Screens and AI in K-6 Classrooms: Research Brief for ARPS Parents

September 22, 2026

How to read this
The brief follows the eight questions in the Background Info outline. Each section ends with a short "what this means for the ask" note. The evidence is uneven and the brief says so. The strongest negative findings on screens come from large correlational datasets and from preschool cohorts. The strongest positive findings come from randomized trials of specific, well-designed software. Those are different things, and administrators who have looked at the research will know the difference, so the brief differentiates those findings.

NEW! 10/6: ARPS Research Brief - Addendum Oct 2026 (WSJ, PISA 2025, Google Search AI, Fairfax

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Executive summary

The Amherst School Committee has already put a technology policy on its agenda. The committee's Annual Goals for SY 26-27, adopted at its August 29 retreat and posted with the September 15 agenda, list under goal 5 "Curriculum Review" two items: "Technology Policy (phones, screen time, AI, etc..)" and "I-Ready review." The same document commits the committee to "regular surveys and feedback loops" and "public forums" (ASC Annual Goals SY 26-27). The parent group is therefore not asking the committee to take up a new issue. In this brief, we are offering existing research and recommended action steps to support these stated goals.

The superintendent is moving too, and has invited input. Her September 15 report says she is "working to launch an initiative called Techless Thursdays," which "will encourage schools to reduce screen time at selected times and create more opportunities for face-to-face conversation, collaboration, hands-on learning, movement, creativity, and stronger human connections," and that "this work will take time to plan and launch so that it supports instruction and reflects the needs of each school community." It is paired with 90-minute instructional walkthroughs at every school with the district leadership team, a curriculum review of whether current instructional materials "are the best fit," and a monthly invitation for committee members to join walkthroughs (Superintendent's Update, Sept 15, 2026). No usage data was presented. The walkthroughs are the natural vehicle for collecting it. Dr. Herman received a "Needs Improvement" rating for 25-26, is leaving June 30, 2027, and a superintendent search is under way (Chair's Update), so the committee, not the administration, is the audience for a policy meant to last.

The calendar is short. The committee is adding meetings on October 6, November 3, and December 1 (pilot "shorter, more frequent meetings") in addition to October 27 and November 17th. Public comment runs under policy BEDH, three minutes per speaker, emailed to SCPublicComment@arps.org or left by voicemail at 413-362-1891 by 3:00 PM on meeting day. The Joint Policy Subcommittee began a systematic review of the whole ARPS manual against current MASC model policies on September 14, starting with Section B; Section I (Instruction), where IJNDB lives, will come up in that sequence. The DESE district review is the week of November 16.

ARPS's governing document is roughly twelve years old. The district's implementing regulation for technology use, "I7 Appropriate Use of Technology," carries a footer reading "Updated: xx 2014," predates 1:1 devices and AI, and says nothing about screen time, developmental appropriateness, or take-home devices (I7 PDF). It is clear that this policy has not kept pace with technological developments nor does it integrate up to date research on educational technology. This type of discrepancy is explicitly discouraged by subsection IJ which states that instructional materials will "reflect current research and instructional methodology". We have entered a critical window for the development of policies that can meet the cultural moment, creating a meaningful impact on the development of our community's youth.

The federal government now says put it on paper. The May 2026 HHS Surgeon General's advisory on screen use tells schools to "limit screen use by assigning work in books or on paper whenever possible" and to limit "individually assigned devices outside dedicated computer lab environments" (HHS advisory) citing poorer physiological and mental health outcomes as a result of certain types and quantities of screen use. This is the most citable single document for a K-5 audience, though it was issued by HHS without a confirmed Surgeon General in office, so cite it as an HHS advisory.

The research is consistent on a few things and silent on many. Consistent findings are that reading on screens produces a small, reliable comprehension deficit that is largest for young children and for informational text (Delgado 2018; Altamura 2023); that simply handing out devices produces no learning gain (Escueta et al. 2017/2020); that heavy device use correlates with worse outcomes at scale while moderate use does not (PISA 2022); and that tangible rewards undermine children's intrinsic motivation (Deci, Koestner and Ryan 1999). What the research does not show is that well-designed adaptive software hurts, that gamified apps specifically damage deep learning, or that screens cause ADHD or autism. The brief says both halves.

Massachusetts state law will not solve this. The stalled cell phone bill covers personal devices only and explicitly excludes school-issued Chromebooks and iPads. DESE has issued no elementary screen-time guidance and its April 2025 AI guidance leaves every decision to districts. Other Massachusetts districts (Cambridge, Arlington, Northampton, Acton-Boxborough) have moved on their own in 2026, and their moves are the nearest precedents.

Rapid AI integration nationally increases urgency. On August 10, 2026, Google turned Gemini in Classroom on by default for students of all ages in Google Workspace for Education, unless a district admin had already disabled it (Google Workspace Updates). Common Sense Media rated Gemini Under 13 "High Risk" (Sept 2025). ARPS uses Google Workspace. Whether the elementary organizational unit has Gemini disabled is a yes-or-no question the Information Systems director can answer in one email, and it should be the first question asked. New York City (Sept 2, 2026) and Los Angeles (Sept 3, 2026) both imposed moratoria on student-facing generative AI in elementary grades this month, and Acton-Boxborough, Massachusetts adopted "no direct student AI tool use" for elementary schools in May 2026. San Francisco, which did the opposite (an OpenAI contract signed before board review, an AI reading tutor rolled into K-5 without consulting teachers, a policy vote deferred to March 2027), now has a four-day teachers' strike, a thousand-signature parent petition, and a superintendent who avoided saying "AI" on a Salesforce stage behind it. Section 5c covers it as a case study.

The Future Questions block in the outline is the most powerful part of the project. Cambridge parents got their School Committee to order a district usage audit; it found median Chromebook use of 17 minutes a day in kindergarten and 25 minutes a day in grades 1-2 (Cambridge Day). Bend-La Pine,

Oregon parents asked for the top ten applications used at each grade level and ended up with a board resolution requiring evidence review of every app. Data requests move administrators in a way literature reviews do not.

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1. What governing bodies and special interest groups say about technology in the general education classroom

US Department of Education, National Educational Technology Plan (January 2024). The 2024 NETP reframed the classroom problem as a "digital use divide," meaning some students use technology actively (creating, coding, analyzing, collaborating) while others use it passively (digital worksheets, drills, watching content), and it called on schools to design for active use and minimize passive use. This is the origin of the active/passive distinction the AAP now uses. The Office of Educational Technology that wrote it was eliminated in the March 2025 Education Department layoffs; the plan still exists but has no federal office behind it and no updates are expected. New America hosts an archive (archive; K-12 Dive summary; EdWeek on the closure).

US Department of Health and Human Services, Surgeon General's Advisory on the Harms of Screen Use (May 2026). The most directly relevant federal document for a K-5 brief. It declares harmful screen use a public health concern and includes explicit school recommendations. "Limit screen use by assigning work in books or on paper whenever possible." "In classroom settings, multitasking with digital media interfered with attention and concentration and negatively affected grades, test scores, recall, and reading." It also recommends bell-to-bell phone restrictions, digital literacy instruction, and more physical activity, and per the school superintendents' association it recommends "limiting individually assigned devices outside dedicated computer lab environments" (advisory PDF; landing page; AASA summary; K-12 Dive). Issued without a confirmed Surgeon General in office; cite as an HHS advisory. The earlier 2023 Surgeon General advisory on social media (Dr. Vivek Murthy) recommended digital and media literacy curricula in schools (2023 advisory).

