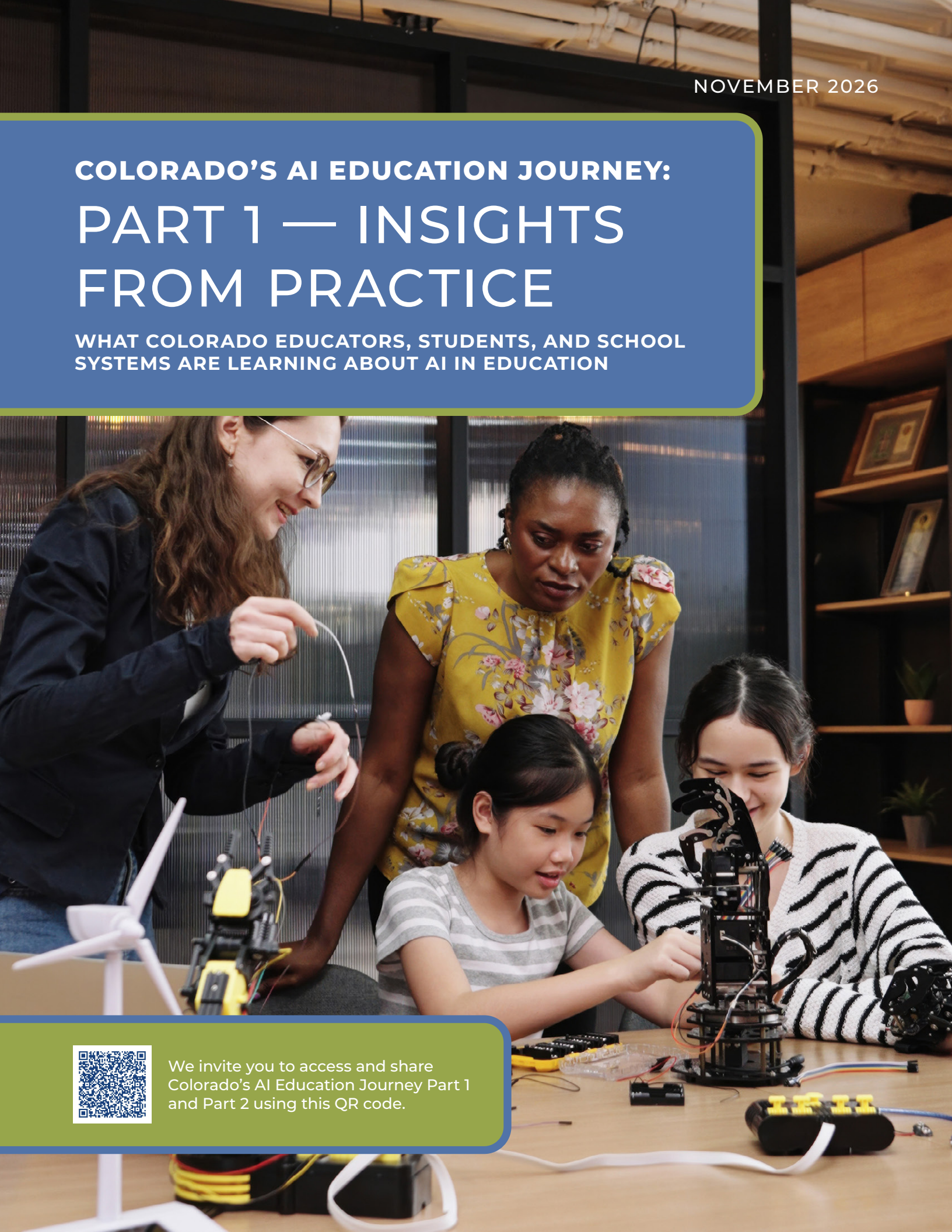
NOVEMBER 2026

COLORADO'S AI EDUCATION JOURNEY:

PART 1 — INSIGHTS FROM PRACTICE

WHAT COLORADO EDUCATORS, STUDENTS, AND SCHOOL SYSTEMS ARE LEARNING ABOUT AI IN EDUCATION



We invite you to access and share Colorado's AI Education Journey Part 1 and Part 2 using this QR code.



DEAR COLORADO EDUCATORS, STAKEHOLDERS, AND COMMUNITY MEMBERS,

Two years ago, Colorado Education Initiative (CEI) and the Colorado Department of Education introduced the Colorado Roadmap for AI in K–12 Education with a simple commitment: to meet a fast-moving technology with cautious optimism and to do it together. More than 100 educators, policymakers, industry leaders, community members, and students shaped that Roadmap. A great deal about the AI landscape has changed since 2024, but the commitments that guided Colorado's original Roadmap have held steady: human-centered teaching, equity as a design principle, and a rapid learning agenda over rigid policy.

