. That was really annoying. Because there were so many parental controls."

Female (age 16): "If you research certain religions for any reason, they'll block it. But if you research Christianity, go ahead. Go for it... But if you research any certain religions – I don't remember which one I was looking at – for a project, it's just like, no. This is satanical. It said that in the description. Sorry, you can't research anything satanical."

Female (age 16): "I've had to do a research paper, and we had to research it in class to show how we were researching. My topic was rising gang rape in India. And I couldn't do my assignment here. I had to do it all at home because it had the word rape in it."

² Children's Internet Protection Act. (n.d.). Retrieved November 12, 2013, from http://www.fcc.gov/node/31585

Male (age 17): "Well, I do not think they know what to block sometimes. Because sometimes when you have – projects that you have to do and they give you the laptops and stuff, trying to look up someone or something and put it in Google and it will ask you – what the hell? I am just trying to look it up not look at a naked picture or something."

Not only are sites and platforms critical to academic research blocked, access to social media platforms is often blocked as well, primarily out of concern that social media platforms promote inappropriate behavior, are distracting, or are not relevant for school. In general, our data show that public (92%) and charter school (84%) students report greater restrictions on social media platforms at school than private school students (53%). Significantly more public school students (95%), as opposed to private school students (71%), report that Facebook is blocked at their school (p<0.01). YouTube, Instagram, and Tumblr are blocked significantly more often at public and charter schools, as compared to private schools, according to focus group participants.

School Type	Facebook	YouTube	Instagram	Tumblr	Twitter	Pinterest
Public	95%	80%	78%	78%	66%	71%
Charter	93%	85%	91%	90%	96%	95%
Private	71%	14%	18%	33%	67%	33%

Figure 2. Percentages of youth who report that social networking platforms are blocked at their school.

Feelings about Blocking / Filtering

Many participants who encountered blocking while at school reported frustration, especially when the blocking impeded their ability to do their schoolwork. Participants described several scenarios where blocking of social media directly prevented them from accessing key resources:

Interviewer: "You mentioned that the school is blocking websites."

Female (age 14): "They don't know how to correctly block them."

Female (age 13): "It's so stupid."

Male (age 13): "Often, school websites that we have to use for homework are blocked. And that ends up happening a lot. Like, Khan Academy, which we use for math, ends up getting blocked because it uses Facebook to log in."

Male (age 17): "I think I could care less honestly because we have – most of us have phones so we can go on Facebook or Twitter, or whatever on our phones.

But the only thing that gets me mad about the restrictions is that they sometimes restrict the dumb things like sometimes..."

Male: "Like Google..."

Male (age 17): "Yeah, they restricted Google, they restricted Google Docs. Sometimes you can't even access Google Drive or your email and sometimes your homework is saved there and you can't access it."

Interviewer: "You can't access your email."

Male (age 17): "Sometimes you can and sometimes you can't access your email and sometimes you want to do something and you can't."

Interviewer: "Because they lock email."

Male (age 17): "Yeah. So that's something that I think is outrageous because I mean email is like the most common way to communicate with people especially your teachers. So I think that's the downside but..."

Female (age 19): "YouTube, I think, was the dumbest thing [to block]."

Male (age 18): "Some teachers teach classes based on YouTube."

Female (age 19): "Yeah, it's kind of unblocked, but there's still videos that YouTube says, 'Oh, this is not educational so you can't watch it.' So, it's still trying to determine what is educational, and what's not."

Why Restrictions Don't Work

According to our focus group participants, all schools seem to have some kind of restrictions. And while most students seemed to be annoyed by the restrictions at their schools, some participants mentioned that the restrictions (specifically, not being able to access Facebook while at school) helped them to not get distracted, the same students mentioned bringing their smartphones to school and being able to access social media via phones.

Overall, restrictions seem to be of limited effectiveness. Of the youth surveyed, half participants (51%) know the workarounds themselves or have friends help them to circumvent filters. About a quarter of participants (26%) don't use workarounds but know peers who use the workarounds. One in five participants (21%) have no knowledge of workarounds and no access to peers who know the techniques.

There are no restrictions at my school		
No, and I don't know anybody who knows how	21%	
No, but I know students who know how to do it	26%	
No, but I know students who do it for me	14%	

Yes, I know how to get around the restrictions	37%
I don't know/think my school has restrictions	2%

Figure 3. Restrictions and workarounds.

Seventy-four percent of public school students report that students get around restrictions at their school, and 37% admit to using workaround themselves (n = 198). Charter school students also reported high levels of workaround use: 70% of charter school students report that students get around restrictions at their school, and 47% of students admit to using workarounds themselves. Private school students report lower, but still significant use of restriction workarounds. Thirty-three percent of private school students report that students get around restrictions at their school. 18% use workarounds themselves.