UNESCO, 2023 Global Education Monitoring Report, "Technology in education: A tool on whose terms?" The most authoritative international review. "There is little robust evidence on digital technology's added value in education." "A lot of the evidence comes from those trying to sell it." "Mere proximity to a mobile device was found to distract students and to have a negative impact on learning in 14 countries." "The focus should be on learning outcomes, not digital inputs. To help improve learning, digital technology should not substitute but instead complement face-to-face interaction with teachers." It also found that 89% of 163 ed-tech products recommended during the pandemic could surveil children (GEM Report summary).

OECD (PISA). The 2015 report "Students, Computers and Learning" found that countries investing heavily in classroom ICT saw "no appreciable improvement" in reading, math, or science, and that students using computers very frequently at school did worse than moderate users even after controlling for demographics (OECD 2015). PISA 2022 found roughly one in three 15-year-olds distracted by devices in most or all math lessons, and students distracted by peers' devices scored the equivalent of three-quarters of a year lower. The OECD's own framing is "manage," not "ban," and the data show a U-shape where moderate use for learning beats both none and heavy (PISA 2022 Vol. II; OECD, Managing Screen Time, 2024).

World Health Organization (2020). For ages 5-17, "children and adolescents should limit the amount of

time spent being sedentary, particularly the amount of recreational screen time." No numeric threshold and no classroom guidance (WHO 2020 guidelines).

CDC. No classroom policy. A 2025 CDC study found about half of US teens report four or more hours of daily non-school screen time, associated with worse sleep, activity, and mental health (Preventing Chronic Disease, 2025).

Massachusetts DESE. DESE has no guidance on elementary classroom screen time. Its relevant documents are the 2016 Digital Literacy and Computer Science Framework (DLCS), a June 2025 DLCS curriculum guide that mentions "unplugged activities" but sets no limits (guide), and the April 2025 "Massachusetts Guidance for Artificial Intelligence in K-12 Education," which states "The Department is not recommending or requiring the use of AI in schools; those decisions remain with local leaders" and recommends that schools inform parents when AI tools are used (DESE AI guidance). The absence of state screen guidance is itself a finding. It means ARPS is free to set its own standard and cannot point upward.

Massachusetts legislation. The cell phone bill (Senate S.2561/S.2581 passed July 31, 2025; House H.5366 passed 129-25 on April 8, 2026) is not law as of September 22, 2026. It sits between chambers with no conference committee (Globe, Sept 7, 2026; Boston.com, Sept 14, 2026). Both versions cover personal devices only. The Rennie Center's analysis notes "it excludes school-issued devices that serve an educational purpose" (Rennie Center). A separate classroom screen-time bill, S.463, filed January 2025 by Sen. Velis by request of a petitioner, would cap PreK-K at 4 hours per year and grades 1-2 at 5 hours per year, require locally adopted screen-time policies after public hearings, and give parents opt-out rights. It has seen no committee action and should be treated as a reference point, not pending law (S.463). Attorney General Campbell's January 2025 toolkit on phones in schools offers three model approaches but does not address school-issued devices (AG toolkit).

Federal legislation and Informal Guidance. No federal law governs classroom screen use. The House passed the KIDS Act (H.R. 7757) on June 29, 2026, expanding COPPA to age 17; Senate passage is considered unlikely and it has no school provisions (K-12 Dive). In June 2025 and August 2026, the Department of Education published two letters meant to provide states, districts and other stakeholders with guidance on the selection, use, and ongoing evaluation of AI and EdTech tools writing “the effectiveness of any educational technology depends on the quality of the tool, the purpose for which it is used, and the conditions in which it is implemented” (Assistant Secretary Letter). They do not provide specific guidance on screen-use total quantities.

Section Summary: What this means for the ask: *No governing body above the district has set a standard for school-issued device use in elementary grades, so ARPS owns the decision. The HHS advisory and UNESCO report provide the parent group with two authoritative documents that say "paper first, screens where they add value," which happens to be the superintendent's own stated framing.*

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2. What pediatric, mental health, and watchdog organizations say

American Academy of Pediatrics. The AAP does not set time limits for school screen use or for ages 5-12. It emphasizes quality over quantity, distinguishes active from passive use, and urges schools to

evaluate whether technology actually augments learning. The Screen Time at School Q&A (March 2025) defines active use as "critical thinking activities like coding, simulations, media production, and collaboration," passive use as "consuming digital content without reflection, such as filling out worksheets," and says schools should "build curricula and training approaches that allow students to engage in more active technology use at school, while minimizing passive use" (AAP Screen Time at School). The January 2026 "Guidance for Schools on Educational Technology" recommends acceptable use policies built with parent input, prompts parents to ask whether a 1:1 device is necessary and whether it can stay at school, and cites lower reading comprehension with heavier ed-tech use in younger learners (AAP school guidance, Jan 2026). The AAP's "5 Cs" framework (Child, Content, Calm, Crowding out, Communication) is its recommended lens (5 Cs). Among other things, this framework urges administrators and educators to avoid using technology to "displace" other learning opportunities such as hands-on activities, emotional coping skill development, and social interactions. Its January 2026 policy statement "Digital Ecosystems, Children, and Adolescents" shifts emphasis to platform design, stating "children's media use cannot be viewed solely through the lens of individual child behaviors or screen limits alone" (summary). The 2016 AAP policy statement on media use in school-aged children remains the formal policy for ages 5-18 but could not be retrieved for verbatim text.

American Psychological Association. An expert report published in September 2026 produced six broad findings and ten EdTech recommendations relevant to elementary and secondary education (APA Expert Report). Contributors found that evidence does *not* support the notion that EdTech improves critical thinking or, even, intelligence. They write "time spent, enjoyment, participation, and completion rates are often mistaken for learning" and "features designed to capture attention can pull attention away from learning." p.5. The report also mirrors the AAP's emphasis on the potential for EdTech to "crowd out" other critical learning modalities. Contributing authors urge educators, parents and policy-makers to "judge EdTech tools by learning outcomes, not only engagement, enjoyment, or interest because engagement is not learning, and the ultimate test is what learners can do after they leave the tool" p. 3. The report recommendations also address generative AI and data privacy.

Common Sense Media. The 2025 census of media use by children 0-8 reports that 40% of children have a tablet by age 2 and nearly one in four has a personal phone by age 8 (2025 Census). Its privacy program finds most ed-tech companies fail on transparency and data monetization, and its April 2025 response to Congress warned that "children simply trying to learn can unknowingly have their information shared with advertisers and tech giants seeking to profit off of such insights" (RFI response; 2023 State of Kids' Privacy). Its AI risk assessments are covered in Section 6.

Electronic Frontier Foundation. The 2017 "Spying on Students" report found school-issued Chromebooks and Google services collected student browsing and behavioral data with little parental notice or opt-out; one Maryland parent quoted: "We were given no information about our first-grader receiving a device—a tablet—this year" (EFF 2017). Its 2024 analysis of student monitoring software found "no comprehensive or independent studies have shown an increase in student safety linked to the usage of this software" and that it "often disproportionately targets disadvantaged, minority and LGBTQ youth" (EFF 2024).

SAMHSA. While much of their work has been focused on social media use, SAMHSA explicitly encourages educators to limit passive screen time at school to avoid negative impacts on development and overall well-being. They include a list of recommendations to help educators consider the healthiest ways to incorporate education technology, including ways to help students think critically about their screen use in and outside of the classroom (Beyond the Screen: Creating Healthy, Engaged Elementary School

Classrooms).

Center for Digital Thriving (Harvard GSE, with Common Sense). Researches teen digital well-being and produces classroom lessons; no position on elementary device volume (research index). Its May 2025 youth advisory memo on generative AI covers grades 9-12 only.