As educators have gained experience with AI, their questions have become more practical and specific. Districts have moved from asking whether to engage with AI to asking how to do it deliberately. Educators want to know how to build the conditions for responsible AI use, what meaningful AI literacy looks like, and how to use AI without short-circuiting the thinking and relationships at the heart of learning. Students have told us plainly that they want to be taught how to use AI well. They will need it in their pursuit of passion, purpose, and economic mobility after high school. Young people understand the powerful opportunity to be creators, not just passive consumers.

This two-part report represents our response to these questions. Where the 2024 Roadmap offered a framework for exploration, this guide offers practical support for the daily work of teaching and leading. It begins with a shared picture of what students will need to thrive in the years ahead. From there, it turns to the knowledge, skills, and instructional practices educators need to teach confidently both with AI and about it, building on their understanding of how students learn. Finally, it extends to the families, counselors, and community partners who help carry this work beyond the classroom and into students' lives.

Once again, this guide reflects a distinctly Colorado process. It was shaped by a statewide task force, by lessons from districts leading out ahead, and, for the first time, by students sharing their own important perspectives and experiences.

We remain clear-eyed about the risks, both those specific to PK–12 education and broader societal concerns, and believe those risks demand thoughtful, intentional choices. We've stood shoulder to shoulder with Colorado educators as they've moved from apprehension to agency and watched them become confident architects of AI-enabled learning. We've also listened deeply as they have wrestled with components of teaching and learning that must always remain innately human.

We are deeply grateful to the task force members, educators, and students whose time and insights made this work possible. We invite you to explore Colorado's AI Education Journey, adapt it to your context, and partner to shape what Colorado learns next.

Warm Regards,



Rebecca Holmes
President and CEO
Colorado Education Initiative



CONTENTS

Elevating the Voices of Early Adopters and Practitioners 5

District Vision, Strategy, and System Conditions 6

AI Readiness, Literacy, and Fluency 13

Teaching and Learning in an AI-Enabled Environment 15

Supporting Students Beyond the Classroom 29

Closing: Designing the Future of Learning 33

CEI is grateful to the Colorado Association of Leaders in Educational Technology (CALET) and the Colorado Association of School Executives (CASE) for their endorsement of this report. Together, our organizations look forward to partnering with school districts as they navigate AI in education.

ELEVATING THE VOICES OF EARLY ADOPTERS AND PRACTITIONERS

Part 1, ***INSIGHTS FROM PRACTICE****, brings together what Colorado educators, students, and district leaders are learning as they navigate AI in education.*

Part 2, ***FROM INSIGHT TO ACTION****, offers tools, frameworks, and resources to help educators and leaders apply those insights in their own contexts.*



Throughout 2026, CEI convened a statewide task force of district and school leaders, students, state agency partners, and postsecondary and industry partners to surface emerging lessons and identify practical recommendations and resources for educators navigating AI in education.

In parallel, eight Colorado school districts have spent three years exploring and integrating AI in K–12 education with support from the Opportunity Now ElevateAI grant, awarded in 2023 by the Colorado Office of Economic Development and International Trade. Their experiences offer valuable lessons about what it takes to move from exploration to implementation in schools and districts.

Drawing on this work, Colorado's AI Education Journey offers practical guidance to support educators in moving from reacting to AI toward making intentional decisions about when and how to use it, including when to leave it out of learning. The guide is organized around problems of practice that have emerged from this work.

DISTRICT VISION, STRATEGY, AND SYSTEM CONDITIONS

CORE IDEA:
AI implementation begins with a district's vision for student success and core beliefs about teaching and learning, not with tools.



CONNECTING AI TO DISTRICT GOALS AND STRATEGIC PLANS

Districts that sustain meaningful change over time ground their efforts in a future-facing vision for student success and the durable skills students will need. AI implementation is no different.

AI adoption that is driven by tools rather than pedagogy presents several common risks. Absent intentional design, districts may see over-reliance on AI-generated responses, reduced cognitive demand for students, and fragmented instructional practice. AI changes how teachers and students interact with information, instructional materials, and one another. Educators are beginning to explore how AI can deepen learning without replacing the thinking that students need to do themselves or the professional judgment of teachers.



When district and school leaders articulate a shared AI vision tied to their broader strategic plan and Graduate Profile (also called Portrait of a Graduate or Learner Profile), AI literacy and critical thinking become part of what it means to be future-ready. This positions educators as co-designers, identifying how to use AI to streamline workflow, personalize instruction, and open space for new levels of student creativity and inquiry. By 2027, districts should move beyond disconnected efforts by early-adopter teachers and discrete AI plans to an integrated evaluation of what next steps in teaching and learning will advance a system's strategic goals.