Participants reported that techniques to circumvent blocking on school computers were simple, effective, and well-known; only a few have never heard of the workarounds at all.

Male (age 18): "It's annoying. You know, when YouTube was blocked, everybody was pissed because they wanted more YouTube for learning, sometimes. And it was a lot of trouble to get it to work until someone came up with, 'Oh, you put an "s" at the end and you can watch whatever you want'."

Interviewer: "On your iPad from school, you can't go on Facebook?"

Male (age 13): "Yeah, they just banned that."

Male (age 14): "Yeah, but you can get around it."

Male (age 13): "You could probably get around it. There's a way to get around it on the computer."

Female (age 14): "It's an easy way to get around it."

Male (age 16): "I know how to get on Facebook."

Male (age 15): "I don't, but it's very easy to get around. I think you can do 'https.' You just mess with the domain."

Female (age 16): "Instead of it saying 'http,' you add an 's,' and then you take away the s or something like that."

Female (age 15): "I used to, last year, just put the 'https' and then the two little things."

Female (age 16): "The colons."

Female (age 15): "Well, I think they figured it out, because I tried it this year, and it didn't work."

Male (age 16): "It worked for me."

Female (age 17): "But at the same time, I think it's too much effort just for that. Just use your phone."

Several youth participants reported that bringing their own laptops, iPads, and smartphones with Internet access provide an even easier route to access social media:

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Interviewer: "Is Facebook blocked for everyone?" Female (age 17): "Yeah, but I have it on my phone."
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Female (age 16): "And at school, they block YouTube and Facebook and websites like that. But Snapchat – which uses the Internet – can still be used on the school's Internet."

Female (age 15): "You can use it, you just got to—" Male (age 15): "It's very easy to get around."

Female (age 13): "If you bring your own computer to school, which people do, they can get on Facebook."

Male (age 14): "I've seen people checking their Facebook." Female (age 13): "I don't go on Facebook in the middle of the day."

Male (age 16): "If you have an iPad or MacBook, there's an app called – lmy friend told me about it. It's called Dash VPN. And then you can hack around the school website, and you can get on any website you want, watch any videos."

Participants also reported that the workaround methods were commonplace enough that teachers have begun learning them from students:

Female (age 19): "Some teachers found out by students. A lot of things in this school that are supposed to be blocked from everyone...if the teachers find out how to unblock it, it's by students."

In addition to believing that the Internet filtering restrictions are useless and easy to get around, several participants mentioned that they view these restrictions as a sign that their schools and teachers do not trust them, which leads youth to question their relationship with their teachers.

It's important to note that while schools base their filtering and blocking policies on the Children's Internet Protection Act, the Act itself does not mandate the blocking of social media

sites, nor does it condone the broad techniques for filtering that many schools employ.³ Many public libraries, which are also eligible for federal funding under compliance with CIPA, have chosen to reject the funds entirely, and have critiqued the usage of filtering software due to unintentional blocking of constitutionally protected content and ineffectiveness of blocking pornography.⁴

MONITORING

An additional privacy-related phenomenon that youth encounter in an academic context is monitoring. Participants were aware of a variety of techniques by which school officials attempted to monitor their behavior online. One common technique used on school computers is screen-surveillance software, which gives a supervising adult immediate access to a student's screen with only subtle notification to the student:

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Female (age 13): "Our tech teacher will be watching us [on the laptops] and you won't know."
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Male (age 13): "You can see the little binocular symbol in the corner."

Female (age 13): "That's so scary! Stop watching what I do."

Interviewer: "So you think they watch you in real time?"

Female (age 13): "Yeah."

Male (age 13): "You can."

Interviewer: "Do they track what you're doing on the network? Do you know?"

Male (age 16): "I think they do."

Interviewer: "So they can't see what you do?"

Male (age 16): "They might be able to."

Female (age 16): "I know some computers got that little thing where you can, like, see what you're on."

Male (age 16): "Yeah."

Female (age 14): "If you're on a school computer, then they can see where you go."

Female (age 16): "Oh, yeah."

Female (age 14): "Someone downtown sees what you do."

Female (age 14): "And people do some random stuff on the school laptops. They don't do anything inappropriate. But there are some random things that people

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³ The Cost of Censorship in Libraries: 10 Years Under the Children's Internet Protection Act. (n.d.). *Electronic Frontier Foundation*. Retrieved November 12, 2013, from https://www.eff.org/deeplinks/2013/09/cost-censorship-libraries-10-years-under-childrens-internet-protection-act

⁴ ALA files lawsuit challenging CIPA. (n.d.). Retrieved November 12, 2013, from http://www.ala.org/advocacy/advleg/federallegislation/cipa/alafileslawsuit

do, just because they're a resource that's there and being constantly monitored, that we know of. So there's definitely stuff that isn't school related. But I think the majority of what people use the laptops for is actually class work."