Fairplay / Screens in Schools Action Kit (updated March 2025). The most complete parent-organizing toolkit. Includes "Questions Parents Should Ask about Edtech," sample district-wide recommendations, and a short superintendent letter (action kit; questions PDF; sample recommendations). The templates are 2020-2021 vintage and should be refreshed with the 2026 sources in this brief.

Everyschool.org (Emily Cherkin). The EdTech Triangle sorts classroom tech use into four tiers, Transformative, Supportive, Restrictive, and Disruptive, and places "screens for behavior management" and "excessive screen time" in the Disruptive tier. A 26-page implementation guide, "Triangulate," and a "10 Best Practices for School Technology" list are available (EdTech Triangle; Triangulate PDF; 10 best practices).

Karolinska Institutet (Sweden, April 2023). Five professors, including ADHD researcher Lisa Thorell and Torkel Klingberg, told the Swedish government that its school digitalization strategy lacked an evidence base, citing screen-reading deficits, distraction, and special vulnerability of children with ADHD, and recommended funding printed textbooks. The government did (original response, Swedish; AP coverage). Their line "there's clear scientific evidence that digital tools impair rather than enhance student learning" states the case more strongly than the meta-analyses support, and critics have said so (TES critique). Cite the Karolinska statement as expert opinion from a major medical university, not as a study.

CoSN (Consortium for School Networking, August 2026). The ed-tech leaders' association released "From Screen Time Mandates to Purposeful Technology Policies and Guidance" with sample board policies and checklists. Useful because it comes from the technology side of the house and administrators will trust it (CoSN).

Section Summary: What this means for the ask: *The AAP and APA's positions are the best models for Amherst because they are moderate, specific, and impossible to dismiss. They do not say "no screens." They say minimize passive use, evaluate whether each use augments learning outcomes, ask whether 1:1 devices are necessary, and collaborate with parents on policy and implementation. That is a policy process, and it is what the parent group is asking for.*

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3. What the scientific literature says

3a. Pros and cons of technology in elementary learning

Hardware alone does nothing; specific software with specific pedagogy sometimes helps. Escueta, Nickow, Oreopoulos and Quan reviewed only randomized and regression-discontinuity studies (NBER 2017, Journal of Economic Literature 2020). Giving K-12 students laptops or computers produced null effects on grades, test scores, homework time, and attendance. Computer-assisted learning software, especially in math, was mostly positive, with effect sizes ranging from small (+0.18) to medium-high (+0.63)SD for programs like ASSISTments, SimCalc, and Cognitive Tutor (NBER w23744). Zheng et

al.'s 2016 review of 1:1 laptop programs in Review of Educational Research found small positive average effects but only 10 of 96 studies had usable effect sizes; the authors note few rigorous designs (Zheng, 2016). Strength moderate. This is the best evidence in favor of 1:1 programs and it is thin.

Hattie's effect sizes put most technology below the average intervention. Technology with elementary students d = 0.44, intelligent tutoring 0.48, gaming and simulations 0.35, technology in reading 0.29, one-to-one laptops 0.16, against a hinge point of 0.40 (Hattie rankings). Strength moderate; Hattie's averaging method is widely criticized, but as a rough map it shows 1:1 devices near the bottom.

Well-designed adaptive software yields small positive effects in rigorous trials. ST Math (grades 3-6) has two cluster RCTs and an Evidence for ESSA "Strong" rating with an average effect of +0.07; the effect in a 52-school high-poverty trial was +0.04, and an earlier RCT's +0.09 in year one fell to +0.03 in year two (ESSA; WestEd RCT). IXL Math showed +0.13 SD on Star Math in a 545-student cluster RCT in one Michigan district, larger for special education and ELL subgroups; vendor-commissioned, not journal-published (IXL RCT). Reading Plus showed +0.11 in one RCT (ESSA). Prodigy has no rigorous efficacy evidence at all, only a vendor-commissioned case study (JHU case study). Strength high for ST Math, moderate for IXL and Reading Plus, none for Prodigy. Note that ARPS's signed vendor list includes i-Ready, Lexia, Raz-Kids, Kahoot!, and Blooket; the evidence base for each should be checked the same way.

Reading on screens produces a consistent, small comprehension deficit, worst for young children. Delgado, Vargas, Ackerman and Salmerón's 2018 meta-analysis (54 studies, 171,055 participants) found a paper advantage of Hedges g = 0.21, larger for informational text and under time pressure, and growing in more recent studies; the authors describe the effect as roughly two-thirds of a year of elementary reading growth (Delgado 2018). Altamura, Vargas and Salmerón's 2023 meta-analysis in Review of Educational Research (26 studies, 469,564 participants) found leisure digital reading correlated only r = 0.055 with comprehension, six to eight times weaker than print, and at primary and middle school ages the association was negative, turning positive only in high school (Altamura 2023). Strength high for both. This is the single most K-5-relevant finding in the literature.

Handwriting evidence favors pencil for beginning literacy, but the famous studies are weaker than their reputation. Mayer et al. (2020) trained 145 German kindergartners for seven weeks with pencil, keyboard, or tablet stylus; pencil produced superior letter recognition and was the only condition that improved visuo-spatial skills, and tablet stylus was least favorable (Mayer 2020). Strength moderate, and the most age-appropriate handwriting evidence. Van der Weel and Van der Meer's 2024 EEG study showing far more brain connectivity during handwriting than typing used 36 university students and measured no learning outcome; a published commentary challenges the classroom inference (study; commentary). Mueller and Oppenheimer's "pen is mightier than the keyboard" (2014) did not replicate; Urry et al. (2021) found the effect "not statistically significant" (Urry 2021). Do not cite the last two to the district.

Reboot Foundation (2019) found fourth graders reporting heavy tablet use in reading class scored lower on NAEP reading. Cross-sectional, self-reported, from a foundation with a stated position; cite as descriptive only (Reboot).

Policy reversals abroad are policy facts, not evidence of causation. Sweden withdrew its digitalization strategy in 2023, funded printed textbooks (SEK 685M in 2023, roughly 500M annually after), ended mandatory digital tools in preschool, and from July 1, 2025 restricts digital use for older preschoolers

(Swedish government). Denmark announced a school phone ban and DKK 540M for physical books in 2025. The Netherlands banned phones, tablets, and smartwatches from primary classrooms from summer 2024 (Eurydice). Finland restricted phones in grades 1-9 from August 2025. Most of these concern phones and digital-first national strategies, not adaptive instructional software, and the brief should not blur that.

3b. Does screen use as a teaching method undermine other skills?

Language, the strongest displacement evidence. Madigan et al.'s 2020 JAMA Pediatrics meta-analysis (42 studies, 18,905 children) found quantity of screen use correlated negatively with language ($r = 0.14$), background TV more so ($r = 0.19$), while educational content, co-viewing, and later age of onset correlated positively ($r = 0.13$ to 0.17) (Madigan 2020). Strength high. The pattern, quantity negative and adult interaction positive, is the empirical core of the displacement hypothesis and matches UNESCO's "complement, not substitute" language.

Attention and distraction. Sana, Weston and Cepeda (2013) found laptop multitaskers scored about 11% lower and peers in view of a multitasking screen about 17% lower (Sana 2013); college students, strength moderate. The PISA 2022 distraction data (Section 1) is the largest attention dataset. A 2023 meta-analysis of screen time and executive function in children under six (15 studies, 6,922 children) found a pooled null ($r = 0.05$), with passive use trending negative and active use trending positive (Computers in Human Behavior 2023). Strength high, and a fair brief acknowledges the null.

