

To: American Federation of Teachers
From: Guy Molyneux and Livia Baer-Bositis, Hart Research
Date: September 18, 2023
Re: Surveys of Teachers and Parents on Educational Technology

This memo presents the key findings from surveys of teachers and public school parents that we conducted on behalf of the American Federation of Teachers (AFT), focusing on the topic of educational technology. We interviewed a representative, national cross-section of 1,755 PK-12 AFT members for the teacher survey; and a representative national cross-section of 810 public school parents for the parent survey. The interviews were conducted online between August 3 to 7, 2023.

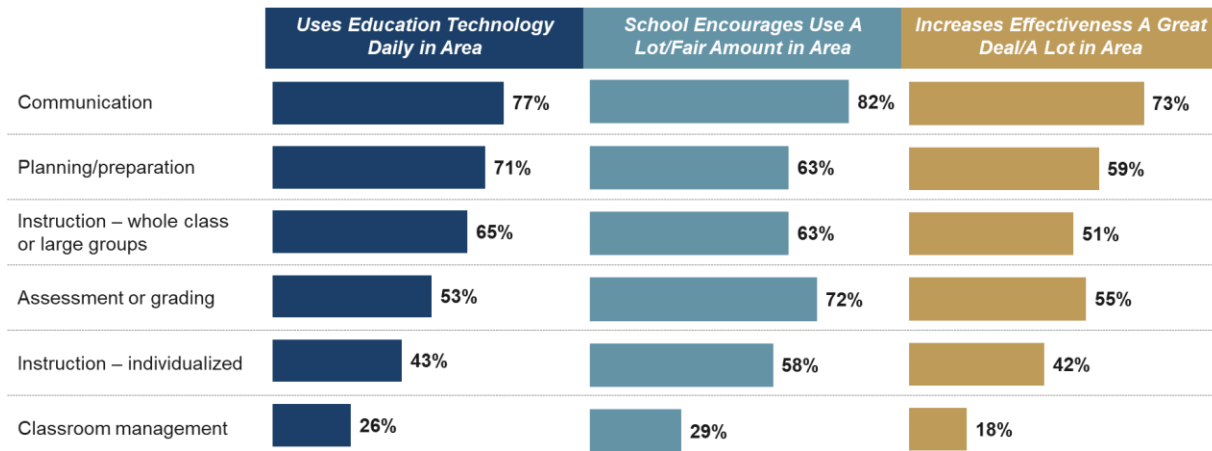
Key Findings: Teacher Survey

Teachers have fully embraced the use of education technology in multiple aspects of their work in the profession. The majority of teachers are using hardware devices in their work, including laptop computers (97% use, 83% use daily), smartphones (70% use, 34% daily), and interactive whiteboards (73% use, 56% daily). Further, software has also become an integral part of teachers' work. Teachers routinely use learning management systems (85% use occasionally or daily), assessment or testing software (74%), digital or online encyclopedias (55%), and bibliographic search engines (50%) for work.

- Over six in ten teachers use education technology daily in communication (77%), planning and preparation (71%), and whole class or large group instruction (65%). The use of educational technology is the lowest in the area of classroom management (26% of teachers use daily) and encouraged by few schools for this purpose (29% report school encourages use a lot/fair amount).