Female (age 14): "Sometimes."

Male (age 13): "At least for me, I use it mostly for classwork."

Participants also expressed uncertainty and suspicion about school-created online resources that offer a platform for student communication, but may enable school officials to surveil and intercept communication:

Interviewer: "Since your school provides you with email addresses, can they see what you write?"

Female (age 13): "Yes."

Female (age 13): "Technically."

Female (age 12): "Well, we change our passwords."

Female (age 13): "We change our passwords, but they can still look."

Male (age 13): "But I'm sure the technology director – he set the whole thing up, so he can probably see everything."

Female (age 13): "I don't think he's looking at our email."

Female (age 15): "[Gaggle] is this little school website everybody made for school."

Male (age 15): "It's filtered YouTube."

Female (age 16): "It's a filtered, online program."

Female (age 15): "You have an email account."

Female (age 16): "You have an email, and you can talk to people."

Female (age 15): "For schools only. Yeah, but I forgot mine, so it's just like, I don't get on it.

Interviewer: So on this Gaggle thing, do the teachers track what you write?"

Female (age 17): "I'm sure they do."

Female (age 17): "Yeah, they can see what you put."

Female (age 17): "That's probably a main reason why a lot of students don't use it."

Participants reported that many adults in positions of power – school-based security officers, teachers, and administrators – were able to directly access their social media behavior.

Female (age 16): "And our SRO, Officer Ridgill, he has information. He can see anything that we do, basically, because he's part of the police department. And so he's talked to my friends and I before. And he was like, 'Anything you do, I

can pull up. So if y'all tweet about a party, while you're there, just don't be surprised when it gets busted.'"

Interviewer: "And he's a police officer?"

Male (age 16): "Yeah, he can access any Facebook account, even though it's private."

Female (age 16): "He can? I didn't ever know he could do that."

Male (age 16): "Yeah, all police officers can do it."

Male (age 16): "They did that to one kid."

Male (age 16): "Well that's how they find – the only reason they do that – so what they tell me, but I know this isn't the only reason. The reason they do that is if like a kid's talking about killing himself, or starting a fight, or going to rob somebody, then they can stop it before anything happens. That's why they do it. But then again, I feel like they don't tell us everything."

Female (age 16): "The people in the big offices that are watching you, that freaks me out. Because they can be watching any computer screen at any time." Interviewer: "Do you think they are watching you?"

Female (age 17): "Oh yeah."

Female (age 16): "I used my laptop at school, and a social media site was still loaded on my tab. And I came to school and it popped this message up just in a different tab. You've violated da da da da da. I'm like, I didn't load that here. It doesn't count."

Participants expressed ambivalence about monitoring practices. Some noted that monitoring could help prevent acts of violence or suicide, while others expressed resentment at being put into uncomfortable situations and took steps to avoid surveillance:

Male (age 13): "One of our teachers said that she goes and looks at people's Facebook profiles. It does not matter to me, but I think some people are annoyed by it..."

Male (age 12): "My friend got something from her, and I think he muted her or blocked her from his page."

Female (age 12): "That is why my Facebook is private."

Interviewer: "Does that bother you that the school keeps a little bit track of what you do online or not?"

Female (age 16): "No. I mean, that could stop a shooting or something, that might—"

Female (age 19): "Yeah, it could be a good thing too. I mean, it might be a little—"

Female (age 17): "It's good and bad."

Female (age 19): "Yeah, pushy and weird. But at the end of the day, it is a good thing. Because there are things we can learn."

Female (age 18): "Well, to go back to what you said, I remember – two years ago, this girl, she wanted to start a fight with me, so I went home and I posted on my wall. And then she posted on her Facebook "Oh, I am going to be smoking and smoking – drinking while kicking your ass". And her dad had told on her, had kicked her out 'cause of that. At school – when our teacher came back, the students told her, and my teacher pulled me out of class. Facebook is blocked in our school, but they obviously can get into it, so they got into it. And they made me log in to my Facebook and they made me go to her Facebook, and they saw it, so I guess that was proof that whatever was happening. So I guess we got in trouble because of that."

FRIENDING TEACHERS

In a practice that blurs the line between monitoring and building positive relationships with students, some teachers have begun requesting that students list them as friends on social networks. Youth participants generally drew a contrast between friending current teachers and past teachers. Many described friending a current teacher as potentially uncomfortable, as it could lead to teachers developing a negative impression of the student and their personal life. In some cases, it directly violated school policies:

Male (age 14): "We're not allowed to friend [our teachers]."

Female (age 14): "Until we're out of school."

Male (age 14): "I wouldn't friend them anyway."