Embodied and hands-on learning. Carbonneau, Marley and Selig's 2013 meta-analysis (55 studies, 7,237 students) found small-to-moderate effects favoring physical manipulatives over symbol-only instruction, larger on retention than on transfer (Carbonneau 2013). Strength high. But a 2023 meta-analysis of physical versus virtual investigation (35 studies) found no overall difference; physical was better only when touch carries information about the concept (Frontiers 2023). This cuts against a blanket "screens undermine embodied learning" claim.

Fine motor. A 2019 study of 72 Taiwanese preschoolers found tablet non-users scored higher on fine motor precision and visual perception, with usage time correlating negatively with precision (Lin 2019); small, cross-sectional, strength low. A 2025 systematic review found the motor-development evidence mostly observational and low quality (Dutra 2025). Suggestive, not established.

Social-emotional. The AAP's January 2026 policy statement, Digital Ecosystems, Children, and Adolescents, links heavier solo and noneducational media use to delays in language, cognition and social-emotional development and to sleep disruption, and engagement-driven design to prolonged use that displaces sleep, play and in-person interaction (AAP policy summary, healthychildren.org). A 2022 longitudinal toddler cohort found screen time displacing peer play was associated with poorer developmental outcomes (Pediatric Research 2022). McDaniel and Radesky (2018) documented "technoference," parent device use during interactions predicting later child behavior problems, in 183 families with children 0-5 (McDaniel 2018). No peer-reviewed study measures teacher-student technoference in K-5 classrooms; the parent-child literature is the closest analogue and the brief should say so rather than extrapolate.

3c. Does screen use prioritize rote over deep learning?

Rewards and motivation. Deci, Koestner and Ryan's 1999 meta-analysis of 128 experiments found

expected tangible rewards undermined intrinsic motivation (d = 0.36) and were more damaging for children than for college students; verbal praise barely helped children (d = 0.11) (Deci 1999). Strength high. This is the theoretical basis for concern about coins, badges, and streaks in apps like Prodigy and Blooket. No study directly measures whether app rewards reduce children's intrinsic interest in math.

Gamification is not inherently shallow by the available measures. Sailer and Homner's 2020 meta-analysis found cognitive effects of g = 0.49, though outcomes are mostly short-term knowledge tests (Sailer 2020). A 2025 Kahoot! meta-analysis reports very large effects (achievement d = 0.77), typical of small, short, mostly higher-education studies with weak controls, and promoted by Kahoot itself; treat with caution (Özdemir 2025).

Shallow versus deep processing. The Delgado and Altamura meta-analyses are the empirical anchor. The screen deficit is largest for expository text and under time pressure, consistent with a "shallowing" account. Maryanne Wolf's "Reader, Come Home" (2018) is the expert synthesis, arguing that habitual skimming on screens atrophies deep-reading circuits (Wolf); cite her for framing and the meta-analyses for data.

Transfer. Moser et al. (2015) found 2.5- and 3-year-olds learned a puzzle substantially less well from a touchscreen or video than from live demonstration (Moser 2015); below kindergarten age. Most ed-tech trials measure no transfer outcome at all, and the ST Math effects fading in year two suggest transfer is the weakest outcome for any modality.

Section Summary: What this means for the ask. *The honest claim is "unproven for deep learning," not "proven harmful." The defensible claims are that screen reading hurts comprehension in young children, that device provision alone does nothing, that heavy use correlates with worse outcomes, and that most apps in use have never been rigorously evaluated. That last point is the one to press. Ask the district which apps on the elementary approved list have any independent efficacy evidence, using the Evidence for ESSA and What Works Clearinghouse databases as the standard. Bend-La Pine's board resolution did exactly this.*

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4. Special considerations for neurodivergent children and learning differences

ADHD. Nikkelen et al.'s 2014 meta-analysis (45 studies) found a small but significant pooled correlation (r = 0.12) between media use and ADHD-related behaviors, direction undetermined (Nikkelen 2014). Ra et al. (JAMA 2018) followed 2,587 adolescents without baseline symptoms for 24 months; each additional high-frequency digital activity raised the odds of later ADHD symptoms (OR 1.11), with symptom rates of 4.6% among non-users versus 10.5% among the heaviest users (Ra 2018). Thorell et al.'s 2022 review of 28 longitudinal studies concluded the relationship is reciprocal, small, and more consistent for problematic use than for raw screen time (Thorell 2022). Strength high for the correlation, low for direction.

Dysregulation and transitions. Radesky et al. (JAMA Pediatrics 2022, 422 children aged 3-5) found using devices to calm children predicted higher emotional reactivity three months later, strongest in boys and in temperamentally "surgent" children, a trait overlapping with ADHD (Radesky 2022). Fitzpatrick et al. (JAMA Pediatrics 2024, 315 preschoolers) found one standard deviation more tablet use predicted 22% more anger and frustration a year later, and more anger predicted 22% more tablet use the year after, a documented cycle (Fitzpatrick 2024). Strength moderate. The Karolinska statement explicitly flags

children with ADHD as disproportionately harmed by classroom digital distraction. Everyschool places "screens for behavior management" in its Disruptive tier, and Cambridge's existing guidance bars "screens as a behavioral reward"; both are directly relevant to how devices get used with dysregulated kids.

Autism. Ophir et al.'s 2023 JAMA Network Open meta-analysis (46 studies, 562,131 participants) found the raw association between screen time and autism disappears after correcting for publication bias; the authors say the data do not support a causal link and that autistic children may simply prefer screens (Ophir 2023). Strength high. The brief should not claim screens cause or worsen autism. The relevant concern is displacement of social interaction.

Dyslexia and reading disabilities, where technology clearly helps. Wood et al.'s 2018 meta-analysis (22 studies, 2,942 participants) found text-to-speech improved comprehension for students with reading disabilities, d = 0.35 overall (Wood 2018). Schneps et al. (2013) found short-line e-readers improved speed for about half of dyslexic high schoolers and comprehension for a third, with the benefit concentrated in students with visual-attention deficits; some read better on paper (Schneps 2013). A 2024 meta-analysis of technology-based reading interventions for elementary students with reading difficulties found strong effects (Tau-U = 0.87), equal across K-3 and 4-5 (Nature HSSC 2024).

The assistive-technology distinction. The evidence supports drawing this line sharply. Assistive technology (text-to-speech, speech-to-text, adaptive intervention software) has effect sizes of 0.3 to 0.9 for the specific students it targets. General-population screen reading has a consistent negative effect and general device use has null-to-negative effects. Under IDEA and Section 504, assistive technology is an individualized accommodation determined by the IEP or 504 team (34 CFR 300.105); it neither requires nor justifies whole-class device use. Every recent restrictive policy in Section 5 (New York City, Los Angeles, Iowa, Utah) carves out IEP/504 accommodations explicitly. ARPS has an Assistive Technology Coordinator, Allegra Osborne, who should be part of any policy conversation.

What this means for the ask. Reducing general screen use in K-5 does not conflict with, and may be complementary to, protecting individually prescribed assistive technology. Saying this early defuses the most common administrative objection. The specific asks are that screens not be used as behavioral rewards or calming tools, that transitions off devices be planned, and that 504/IEP teams review device use individually rather than defaulting to whole-class norms.

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5. Local and national policy examples

5a. Where ARPS stands today

People. Superintendent Dr. E. Xiomara Herman (started July 2024; has announced she will leave June 30, 2027, per the Gazette). Amethyst Brook Principal Allison Estes, Assistant Principal Kakas Coblyn. Director of Information Systems Jerry Champagne, (413) 362-1884; Assistant Director Codey Kolasinski; Assistive Technology Coordinator Allegra Osborne (Information Systems). Director of Curriculum, Equity and Instructional Leadership Tonya McIntyre. Director of Student and Family Engagement Dr. Marta Guevara. Amherst School Committee members at the September 15 meeting were Deb Leonard (Chair), Andrew Hart, Laura Jane Hunter, Bridget Hynes, and Sarah Marshall. Next listed Amherst School Committee meeting is October 27, 2026 at 6:30 PM (committees page). A superintendent in her final year is a specific opportunity; policy adopted now will outlast her, and she has already signaled interest.