Effective district AI visions:

- Align with local values, strategic priorities, and Graduate Profile.
- Center human expertise and relationships.
- Address equitable access, ethical safeguards, and inclusion for all learners.
- Explain why AI matters for student learning, not just how to implement tools.
- Include a plan for educator professional learning and coaching.
- Engage departments across the district, including human resources, assessment, and operations.

FROM INSIGHT TO ACTION

Compare policy and readiness frameworks districts can draw on in Part 2, Section 1: Frameworks and Readiness Tools.

SYSTEM CONDITIONS: WHAT THE ELEVATEAI DISTRICTS DEMONSTRATE

The eight Colorado school districts participating in the Opportunity Now ElevateAI grant — Adams 12 Five Star Schools, Brush, Cañon City Schools, Durango, Estes Park, Greeley-Evans District 6, Harrison District 2, and Mesa County Valley 51 — have worked to deepen their knowledge and implementation of AI literacy, professional learning for Educator Fellows, and change management for school and district leaders. Several common conditions have emerged across their work:

- **Vision.** Their AI work is grounded in a clear purpose and connected to broader district goals. They have articulated what they want teaching and learning to look like in the near term, giving classroom educators and central office staff a shared direction.
- **Courageous leadership.** Their leaders create room to try, fail, and try again, and treat missteps as part of learning rather than a reason to pull back from a future for which students must be prepared.
- **Collaboration.** They intentionally bring technology and instructional leaders together through cross-functional AI task forces, ensuring that decisions about tools reflect classroom needs and that rapid feedback loops exist from educators to central office.
- **Infrastructure.** Reliable technology, equitable access, and clear processes for evaluating and supporting tools allow educators to put the district's vision into practice across schools and classrooms.

Building on these lessons, there are several actions school district leaders can take to create conditions for responsible AI exploration and integrated use across systems.

Governance and Leadership

- **Charter a standing AI Task Force.** Bring together senior district leaders, technology professionals, students, and instructional leaders, and give them real authority to shape, monitor, and regularly refresh the district's strategic vision for AI.
- **Set clear guardrails for responsible use.** Establish shared principles and policies on privacy, equity, safety, and academic integrity, and review them on a set schedule as the technology evolves.
- **Keep the board informed and engaged.** Provide regular, transparent updates to the school board on AI developments, district decisions, and results so that oversight stays visible and public dialogue and trust keep growing.



Manage Change Thoughtfully

- **Communicate the vision and clear the path.** Share the "why" and the direction with staff, students, and families. Build a network of champions across schools and address barriers such as outdated policies, limited training time, or uneven access to tools. Consider a family-facing committee that can surface parent questions and offer parent-facing AI education.
- **Create early wins and build on them.** Identify visible, meaningful successes, celebrate the people behind them, and use that momentum to extend the work to more classrooms, teams, and schools. This is especially important for surfacing practices that may deeply transform the future of teaching and learning.
- **Anchor AI practices in how the district operates.** Weave what is working into everyday systems like planning, budgeting, hiring, professional learning, and evaluation so the change lasts beyond any one initiative or leader. Consider working groups for populations of students where AI use may be particularly fraught or particularly promising: young learners, multilingual learners, students with special education needs, highly mobile students, etc.

Continuous Learning and Improvement

- **Be specific about the goal of any pilot or change.** Set goals, name them, and design systems to achieve them. This ensures the learning agenda remains closely connected to outcomes.
- **Stay informed and learn from others.** Evaluate emerging AI tools and resources, learn from peer districts and experts, and design targeted pilots aligned with priorities that keep the district informed and ready for what comes next.
- **Test, refine, and scale what works.** Run short-cycle tests to try new ideas quickly, learn from the results, pivot or adjust, and expand the practices that show real promise.
- **Close the loop with governance.** Regularly share what is being learned with the AI Task Force so insights feed directly into updated strategy, guardrails, and decisions.

Colorado school districts are already doing versions of this work, and examples follow throughout this report.

FROM INSIGHT TO ACTION

Engage with resources to support shifting from planning to implementation in Part 2, Section 1: Frameworks and Readiness Tools, including the ALIGN framework, with guidance for piloting, evaluating, expanding, and improving AI-supported practices.

First Steps for Small Systems

Many Colorado districts have a superintendent who is also the principal, a technology lead who covers all schools, and a counselor who works alone. While the conditions in this section still apply, the structure around them can be lighter. For example:

1. **Make the council small.** In a small district, "governance" can be the superintendent, the person who handles technology, and two teachers, meeting monthly. Add a student and a small family task force when policy is being revised.

2. **Write a one-page position statement first.** A short statement of why the district is engaging with AI and what it will protect gives teachers enough direction to begin. Detailed guidance can follow.