Male (age 13): "Well, some people do."

Female (age 14): "I want to friend them right on graduation."

Female (age 13): "Yeah, I wouldn't really want my teachers stalking me. That's weird."

Female (age 14): "I think I wouldn't want to be friends with my teachers. Just because I'm such a different person online. I'm more free. And obviously, I care about certain things, but I'm going to post what I want. I wouldn't necessarily post anything bad that I wouldn't want them to see, but it would just be different. In the classroom, I'm more professional. So, I feel like if they saw my Facebook they would think differently of me. And that would probably be kind of uncomfortable. So I would not want to be friends with them."

Interviewer: "OK. All right. So we talked a little bit about this before, but how do you feel about like your teachers and social media, the Internet? Would you want to be friends with them on Facebook or Instagram?"

Female (age 15): "I would say that's kind of weird."

Female (age 15): "It depends who they are though, 'cause I'm friends with one of my teachers on Facebook."

Male (age 15): "It depends how close you are with them."

Female (age 15): "Some teachers are actually really cool, like I wouldn't mind. But like not Facebook."

Female (age 15): "That'd be creepy. If you just put a status update, hey, how you doing. They're like writing on your wall."

Female (age 16): "They'll look at us different if they really see what we do."

Female (age 15): "Yeah, I think so too."

Female (age 16): "They'll be like. "that's stupid."

Male (age 13): "On the topic of teachers having social network accounts and being friends with you...I think in this school, I wouldn't really mind at all."

Female (age 12): "We're pretty close."

Male (age 13): "But yeah, this is a small community. In a bigger school, or a more serious school, like high school, then I think it could affect your grades if the teacher has a sort of bias against you, if they personally hate you."

In contrast, more participants expressed positive associations with friending a teacher once the student has completed their class. However, participants continued to express fear about teachers from past courses judging them based on their social media presence:

Female (age 14): "I friend my old teachers."

Male (age 16): "I'm friends with a couple of my old teachers. But I don't think that's a usual or a normal case."

Female (age 16): "Well technically, we're not supposed to be friends on Facebook with them."

Female (age 17): "Yeah, it's illegal."

Female (age 16): "But I'm friends with Mr. Albert. I know that."

Male (age 18): "That's illegal."

Female (age 17): "Yeah, it's not-"

Female (age 16): "Oh no."

Male (age 18): "No, I mean is it illegal?"

Female (age 16): "I'm not in his class anymore, so."

Female (age 14): "When I first got Facebook, I was friends with my old fourth grade teacher. And I had completely forgotten about that and I posted some things that maybe I wouldn't want my old teachers to see. And then a month ago, I posted a photo and she commented. She said, 'This is so beautiful'. I was like, 'Oh my God. She sees the stuff I post? Oh Lord, I must be all over her newsfeed'. I was like, 'Oh, this is awkward'."

Youth react more negatively when teachers attempt to friend students, as opposed to when students themselves send the friend request:

Male (age 15): "Yeah, I applied for this summer program. And they tried to add me on Facebook, but I didn't add them. It's pretty awkward for me." Female (age 16): "They'll judge you basically on everything you've done."

Female (age 12): "I hate when teachers, like, I never unlike teachers on Facebook, but I have school teachers adding me, and I have IM'd them because I do not want to be friends with my teachers on Facebook."

Participants described many specific instances where Internet-mediated contact helped them complete a project or connect with material:

Female (age 12): "Well, if I forget an assignment, and it is not on the school website, when [my teachers] get online I will chat with them."

Female (age 12): "[Being friends on Facebook with a teacher] is actually helpful – last year if I had questions about the homework, I could ask them on Facebook."

OPEN QUESTIONS

In the context of the Student Privacy Initiative, the findings outlined in this research brief lead to a number of interesting questions for further exploration. On a general level, one might ask as to what extent the youth perspectives highlighted in this brief align or contrast with an adult-normative perspective on these topics as expressed by parents, teachers, and school administrators. Some of the findings might also highlight a potential mismatch between the intention of school policies aimed at regulating the use of digital technology – including cloud-based services – and privacy-relevant youth practices and attitudes (for instance, in the context of monitoring).

On a more granular level, the youth voices compiled in this brief lead to a diverse set of questions regarding the opportunities of and appropriate limitations on youth technology practices in the academic context — many of which are cloud-based and have privacy implications. For instance:

- Does it make sense to have overall school policies with regard to digital technology, or does it make more sense (to the extent legally permitted) to take a nuanced approach (e.g. by classroom, age, class/subject)?
- Should school policies be created in collaboration with the students?
- How can schools comply with legal filtering and monitoring requirements but not prevent access to legitimate content and not interfere with students' privacy attitudes and expectations?
- How can teachers most effectively use social media to connect with their students without creating privacy risks?