What the September 15 documents show. The committee's SY 26-27 goals name a technology policy under "Curriculum Review" (goal 5), alongside an I-Ready review; they also include, under process goals, "create robust feedback systems for students, families, educators, and paraprofessionals, including regular surveys," and "increase meaningful community engagement through public comment and committee structures, including public forums." The document still carries members' marginal notes, so it is a working draft, but it was posted publicly. The superintendent's report describes Techless Thursdays (quoted above), instructional walkthroughs, a curriculum review, and the November 16 DESE review. The Amethyst Brook leadership update is silent on technology; its priorities are routines in the new building, 30 classrooms, 12 new staff, and "all students make at least 1 year of growth on End-of-Year assessments" (Amethyst Brook update). The Crocker Farm update is also silent. The Chestnut Street Academy update names "iReady Inform" for baseline diagnostics and "technology integration" for sixth grade, confirming i-Ready as the district assessment platform (CSA update). The chair's update records the added meeting dates and the superintendent search (Chair's Update).

The policy review already under way. The Joint Policy Subcommittee's September 14 agenda began "systematic review of existing ARPS Section B policies against the current MASC model policy manual," considering for each policy "alignment with current MASC model language, Massachusetts law and regulatory requirements, outdated or unnecessary provisions," and classifying each as no change, minor revision, substantial revision, or replacement. It is also drafting MASC model policies ARPS lacks. The subcommittee takes public comment. This is the mechanism through which IJNDB and the 2014 I7 regulation would be replaced, and the group can ask that Section I be reached with the technology policy in hand rather than defaulting to MASC boilerplate.

Policy on the books. ARPS points to policy IJNDB (Appropriate Use Policy) and the implementing regulation "I7 Appropriate Use of Technology," posted as a PDF with a footer reading "Updated: xx 2014." It says students get network accounts and internet access "unless a parent or legal guardian submits a signed request refusing access," restricts student use "to teacher-approved projects and research," provides CIPA filtering with "no expectation of privacy," and requires that Information Systems "be consulted before any software purchase." It says nothing about screen time, developmental appropriateness, AI, or take-home devices (I7 PDF). All policies live on BoardDocs (BoardDocs), which blocks automated access. Someone needs to open BoardDocs manually and check the current text and adoption date of IJNDB, and whether ARPS has adopted the MASC codes IJND, IJNDC, EHB (data security), JICJ (student phones), or KBA.

Student data. ARPS is a member of the Massachusetts Student Privacy Alliance and shares student data with vendors only under a signed privacy agreement or written parent consent (ARPS privacy page). Its 48 signed agreements are public (SDPC listing). Elementary-relevant vendors include i-Ready (2025-2028), Lexia, Raz-Kids, Seesaw, ClassDojo (2025-2028), mCLASS (2024-2027), Kahoot!, Blooket, Canva for Education, Kami, and PowerSchool. The ARPS page also names "affiliated organizations" used without agreements, including "select Google Additional Services." Google Workspace itself does not appear on the SDPC list. No AI vendor appears on it.

Not found. Any published statement of what devices Amethyst Brook students use (Chromebook or iPad), whether they are 1:1, whether they go home, or how many minutes a day they are used. Any district technology plan. Any ARPS AI guidance. An Amethyst Brook family handbook. These are the records-request targets in Section 8.

5b. Massachusetts districts that moved in 2026

Cambridge. After parent complaints, the School Committee ordered a usage audit in December 2025. The May 2026 report, combining Chromebook telemetry and classroom observation, found median use of 17 minutes a day in kindergarten, 25 minutes in grades 1-2, and 71 minutes in high school. A member's proposed near-total PreK-2 screen ban was deferred to the superintendent, who pointed to existing guidance barring "screens as a behavioral reward" (Cambridge Day; Globe). The audit method is the model for an ARPS data request. **Arlington** moved to shared devices through grade 2 and keeps devices at school through grade 5. **Northampton** accommodated about a dozen opt-outs with analog alternatives after parents objected to YouTube replacing read-alouds. **Melrose** teachers made paper the default. **Worcester** declined opt-outs (Globe, April 24, 2026; The 74). **Acton-Boxborough** (May 21, 2026) adopted a phased AI plan under which only high schoolers get limited Gemini access in 2026-27 and elementary and junior high have "no direct student AI tool use" (Acton Exchange). This is the closest Massachusetts precedent for an ARPS AI policy.

5c. US districts that limited elementary screens, 2025-2026

Seattle Public Schools (September 21, 2026). Superintendent Ben Shuldiner announced that the district will end its one-to-one iPad program for kindergarten through second grade and cap classroom screen time in those grades at 30 minutes a day, with a stated preference for zero-screen days, effective January 4, 2027. Devices move to shared classroom carts that teachers sign out for curriculum-specific use; exceptions cover assessments and the district's newly adopted K-5 English language arts curriculum, which includes up to 20 minutes of screen-based small-group work on some days. Shuldiner framed the change as reversing a pandemic-era practice rather than as a response to research: "There's no reason why a kindergarten kid needs to have an iPad every day in their hand," and "if we're ever going to use technology, there needs to be a high bar for using it." He said the district will assess results over several months before extending limits to grades 3-5, and hopes to have something for secondary students by second semester; he estimated savings in the low millions over several years but gave no firm figure. The decision was administrative, announced by email to families, with no board vote reported; Assistant Superintendent Mike Starosky said some schools may need a longer transition. The parent group Seattle Families for Intentional Technology, the Seattle chapter of Schools Beyond Screens, partnered with the district on the change and is now pushing for caps in all grades and a pause on generative AI. No usage data or IEP/504 carve-out was mentioned in the coverage. Sources: KUOW, Sept 21, 2026 (https://www.kuow.org/education/2026-09-21/k-2-students-no-longer-get-personal-ipads-seattle-superintendent-says-pledging-less-screen-time); Seattle's Child (https://www.seattleschild.com/seattle-public-schools-k2-screen-time/); KING 5 (https://www.king5.com/article/news/local/seattle-public-schools-limits-screen-time-ends-individual-tablets-for-k-2-students/281-1d89425f-8b02-4480-b6ce-7e2cb59db413); GovTech (https://www.govtech.com/education/k-12/seattle-schools-curb-screen-time-for-youngest-students).

New York City (September 2, 2026). One-year moratorium on student-facing generative AI for 3-K through grade 8, about 600,000 students; companion chatbots banned at all grades; no 1:1 devices in the earliest grades; recommended screen caps of 30 minutes a day in grades 3-5 and 45 minutes in grades 6-8; exceptions for assistive technology and multilingual learners. Mayor Mamdani: "The tech industry wants us to believe that A.I.-powered early education is not only inevitable, but necessary. We do not see it that way" (NYC press release; EdWeek).

Los Angeles Unified. Screen policy adopted June 23, 2026 and effective this fall. No district-issued

devices in preschool through grade 1; daily and weekly caps in grades 2-12; YouTube and non-approved gaming blocked; no devices at recess or lunch; parents must opt in to take-home devices; laptop carts replace 1:1 in upper elementary (LAist; K-12 Dive). On September 3, 2026 the board added a moratorium on generative AI on district devices for all K-12 students, teachers exempt (EdWeek).