3. **Start with one approved tool and one problem.** Choose a district-approved tool covered by a data privacy agreement and a single problem staff already feels, such as planning time, feedback on writing, or family communication. Expand once a strong feedback and learning cycle has been built.

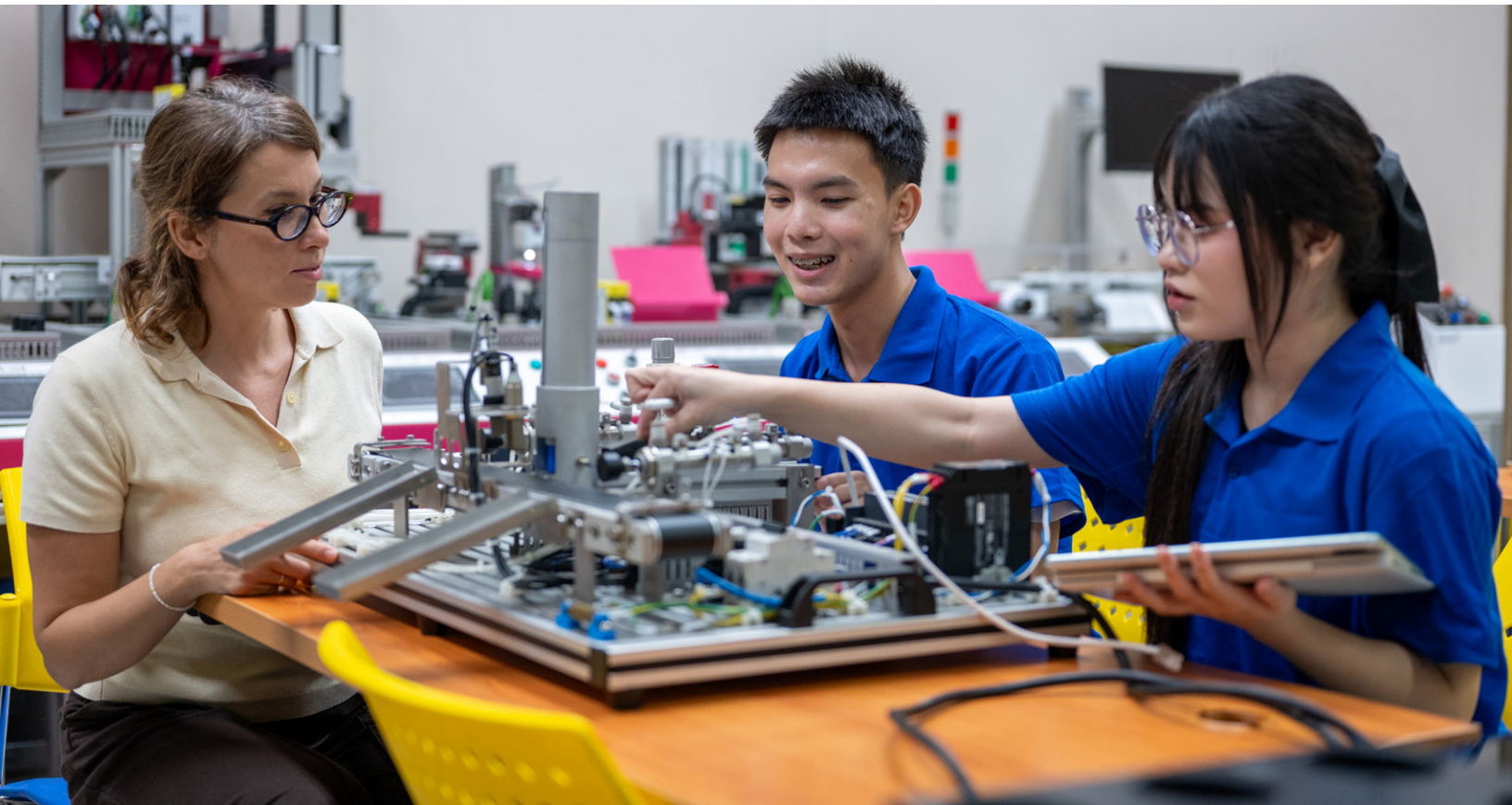
4. **Borrow before you build.** Adapt the grade-band expectations and stoplight framework in this guide, the family templates in Part 2, and existing tool-vetting resources rather than drafting from scratch.

5. **Use your BOCES and your neighbors.** Shared professional learning, tool vetting, and data privacy agreements reduce the load on any one district. Peer districts in the ElevateAI cohort, including several small and rural systems, can offer a start.

6. **Name one point person.** One staff member who tries tools first, answers colleagues' questions, and brings problems to the council is often enough to advance progress.

7. **Measure a few things.** A short staff survey each semester and a record of which tools are approved and in use will show whether expectations are clear and whether the work is meeting its objectives.