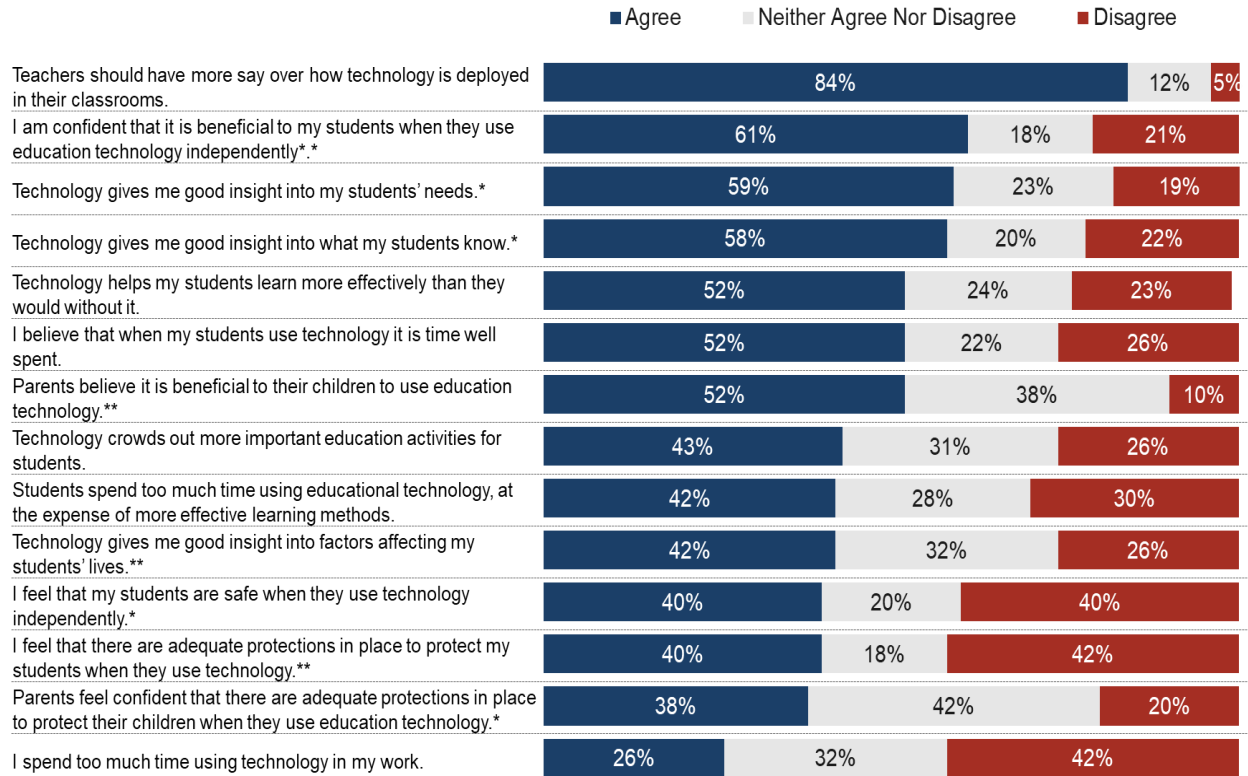
Role of Technologies in Schools



While teachers recognize both the potential and realized benefits of education technology, they also express some caution about the tool and its use in students’ learning. A significant portion of teachers agree that it is beneficial when students use education technology independently (61% agree). Further, close to six in ten teachers also agree that education technology gives them good insight into both what their students need (59% agree) and what their students know (58% agree). However, some teachers do express concerns about the safety and protections in place for students when they use education technology, and whether education technology is overused at the expense of other learning methods.

- Veteran teachers are even more cautious about the potential negatives associated with the use of education technology in learning. While one in three newer teachers (0-5 years’ experience) agree that education technology crowds out more important education activities for students, nearly half of veteran teachers (over twenty years’ experience) agree with that statement.
- One in three teachers feel students spend too much time using education technology (35% agree), but most believe they spend the right amount (47%) or not enough time (18%). Most teachers across subject areas feel students use educational technology the right amount, but social studies, civics, and history teachers tend to think students use it excessively (52% too much time, 30% right amount of time, and 18% not enough time).

Teachers' Attitudes toward Educational Technology



* Asked of one-half of respondents (FORM A).
 ** Asked of one-half of respondents (FORM B).

Teachers want more control over how education technology is used to facilitate teaching and learning. Fully 84% of teachers believe teachers should have more say over how technology is deployed in their classrooms. Teachers feel like they have little or no control over many aspects of education technology, including the selection of hardware (67% little or no control), the selection of software (55% little/no control), district policies on technology use (67% little/no control), and school's rollout of new technology (76% little/no control). However, teachers say they do have some degree of control now over how technology is used in their own classrooms (30% some, 48% a lot/great deal of control).

Teachers' express a need for clearer expectations and policies about teachers' and students' use of education technology. When it comes to the clarity of administrators' expectations about the use of technology in their work, 30% of teachers find them extremely/very clear, 33% somewhat clear, and 37% a little/not at all clear. Similarly, for the clarity of district policies regarding their use of technology in their work, 26% of teachers find them extremely/very

clear, 35% somewhat clear, and 40% a little/not at all clear. Teachers perceive district policies regarding student technology use to be slightly clearer than district policies and administrators' expectations about technology use in their work: 35% say they are extremely/very clear, 32% somewhat clear, and 33% a little/not at all clear.

The use and understanding of how to use artificial intelligence (A.I.) to facilitate the work of teaching and learning is low. A majority of teachers (75%) report that their students never use A.I. software or A.I.-enabled search engines (e.g., ChatGPT, DALL-E, Bard) for learning. In line with this, 76% of teachers say they never use A.I. software or A.I.-enabled search engines for their own work. When teachers use A.I. tools in their own work, they are most likely to use A.I. for planning and preparation (20% use), communication (17% use), and individualized instruction (17% use). Less than one in five teachers believe that students understand how to use A.I. somewhat, very, or extremely well (16%), and a similar proportion reports that they personally understand how to use A.I. well (18%). Teachers' understanding of A.I. varies by the grade level(s) they teach and age.