San Francisco Unified, a case study in what happens without a policy

SFUSD has no board-approved technology or AI policy. Its "Generative and Agentic AI" webpage says its guidelines are "for internal use by SFUSD staff" and "should not be understood to be or treated as official, board-approved policy" (SFUSD). In August 2024 the district introduced Amira, an AI reading tutor that records children reading aloud, in Title 1 K-5 schools through a Salesforce-funded nonprofit, and in June 2025 made it the state-mandated grade 1-2 reading screener (SFUSD screener page). On January 22, 2026 the district signed a ChatGPT Edu agreement with OpenAI covering up to 12,000 teachers and staff, effective February 2, placed it on the board's February 10 consent calendar, then pulled it after members objected to redactions; the cost is redacted and the contract "omits specifics about what student data would be processed or who could access tools" (SF Public Press, Feb 5, 2026; Mission Local). Teachers struck for four days in February, partly over AI. At the August 26, 2026 board meeting a parent group asked the district "to prohibit recreational screen use during the school day, prohibit AI-based instruction, and eliminate 1 to 1 device use in elementary school," and the board assigned staff to research LAUSD's model. The board will review a technology policy in February 2027 and vote March 9, 2027 (SF Standard, Sept 3, 2026; KALW, Sept 15).

On September 16, 2026, Superintendent Maria Su spoke at Salesforce's Dreamforce conference, two days after Salesforce announced $27 million in education grants, $18 million of it to SFUSD, Oakland, New York, Chicago, and Indianapolis, on top of $156 million to Bay Area schools since 2013 (Salesforce). She argued that teachers need AI tools to succeed while never using the word "AI" on stage, speaking instead of "tools," and did not speak of listening to teachers or parents about whether they want them. In a statement the district did not answer SFGate's questions about effects on critical thinking or mental health (SFGate, Ramin Skibba, Sept 21, 2026). The Chronicle reported that recent Salesforce funding has shifted to helping administrators "navigate AI responsibly," including "creating AI usage policies with help from Salesforce-funded organizations like aiEDU" (Chronicle via Yahoo, Sept 14, 2026). The question that raises for any district, Amherst included, is who drafts the technology policy and with what outside help.

Tech In Check, co-founded by two SFUSD employees who are also parents and active in over 45 schools, ran a petition that passed 1,000 signatures on September 21 (680 on September 3). Its framing sentence: "Our request is not to eliminate supportive technology, but to ensure it is used intentionally, transparently, and only when it demonstrably enhances student learning." Its six asks are annual informed caregiver consent for any data-collecting product; a published list of approved ed-tech, parent access to screen-activity reports, and opt-out through 8th grade; an end to 1:1 devices in TK-2, shared carts for grades 3-8, daily and weekly screen caps by grade, no recreational screens at lunch or recess, no screens in PE, no Chromebook homework K-5; no mandatory social media and YouTube blocked except teacher-vetted; all generative AI disabled on student devices and AI programs such as Amira discontinued for core elementary instruction until shown "safe, legal, and effective"; and reinvestment in textbooks and paper as "the default when technology offers no proven advantage," with opt-out and alternatives (petition). Co-founder Kiersten Reta Snavely: "We want there to be a moratorium on AI use for all of our students right now." Co-founder Sarah Conde-Sulzbach: "If the train has children on it, it's our responsibility to bring the train back to the station." The San Francisco Parent Coalition's Emily de Ayora: "We're not opposed to tech tools. We just want the district thoughtfully listening to parents, hearing their concerns, and including those in the process of building out policies." Former teacher Adlah Chisti: "We

shouldn't be using SFUSD as labs to figure out this stuff," and "Why should parents have to be the ones raising this issue? There should be a halt on this, until we figure out what the impacts are" (SFGate). Mission Local surveyed school board candidates on September 11; seven of eight support LAUSD-style limits, one proposing "no routine screen time through first grade and no more than 30 min/day through fifth grade" (Mission Local).

United Educators of San Francisco president Cassondra Curiel, to SFGate: "After making students and teachers lab mice, there has not been any data to show those tools advance the learning of students." She said Amira was introduced without consulting the union, increases teacher workload rather than reducing it, limits student-teacher interaction, and "does not perform well with students who speak with accents or speech impediments." "We're not anti-technology. We're against the companies and owners that want to exploit us." The February strike settlement, ratified by 92% of roughly 6,000 members, includes language that AI will not replace members, cannot be used to monitor or evaluate them, that "any productivity gains resulting from AI implementation shall not be used as a basis for staffing reductions or increased workload expectations," and a joint AI working group (Bay Area Current, Feb 17, 2026; SFUSD release). Teachers are a natural ally on this issue, and the Amherst-Pelham Education Association may want to see that contract language.

The district reports gains after year one (kindergarten proficiency 65% to 69%, grade 1 52% to 59%) (SFUSD, Oct 2025). An independent analysis by Philippe Marchand found actual usage averaged under 4 minutes per student in fall 2024 against a recommended 45 minutes a week, that the reported figures do not match public district proficiency data, and that the vendor's claimed 0.40 effect size compares to 0.10 or less in Louisiana's 79,000-student analysis (SFEDup, Aug 2026). Elsewhere, 35 New Mexico legislators wrote that "Amira has already collected thousands of voice recordings from New Mexico students, while many parents remained completely unaware"; 18 of 89 districts there opted out, and Albuquerque deleted prior-year voice data and stopped recording in tutoring (Source NM, Sept 2, 2026; KUNM, Aug 27, 2026). Amira's CEO, Mark Angel: "We don't want to collect this data; it's a nuisance." Atlanta is offering paper administration to families who request it. SFUSD says recordings are "stored in a de-identified format and never used to publicly train AI models." The San Francisco Parent Coalition's Rebecca Kee: "Our children's likenesses, their faces, their voices being recorded, is something that needs to be thought through" (NBC Bay Area).

SFUSD's device baseline, for comparison. One Chromebook per K-12 student; K-3 devices "stored in locked charging carts on-site and do not go home"; 1:1 take-home from 4th grade at most schools; no systemwide screen-time policy and no published minutes data (SFUSD devices page).

What the case study means for Amherst. Every problem in San Francisco traces to sequence. Tools and contracts arrived first, policy is coming last, and the people who use the tools (teachers) and whose children they record (parents) were consulted after the fact. Amherst's committee has named the policy first. The group's job is to make sure it is written before the next tool arrives, with the data the walkthroughs can produce, and with teachers in the room.

Croton-Harmon, NY (September 2026). iPads prohibited K-2; grades 3-4 shared carts only; no home access in grade 5; no online read-alouds, break videos, or tech rewards. Driven by a 400-member parent group. Superintendent Stephen Walker said technology must "earn its way into a classroom" (New York Focus).

Bend-La Pine, OR (Resolution 2013, April 14, 2026). Review all apps against evidence, set grade-level

standards, remove non-evidence-based tech, move K-5 from 1:1 iPads to shared carts, annual compliance checks. Prompted by parent group Well Wired's 1,100-signature petition (Bend Source; Well Wired).

Mesick, MI removed all K-5 devices mid-year in March 2026 and bought books (Chalkbeat). **Medford, OR** reduced K-2 device use from 2026-27 (OPB).