Small systems often move faster than large ones because decisions involve fewer people. The goal is the same as anywhere: clear expectations, protected student data, and AI use focused on the problems that matter most to students and educators.



DISTRICT SPOTLIGHT:

HARRISON SCHOOL DISTRICT 2

FROM INDIVIDUAL AI USE TO DISTRICTWIDE PRACTICE

Harrison School District 2 in Colorado Springs, a member of the ElevateAI cohort, is working to move AI beyond individual experimentation and establish the structures needed to support responsible, consistent use across schools and departments. Its work has unfolded in stages: establishing policy and an AI mindset; expanding access through approved AI apps and a Canvas-based Educator AI Hub; building capacity through professional learning and AI champions; supporting experimentation through mini-grants and pilots; and now developing shared workflows that can be used across the district.

People are central to Harrison's approach. An AI Committee includes a representative from every school, building-level AI champions bring new practices back to colleagues, and a stipended AI coordinator provides dedicated capacity. Professional learning offers multiple entry points, ranging from statewide train-the-trainer initiatives to building-level professional development, monthly tips, and micro-PDs.

The district's biggest shift has been moving beyond individual prompting to reusable AI tools and workflows. When one person uses AI for a task, the expertise developed can stay with that individual. Harrison instead captures effective processes in reusable bots and workflows that can be shared across the district, with human review built in. At one "build day," 24 district leaders created 25 bots and virtual assistants. District applications now support benefits questions, professional development and salary advancement, new-staff onboarding, contract review, Career and Technical Education (CTE) and graduation competencies, and work orders. School teams are also using AI for staff newsletters, instructional planning, lesson internalization, walkthrough data analysis, and human resources processes. These uses are intended to reduce administrative demands and create more time for teachers and instructional coaches to work directly with students.

The district emphasizes guardrails over roadblocks, with policies and expectations for staff, students, and families. Students participate through middle school AI electives, a high school freshman seminar unit, and an elementary AI club.

Harrison is also candid about the questions it continues to navigate. At the elementary level, educators are working to build comfort and identify meaningful uses of AI while protecting foundational skill development. At the secondary level, the challenge is supporting ethical use and academic integrity without reducing the conversation to enforcement.

Harrison's lessons for other districts: Start with authentic problems rather than tools; build capacity through people already embedded in the work; offer different entry points for different levels of readiness; allow experimentation within clear guardrails; make good examples visible; and treat AI implementation as change management rather than a technology rollout.



RESPONSIBLE IMPLEMENTATION

Student data privacy

AI tools introduce important considerations for student data privacy. Depending on the tool and its settings, information entered by users may be collected, stored, reviewed, shared with third parties, or used to improve or train AI models. These practices vary across vendors and products, making it important for districts to understand how student information is handled before approving tools for educational use.[1] For example, a teacher might enter a student essay, IEP summary, or behavior record into a chatbot without realizing that the information could be retained or processed outside the district's approved systems. When information is used to train an AI model, removing its influence from the model may be technically difficult and cannot necessarily be accomplished by deleting the original submission.[2]

Educators should use only district-approved AI tools and follow district guidance on what information may be entered. Districts should review vendor data practices and establish appropriate data privacy agreements, including clear provisions governing data collection, access, retention, deletion, sharing, and use for model training. Personally identifiable student information — including names, ID numbers, grades, disability information, health details, and discipline records — should not be entered into public AI chatbots or other tools not explicitly approved for that purpose. When in doubt, educators should consult their district technology or data privacy team before using a new tool with student information.

FROM INSIGHT TO ACTION

Find an overiview of federal and Colorado laws and policies that govern AI implementation in education.

Safeguarding students from bias

AI systems learn from large amounts of human-written text, absorbing human bias along with it. Biased output can look objective and professional. For example, in a 2025 Common Sense Media risk assessment,[3] widely used AI teacher assistants asked to generate intervention plans recommended more punitive measures for hypothetical students with Black-perceived names and more supportive approaches for students perceived as white.

The same assessment identified high-stakes documents as the greatest concern. AI-generated IEPs and behavior plans can appear authoritative and influence consequential decisions about students' education. Under federal law, IEPs must be developed by an IEP team that considers each student's individual needs and establishes measurable annual goals. AI-generated content should not substitute for that professional judgment and collaborative process.[4]

1 EDSAFE AI Alliance, What is the EDSAFE AI SAFE Framework?

2 National Institute of Standards and Technology, Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile

3 Common Sense Media, AI Teacher Assistants Need Better Safety Measures, Common Sense Media Report Finds

4 Individuals with Disabilities Education Act (IDEA), Individuals with Disabilities Education Act (IDEA), Sec. 300.320 Definition of individualized education program; Sec. 300.324 Development, review, and revision of IEP



FROM INSIGHT TO ACTION

Explore research on AI bias and its implications for students in Part 2, Section 2: Research Notes.