- Student usage of A.I. software and A.I.-enabled search engines increases by grade level. While only 9% of primary teachers say their students use A.I. (3% occasionally/daily), 29% of middle school teachers (12% occasionally/daily) and 43% of high school teachers (25% occasionally/daily) say students use A.I. in learning.
- Secondary teachers, particularly high school teachers, believe that a substantial number of students are using A.I. software such as ChatGPT for their schoolwork in a way that is not approved or not appropriate (49% say they think it is occurring sometimes or more frequently). Three in ten secondary teachers believe this occurs fairly/very frequently, including 38% of high school teachers.

Percent of Teachers who Understand Personally How to Use A.I. Software

	All Teachers %	GRADE LEVEL			AGE			
		PK/K %	Grades 1-5 %	Grades 6-8 %	Grades 9-12 %	18-39 %	40-54 %	55+ %
Extremely well	1	1	1	2	2	3	1	1
Very well	5	3	4	5	6	8	3	4
Somewhat well	12	6	8	15	17	17	11	9
Slightly well	17	13	17	16	21	20	16	15
Not at all well	25	24	20	26	26	23	25	26
Don't use A.I.	40	53	50	38	27	30	44	46
Total Extremely/Very/Somewhat Well	18	10	13	21	26	27	15	13

Teachers have noted an increase in social media usage among their students, and they view this as a negative trend. When we ask teachers to compare their current students' use of social media compared to the students they taught before the pandemic, 61% of teachers say their current students use social media more. This belief among teachers holds across grade levels, regions, and economic backgrounds of students. Further, 74% of teachers believe that students' social media use has a negative impact on them. Teachers hold this opinion regardless of their age, gender, subject(s) or grade level(s) taught, or years teaching.

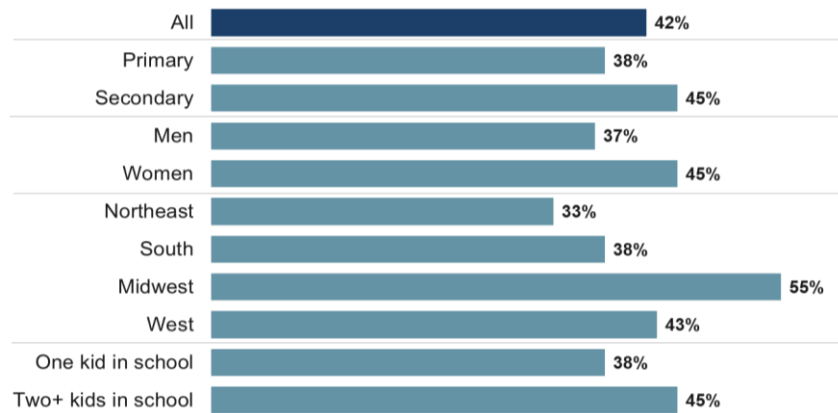
Key Findings: Parent Survey

Parents overwhelmingly express positive opinions toward education technology and how it facilitates learning for their children. The majority of parents (66%) believe that their child spends the right amount of time using educational technology. Moreover, a significant proportion of parents express a favorable view of the way technology is used to facilitate teaching and learning in their child's school (76% favorable, 29% **very** favorable). A substantial number of parents perceive educational technology as having a positive impact on their child's learning (74% positive, 28% **very** positive). Looking ahead, a majority of parents are open to the continued integration of technology in their child's education (86% continue current use/use more technology), with a significant portion expressing a desire for the school to use more technology in the future (54%).

- Parents share the most common activities their child uses educational technology are to complete school assignments or projects (77%), explore topics they are interested in (51%), get better in a specific subject (46%), and communicate with their teacher (46%).

Many parents do not feel as if they have control over the use of educational technology in their child's school. In fact, only 23% of parents feel like they have a great deal/lot of control while 42% feel like they have a little or no control over the use of educational technology in their child's school (another 35% say they have some control). While 66% of parents say they are satisfied with the amount of control parents currently have, over half (55%) also agree that parents should have more say over how technology is deployed in their child's classroom.