5d. State laws that go beyond phones, all 2026

Iowa HF 2676 (effective July 1, 2026). K-5 digital instruction capped at 60 minutes a day; boards must adopt written policies, notify parents of their right to request further reductions, bar devices at recess, and complete a checklist before any 1:1 program; exemptions for IEP/504, teacher-projected demos, state testing, and computer science (Iowa DOE FAQ). **Utah HB 273** (effective July 1, 2026). K-3 screen time largely prohibited except computer science and assessments; no required 1:1, no devices home, no internet-dependent homework; grades 4-6 must balance tech with print; model AI policy with parent notification; generative AI barred from independently grading (HB 273). **Tennessee** (effective July 1, 2026) requires K-5 to prioritize teacher-led instruction and limit devices. **Alabama** HB 78 sets pre-K and kindergarten screen standards from 2027. Pending or failed in 2026 were Oklahoma (60 min K-5), Kentucky and Missouri (45 min), and Kansas (no devices K-5) (Whiteboard Advisors tracker; MultiState).

5e. International
Sweden, Denmark, the Netherlands, and Finland are covered in Section 3a. Ontario's PPM 128 (effective September 2024) bans personal devices all day in K-6 but is silent on school-issued devices (PPM 128). France has banned phones in primary schools since 2018. UNESCO's 2023 recommended minimum age for generative AI tools in the classroom is 13 (UNESCO).

What this means for the ask. The common ingredients of every 2026 policy above are (1) no 1:1 devices in the earliest grades, shared carts instead; (2) devices stay at school; (3) a daily cap or an "earn its way in" evidence standard for apps; (4) no screens as rewards, calming tools, or filler; (5) explicit IEP/504 carve-outs; (6) parent notification and opt-out; (7) no student-facing generative AI in elementary. Iowa's and Utah's statutes and NYC's policy are the cleanest model language to hand ARPS.

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6. AI in the elementary classroom

6a. What is actually in use, and the Gemini default

Google Gemini in Classroom. On August 10, 2026, Google made Gemini in Classroom "available to K-12 and higher education students of all ages," and "access to the Gemini tab in Classroom is On by default for teachers and students of all ages" unless an admin had already disabled it (Google, Aug 2026). Admins must go to Generative AI, then Gemini for Workspace, then Feature access in Classroom, to turn it off per organizational unit (admin help). Google says under-18 users "get a distinct product experience with extra guardrails" and that data is "not human-reviewed or used to train AI models." Common Sense Media nonetheless rated both Gemini Under 13 and the teen version "High Risk," describing them as adult products with filters, and recommended that children 6-12 use chatbots only with adult supervision (Common Sense, Sept 2025). Boston Public Schools approves Gemini "for teenagers" only (WBUR, Sept 22, 2026).

Other tools. Khanmigo markets to "elementary school through college" with school access through district pilots and no stated grade floor (Khanmigo). MagicSchool's student product sets no minimum grade and relies on COPPA's under-13 definition (policy). Brisk's terms state that "the school provides consent for Brisk Teaching to collect information from students under the age of 13," meaning parents are never asked directly (Brisk). Amira, the AI reading tutor, has statewide contracts in ten states and is used with kindergartners (EdWeek, Nov 2025). RAND found 53% of core-subject teachers used AI in 2024-25, and only 45% of principals reported any school or district AI policy (RAND 2025).

6b. Evidence on AI tutors for K-5

No randomized trial shows a generative-AI chatbot benefit for K-5 general education students. Bastani et al. (PNAS, June 2025), an RCT with nearly 1,000 Turkish high schoolers, found unrestricted GPT-4 access improved practice performance 48% but lowered no-AI exam scores 17%; a guardrailed tutor version improved practice 127% with no exam gain (PNAS; Wharton summary). The Khanmigo two-year cluster RCT in 18 Tennessee middle schools (Oreopoulos and Low, August 2026) found math gains of 0.06 to 0.08 SD per year, "comparable to Khan Academy without AI"; the median student messaged the tutor on only a third of practice days, and messages were mostly "bare answers or clicks on suggested prompts" (EdWorkingPaper). MIT Media Lab's "Your Brain on ChatGPT" preprint (54 adults, EEG) found LLM users "displayed the weakest connectivity" and struggled to quote their own essays; not peer reviewed, small, adults only (arXiv). The one K-5 product with real evidence is Amira, rated "Moderate" by Evidence for ESSA on the basis of a 2013 RCT (which predates the LLM version) and a 2024-25 Texas matched comparison, with a What Works Clearinghouse-rated Louisiana study showing gains of 1 to 4 percentile points (ESSA; WWC). Matt Burns of the University of Florida told EdWeek: "There are a few studies, but none of the rigorous studies that we would need to be confident in the use of AI." A UC Irvine and McGraw Hill preprint (Rismanchian et al., July 2026, under review) analyzed 3.2 million interactions in the ALEKS math platform from 2015 to 2025 and found study time per problem fell 31% for high schoolers, 27% for college students, and 9% for middle schoolers after chatbot availability, with no change in grade 5, and a 25% decline in the odds of a correct answer on proctored retention checks (roughly 80% to 60%), an effect that disappears under proctoring (arXiv; Hechinger). Not peer reviewed, cannot observe AI use directly, and the grade 5 null is the relevant finding for K-5; cite as reported.

6c. Positions of major bodies

UNESCO (September 2023) "sets an age limit of 13 for the use of AI tools in the classroom" (UNESCO). The US Department of Education's July 2025 Dear Colleague letter allows federal funds for AI tutoring under principles that AI be "educator-led" and "transparent," with "stakeholders, especially parents" understanding how systems function (letter); Executive Order 14277 (April 2025) promotes AI education and contains no privacy provisions (EO). Massachusetts DESE's guidance sets no grade floor, recommends parent notification "through various structures as well as technology use consent forms," and asks districts to audit AI tools for privacy and anti-discrimination compliance (DESE). Common Sense Media's August 2025 assessment of AI teacher assistants (Gemini in Classroom, Khanmigo Teacher, Curipod, MagicSchool) rated them "Moderate Risk," found IEP generators showed "problematic bias based on perceived student background," and noted many "don't automatically label their outputs as AI-generated" (Common Sense). Its April 2025 assessment rated social AI companions "Unacceptable" risk for under-18s (Common Sense). The AAP's June 2026 clinical guidance notes that "GenAI can hallucinate and may not handle mental health emergencies appropriately" (AAP). No formal AAP policy statement on classroom AI was found.

6d. Student data privacy and AI

The 2025 COPPA amendments (effective June 23, 2025, full compliance by April 22, 2026) require separate verifiable parental consent for disclosures "to train or otherwise develop artificial intelligence technologies" and written data retention policies (Federal Register). Vendors like Brisk rely on the school-consent exception, so parents never see the consent. The Future of Privacy Forum's vetting checklist tells districts to determine "whether student personally identifiable information will train language models" (FPF checklist). Massachusetts student records are governed by 603 CMR 23.00 (regulation) and the MSPA model agreement (template). H.4405, a student data privacy bill, was reported favorably in August 2025 and sits in House Ways and Means; it does not address AI specifically. EFF's Lee Tien, on the SFUSD OpenAI contract, warned that once shared with vendors, student information "can be stored, analyzed or reused beyond public view."

6e. Chatbot safety and school accounts
Character.AI barred under-18 users from open-ended chat in November 2025 after wrongful-death suits involving a 14-year-old and a 13-year-old, and Google and Character.AI agreed to settle in January 2026 (K-12 Dive). The FTC opened a 6(b) inquiry on September 11, 2025 into Alphabet, Meta, OpenAI, Snap, xAI, and others over companion chatbots and children (FTC). Alphabet is a named target, Common Sense rated Gemini Under 13 High Risk, and Google turned Gemini on by default in Classroom for all ages a month ago. NYC's policy bans companion chatbots at every grade.