Responding to AI-enabled harm

Schools are finding that older cyberbullying policies do not cover cases where AI-generated content is used to perpetuate harassment, including deepfake representations or AI-generated sexual imagery. Clear policies, reporting procedures, and staff preparation are essential to preventing and responding to AI-enabled harm. Districts should:

- Update discrimination and harassment policy and training to include reporting procedures for deepfake incidents, so administrators know how to respond.[5]
- Ensure educators know how to promptly report AI-enabled harassment through established district procedures rather than attempting to address serious incidents informally.
- Support the victim first, and never ask them to share or forward the image.
- Teach students plainly that creating or sharing a fake sexual image of a real person is abuse and may be a crime.
- Review whether school websites and social media pair identifiable student photos with names.

Resource constraints

AI implementation has financial and environmental resource implications. AI tools can introduce licensing fees, usage-based costs, and ongoing expenses for training and support. Given competing district priorities and limited resources, a clear strategy is important to making informed investments.

Mindful implementation extends to the environmental resource implications as well. The environmental impact varies considerably depending on the model and task, and more computationally intensive uses can require substantially more energy. Though schools do not control AI's infrastructure, understanding its impact at scale helps districts and students make informed choices.

FROM INSIGHT TO ACTION

Explore information on the financial and environmental costs of AI in Part 2, Section 7: Resource Constraints: Cost Data.

5 Colorado Department of Education, Sexual Harassment Online and Through the Use of Artificial Intelligence (AI)

AI READINESS, LITERACY, AND FLUENCY

CORE IDEA:
Districts need both the organizational conditions to implement AI responsibly and educator and student knowledge and capabilities to use it well.



Three Terms, Three Different Approaches

AI readiness, literacy, and fluency are related but distinct. Together, they describe the conditions districts need to support responsible AI use and the capabilities educators and students need to engage with it effectively.

TERM	WHAT IT IS	WHO IT DESCRIBES
AI readiness	The organizational and system conditions — governance, infrastructure, policy, staff capacity — that support responsible AI adoption	Districts and schools
AI literacy	Foundational knowledge and skills to understand, critically evaluate, and use AI	Educators and students
AI fluency	The ability to collaborate with AI to create, innovate, and solve problems, exercising judgment about when and how to use it effectively	Educators and students

AI literacy is about understanding and using AI; fluency builds on that foundation to create, innovate, and solve problems with it.



Compare definitions of AI readiness, literacy, and fluency and explore readiness frameworks in Part 2, Section 1: Frameworks and Readiness Tools.

FROM ORGANIZATIONAL READINESS TO AI LITERACY AND FLUENCY

Responsible AI integration requires attention to both the systems that support its use and the knowledge and skills educators and students need to engage with it thoughtfully.

Across CEI's work with Colorado districts, early efforts have often focused on leadership, policy, educator professional learning, safety, and data governance. These conditions provide a foundation for expanding opportunities for educators and students to develop AI literacy and fluency. But organizational readiness alone does not ensure that AI is used well. Districts must also consider how educators develop the confidence and instructional judgment to use AI appropriately and how students learn to understand, evaluate, and use AI in ways that strengthen rather than replace their own thinking.

These dimensions are mutually reinforcing. As educators and students gain experience, their questions and challenges can inform district policies, professional learning, and decisions about tools and access.

Building Conditions for AI Literacy and Fluency: Examples from ElevateAI, 2024–26

The following examples illustrate how three ElevateAI districts are establishing organizational conditions to support responsible AI use and expanding AI learning opportunities for students.

DISTRICT	EXAMPLE OF DISTRICT PRACTICE
Durango	Embedded AI in its strategic plan and board conversations, making AI part of broader district priorities
Greeley-Evans D6	Involves principals, finance, legal, and operations in its AI task force, bringing instructional and operational perspectives into district decisions
Harrison D2	Adopted a formal AI policy and embedded AI in freshman seminar, advisory, and CTE pathways, connecting district-level policy with student learning opportunities

Source: Data collected by CEI through the ElevateAI project

TEACHING AND LEARNING IN AN AI-ENABLED ENVIRONMENT

CORE IDEA:
AI should strengthen, not replace, the thinking, relationships, and instructional practices at the center of learning.



DURABLE SKILLS

Durable skills such as critical thinking, communication, collaboration, self-awareness, and empathy are as important as technical skill development. They transfer across contexts and prepare students for school, work, and life. Colorado's Essential Skills and the growing number of district Graduate Profiles reflect a shift that predates generative AI, naming and assessing these skills as core outcomes.