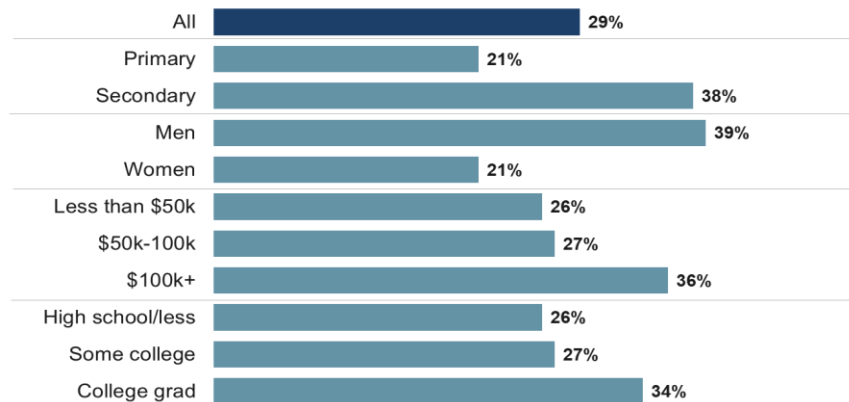
Percent of Parents who Feel They Have Little/No Control Over Use of Education Technology in Their Child’s School



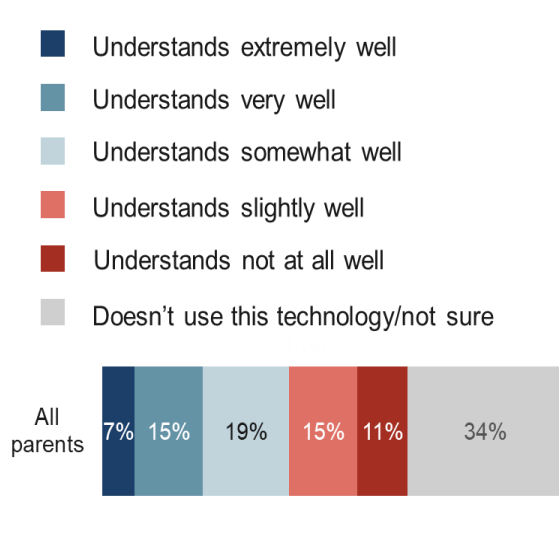
Compared to teachers' assessments of their students' understanding of how to use artificial intelligence, parents report higher assessments for their children. Further, 29% of parents report their child uses A.I. tools either occasionally or daily for learning outside of the classroom, more than the proportion of teachers (12%) who say their students use A.I. software or A.I.-enabled search engines in the classroom. While it seems likely that A.I. tools are used more often at home than at school, it could also be the case that parents' are overestimating their child's familiarity and command of these tools.

- The highest A.I. usage and understanding of how to use A.I. is reported by parents of children at the secondary level, fathers, and higher income and college-educated parents.

Percent of Parents Reporting their Child Uses A.I. Tools Occasionally/Daily



Parents Rating of Child’s Understanding of How to Use A.I. Software



	Extremely/ very well %	Slightly/ not well %	Doesn't use/ not sure %
All	22	26	34
Primary	11	30	46
Secondary	32	22	23
Men	26	28	26
Women	18	24	40
Less than \$50k	21	26	35
\$50k-100k	20	28	35
\$100k+	25	24	32
High school/less	22	24	36
Some college	17	29	35
College grad	25	25	31

Parents are divided about the impact of social media use on their children. While 32% of parents say their children spend too much time on social media, 38% say their children spend an appropriate or not enough time on social media (an additional 28% say their child does not have access to social media). Further, parental perceptions of the overall impact of social media on their children are evenly split: one quarter view this impact as negative (24%) and one quarter view it as positive (23%), while the other half (52%) see it as a mixed influence. It is worth noting that factors such as age of child, gender, income level, education, and race/ethnicity influence these perspectives. Fathers, college-educated parents, and parents with lower incomes (less than \$50k) tend to have a more positive outlook on the impact of social media on their children.

Overall Impact of Social Media Use on Child

	Positive %	Mixed %	Negative %	Net Positive %
All	23	52	24	-1
Primary	22	51	27	-5
Secondary	25	54	21	+3
Men	31	45	25	+6
Women	17	59	24	-6
Less than \$50k	26	53	21	+5
\$50k-100k	20	55	25	-5
\$100k+	24	49	27	-3
Non-college	21	54	25	-4
College	27	50	23	+4

Appendix: Methodology

Survey of teachers. We completed online interviews with a representative national cross section of 1,755 AFT members who currently work as public PK-12th grade teachers. Respondents were recruited entirely through text-to-web recruitment. The survey fielded from August 3-7, 2023. We weighed the survey data to reflect the full universe of AFT members who teach PK-12th grade at public schools. This online survey of teachers has a credibility interval (which is similar to a margin of error) of +/-2.4%.

Survey of public school parents. We completed online interviews with a representative national cross section of 810 public school parents. Respondents were recruited through an online panel. In the survey, we told respondents that when we ask questions about “your child” or “the school your child attends” to answer based on their child who had the most recent birthday. The survey fielded from August 4-6, 2023. We weighed the survey data to reflect the full universe of public school parents. This online survey of parents has a credibility interval (which is similar to a margin of error) of +/-3.5%.