6f. Teacher use of AI
Gallup found 60% of teachers use AI, mostly for lesson prep and worksheets (Gallup 2025). On quality, Common Sense found generated lessons with sanitized history and race-linked differences in behavior plans, and Hechinger reported that ChatGPT matched human essay scores within a point 76 to 89% of the time but exactly only about 40%, with a later ETS study finding it scored Asian and Pacific Islander students' essays lower than humans did (Hechinger). Utah bars generative AI from independently grading and requires parent notification when AI is used in instruction; NYC prohibits AI-determined grades; DESE recommends parent notification. Teacher use is a lower-stakes issue than student-facing AI and the ask is disclosure, not prohibition.

6g. Elementary AI policies elsewhere
NYC (moratorium 3-K through grade 8), Los Angeles (moratorium K-12 on district devices), Acton-Boxborough MA (no direct student use in elementary), Boston (Gemini for teens only), and Wallingford-Swarthmore PA ("only students in grades 6 through 12 should actually be using the generative AI tools," with opt-out procedures in enrollment packets, source). New York State S10133 would prohibit most AI in K-8 classrooms except diagnostics and special education (S10133).
What this means for the ask. Three questions to the Information Systems director, in writing. Is Gemini in Classroom disabled for the elementary organizational units, and as of what date? Which AI-enabled tools (Amira, i-Ready, Lexia, MagicSchool, Brisk, Khanmigo, or others) are in use in K-5, and do their signed MSPA agreements address model training? What is the district's position on student-facing generative AI in K-5 pending a policy? The precedent to cite is Acton-Boxborough, a Massachusetts district, and the standard to cite is UNESCO's age 13.

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7. Key concepts

Active versus passive use. Defined by the US Department of Education (2024 NETP) and adopted by the AAP. Active use "involves critical thinking and includes activity such as coding, immersive simulations, media production, interaction with experts, making global connections, design, and peer collaboration." Passive use "includes activities such as filling out digital worksheets or consuming digital content without

accompanying reflection, imagination, or participation" (AAP). Useful because nearly every drill app in K-5 falls on the passive side by this definition.

EdTech Triangle. Everyschool's four-tier model, Transformative, Supportive, Restrictive, Disruptive, with a 26-page implementation guide (Everyschool). Screens as behavior management and excessive screen time are Disruptive.

Substitute versus complement. UNESCO's formulation. Technology "should not substitute but instead complement face-to-face interaction with teachers." The outline's question "what is the screen time replacing?" is this test applied classroom by classroom.

Assistive technology versus general-education screen use. Individually prescribed by an IEP or 504 team under 34 CFR 300.105, with strong evidence; distinct from whole-class device use, which has weak evidence. Every 2026 restrictive policy carves this out.

The AAP's 5 Cs. Child, Content, Calm, Crowding out, Communication. "Calm" (is the screen being used to regulate emotion?) and "Crowding out" (what is it displacing?) map directly onto the outline's future questions.

Evidence standard. Evidence for ESSA (evidenceforessa.org) and the What Works Clearinghouse (WWC) rate programs by rigor. Asking the district to hold every K-5 app to one of these is a concrete, neutral request.

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8. The Future Questions block, turned into a data plan

The outline's second set of questions on tech usage (daily minutes per classroom, rationale, what screens replace, active versus passive share, 504/IEP considerations) require current, district level data to be answered. This data can be provided by the district, and asking for it is the most effective single move available. Two routes:

Route 1, a public records request under M.G.L. c.66 s.10 (ten business days to respond) through the ARPS records portal (portal). Targets, drawn from what Cambridge and Bend-La Pine asked for. The elementary device inventory and deployment model (device type, ratio, take-home status) for Amethyst Brook and Crocker Farm. Google Workspace admin console settings for Gemini and Google Additional Services for the elementary organizational units. Usage telemetry from Google Admin, GoGuardian, Securly, or whichever management tool the district runs, aggregated by grade (Cambridge's audit came from exactly this data). The top ten applications by usage at each grade level. All current student data privacy agreements for K-5 vendors, and any vendor contracts involving AI. Whether any K-5 tool records students' voices, faces, or keystrokes (i-Ready, Lexia, mCLASS, any reading screener), where those recordings are stored, for how long, and what parents were told; the Amira record in San Francisco and New Mexico is the reason to ask. The current text and adoption date of IJNDB and I7. Any ed-tech purchases over the past three years. Schools Beyond Screens publishes a records-request template that can be adapted (templates).

Route 2, a collaborative audit proposed to the superintendent and committee as the data step before

Techless Thursdays, and as the first deliverable under goal 5. The superintendent has already committed to 90-minute instructional walkthroughs at every school with the leadership team, with committee members invited monthly; adding a simple screen-use observation protocol to those walkthroughs (devices in use, minutes, app, purpose, what it replaced) costs nothing and produces exactly the data Cambridge's audit produced. The committee's own goals call for "regular surveys and feedback loops" and "public forums," so a teacher survey and a parent survey fit a commitment it has already made. Telemetry plus a short teacher survey (minutes per day, apps used, purpose, what it replaced, whether an analog alternative was considered) plus a few classroom observations, reported by grade band. The superintendent's own framing ("when technology adds value") is the rationale. A parent survey should run in parallel; Smartphone Free Childhood's how-to recommends a seven-to-ten day window and a 50% response target (guide), and Fairplay's question bank supplies the items.

Family-level data is available now without asking anyone. A kindergartner's and a third grader's own account of what they did on a device today, kept for two weeks by a handful of families across grades, is a legitimate pilot and a good opener for the October 6 or October 27 meeting.

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9. Policy elements the evidence supports

Not a draft policy, but the ingredients every 2026 precedent shares, each tied to the evidence above. Shared devices rather than 1:1 in K-2, with devices staying at school through grade 5 (Escueta; Hattie; AAP school guidance; Arlington, LAUSD, Croton-Harmon, Utah). Paper as the default for reading and writing in K-3, screens where they demonstrably add value (Delgado; Altamura; Mayer; HHS advisory; Melrose). An evidence standard for every app on the elementary list, with annual review (Evidence for ESSA; Bend-La Pine resolution). No screens as behavioral rewards, calming tools, or transition filler (Deci; Radesky; Fitzpatrick; Everyschool; Cambridge guidance). No videos in place of read-alouds and no unstructured YouTube (Madigan; Northampton; Croton-Harmon; LAUSD). A daily cap or a grade-band minutes guideline, reported to families (Iowa 60 min; NYC 30 min grades 3-5). No student-facing generative AI in K-5 pending policy, with Gemini disabled in the elementary OU (UNESCO age 13; Common Sense; Acton-Boxborough; NYC; LAUSD). Explicit IEP/504 carve-outs written with the Assistive Technology Coordinator (34 CFR 300.105; every precedent). Parent notification of the apps and AI tools in use, and an opt-out with analog alternatives (DESE AI guidance; Utah; Wallingford-Swarthmore; Northampton). Policy built with parent input and adopted by the Amherst School Committee, replacing the 2014 regulation (AAP school guidance; CoSN).

A worked example. San Francisco's Tech In Check petition (Section 5c) asks for the same ten ingredients in six numbered items, framed as "not to eliminate supportive technology, but to ensure it is used intentionally, transparently, and only when it demonstrably enhances student learning." It reached 1,000 signatures in about five weeks, got the board to assign staff to study LAUSD's policy after one public comment, and is now the reference point for board candidates. It is a reasonable model for the length, tone, and specificity of an Amherst version, with two differences. Amherst's committee has already named the policy as a goal, so the ask can be a process (schedule the item, collect the data, involve teachers, adopt by spring) rather than a demand. And Amherst is K-5 with shared or 1:1 devices unknown, so the device asks should wait for the inventory.