AI raises the stakes. When a chatbot can draft an essay, summarize a text, or generate code in seconds, what distinguishes a student is no longer whether they can produce that output but whether they can ask good questions, evaluate what comes back, catch errors or bias, synthesize across sources, and decide when and how to use the tool at all. Doing these tasks well centers durable skills and sets the path for the continued, though evolving, role of content mastery.

Used well, AI can be a practice partner for developing these skills. A student can generate a counterargument to critique, simulate another person's perspective in a negotiation exercise, get low-stakes feedback on a draft, or brainstorm broadly before narrowing with their own criteria. Teachers can use AI to build scenario-based assessments that require applied judgment, draft rubrics for communication or collaboration, or free time from routine grading for discussion-based teaching and higher-quality feedback. Durable skills are taught through authentic, complex tasks, and AI can support the design of those tasks.

Assessing durable skills

Assessing durable skills in an AI-enabled environment requires attention to both how students demonstrate their learning and how that learning is evaluated. Colorado districts have long used performance-based and mastery-based assessment approaches, including capstones, portfolios, and presentations of learning, to assess students' ability to apply knowledge and skills in authentic contexts. These approaches rely on meaningful tasks, clear criteria for mastery, multiple forms of evidence, and opportunities for students to reflect on and defend their learning. AI makes these established practices increasingly important as educators seek credible evidence of what students know, can do, and understand.

Evidence of mastery can include drafts and other artifacts documenting the learning process, decisions about what students kept or rejected and why, application to local or personal contexts, live demonstrations or explanations of their work, and structured reflection. Shared rubrics and opportunities for feedback and revision help educators evaluate growth in durable skills consistently over time.

Using AI to evaluate durable skills introduces additional risks. Skills like empathy and collaboration are demonstrated through interactions, not simply through written products. Automated scoring may also reflect bias, particularly when a student's communication style is influenced by culture, disability, or language background.

AI-generated pattern data, such as participation trends, peer-feedback themes, or reflection consistency over time, can inform a teacher's judgment. Teachers and other qualified professionals should retain responsibility for evaluation, bringing context and judgment that AI cannot provide.



Dig deeper into the research on durable skills, cognitive offloading, productive struggle, and human judgment in Part 2, Section 2: Research Notes.

AI LITERACY AND STUDENT LEARNING

Teaching about AI, not only with it

Integrating AI into instruction is about both using tools to support a rich, human-centered learning experience and teaching students directly about how AI works and what it means for their lives. The latter is a newly arrived and important core instructional outcome. Students should understand how AI systems work, question AI's role in their lives, develop judgment about when and how to use it, and explore what it makes possible.

It is not enough to show students what a chatbot is or how to prompt one. AI literacy is built the way any durable skill is built: through active engagement. If AI lessons are simply added to existing curriculum without intentional design, students may learn to follow AI output without being able to evaluate, question, or improve on it. The science of learning and development is clear that transferable understanding is constructed through active thinking, not absorbed by watching a tool perform.[6]

6 Learning Policy Institute, Design Principles for Schools: Putting the Science of Learning and Development Into Action

Developmental fit matters

Students' developmental stages should shape both what they learn about AI and how they interact with it. Younger students are still developing foundational literacy, numeracy, reasoning, and social skills, making it especially important to protect opportunities for independent thinking, hands-on exploration, and human interaction. As students grow, instruction can introduce more complex concepts about how AI works, its limitations and societal implications, and opportunities to evaluate and use AI with increasing independence. Because students encounter AI at different ages and with varying levels of prior experience, instruction should be responsive to what they already know and understand. Grade-band expectations for AI use are outlined in the next section.



Explore curriculum resources, including CEI's AI Skills Progression, in Part 2, Section 4: Professional Learning and Curriculum Resources.

Cognitive offloading and productive struggle

Cognitive offloading means using something outside your own mind, such as a tool, a device, or another person, to reduce the mental effort a task requires.[7] This practice can support nonessential demands and free attention for deeper thinking. Writing a grocery list, using a calculator, and relying on GPS are everyday examples. The concern arises when students offload the very thinking that an assignment was designed to develop or simply accept AI-generated output without engaging in the work themselves. AI can augment students' thinking, or it can replace it.

Productive struggle is the effortful, sometimes uncomfortable work of wrestling with a problem just beyond one's current ability. Working through that difficulty drives learning. A 2025 study of nearly 1,000 high school math students found that those who practiced with a standard AI tutor did better during practice but worse once the AI was removed.[8] A tutor designed to provide teacher-developed hints instead of answers largely mitigated that negative effect. While the risks of offloading or surrender are real, instructional design can keep learning active and transformational.

The same tension applies to educators, particularly those early in their careers. AI can support planning, differentiation, and reflection, but relying on it for core practices educators are still learning can limit the development of pedagogical judgment and expertise.

The goal is not to minimize AI use or maximize it, but to be intentional about where the thinking lives. AI can remove cognitive work that gets in the way of deeper learning, or it can remove the very struggle through which learning happens. Teachers bring the instructional judgment to know the difference.

Teaching verification

AI chatbots can produce confident, well-written answers that are wrong, including invented facts, quotes, and citations. Because the writing sounds authoritative, students often cannot tell the difference, and sometimes adults cannot either. Misinformation also includes fabricated images, audio, and video.

AI literacy builds on existing media literacy practices and demands that schools that have not yet proactively taught media literacy begin with urgency. Teaching students to verify claims against reliable sources, confirm that cited sources exist and support the claims made, and consider who created a piece of content and for what purpose can begin in elementary grades. Teachers can model these habits by fact-checking AI-generated information with students, examining outputs for stereotypes or missing perspectives, and designing assignments in which students identify and correct false information.

7 Trends in Cognitive Sciences, Cognitive Offloading

8 Proceedings of the National Academy of Sciences (PNAS), Generative AI without guardrails can harm learning: Evidence from high school mathematics

Screen time implications

Growing concerns about excessive screen time and its effects on young people's attention, well-being, and development have prompted schools and policymakers to reconsider when and how students use technology. Colorado districts are required to establish policies governing personal communication devices in schools, reflecting one dimension of this broader conversation.[9] AI introduces an additional consideration: students need opportunities to understand and engage with technology that will shape their lives, but those opportunities should not come at the expense of meaningful human interaction, physical activity, or the sustained attention required for learning. The distinction is not simply how much time students spend on screens but what they are doing, why, and whether technology adds instructional value. AI literacy can be developed through a combination of direct tool use, teacher demonstrations, discussion, critical analysis, and screen-free activities. The goal is purposeful, developmentally appropriate technology use, not more screen time for its own sake.

9 Colorado Department of Education, Communication Devices in Schools

EDUCATOR SPOTLIGHT:

ZACH KENNELLY, DSST PUBLIC SCHOOLS

STUDENTS AS CREATORS

When generative AI became widely available, Zach Kennelly, Co-Founder, Thoughtline Education and former Senior Manager of STEM, AI and Partnerships at DSST Public Schools, saw an opportunity for students to become creators of AI tools, not just users.

After exploring Playlab himself, Zach brought it into his civics class. Students discussed the upcoming 2024 election and how many of their families found voting intimidating. The available information included a 122-page voter guide, accurate but overwhelming. Over two months, students built their own AI apps grounded in that guide and other key documents. They tested the tools themselves, then with community members, and revised them dozens of times to get reliable answers. More than 1,000 community members used the app to navigate voter information and make more informed voting decisions.[1]

This was not an "AI-proof" assignment. Students applied their knowledge of civics, thought critically about reliability, and did the work engineers and designers do for an audience that valued it. It shows what AI fluency looks like when students are creators.

Contributed by Zach Kennelly and Yusuf Ahmad, Playlab.

1 CPR News, Can AI help people vote? These Denver students think so

ACADEMIC INTEGRITY AND ETHICAL USE

Rethinking integrity

Penn State University defines academic integrity as "the pursuit of scholarly activity in an open, honest, responsible manner."[10] When AI is available in the instructional context, it may not always be clear what counts as a student's own work or where reasonable support ends and substitution begins.

Educators are shifting the question from *"Is this original?"* to *"Did the student learn and think this through themselves?"* That means attending to whether students can explain their reasoning, show their process, and take ownership of their learning, even when AI was part of how they got there. For classroom purposes, one test helps:

Is the student using AI to help them learn or to avoid learning?

- Using AI to learn: brainstorming essay ideas, asking for an explanation of a tricky math concept, getting feedback on a draft, or practicing vocabulary with an AI tutor.
- Using AI to avoid learning: having AI write the essay, solve the problem set, or complete the assignment, then submitting it as one's own.

While the line is not always clear, schools are responding by focusing less on catching AI-written text and more on clear expectations, transparency about how AI was used, and assignments that make comprehension visible. Teacher judgment, and even teacher-student co-creation, about where AI belongs in a learning sequence are essential steps, and teacher discernment to distinguish the accuracy and quality of student work keeps the human educator in the loop.

The risk of AI detection tools

AI detection tools are marketed to schools as a way to identify AI-generated work, but their reliability remains a serious concern. Independent research has found that detectors can incorrectly classify human-written work as AI-generated, with disproportionate false positives for students writing in English as a second language. Meanwhile, students who deliberately misuse AI may evade detection, meaning these tools can wrongly flag students who completed their own work while failing to identify actual misuse. OpenAI discontinued its own AI-text classifier in 2023 because of low accuracy.[11]

The consequences of a false accusation can be significant. Students may face unwarranted disciplinary action, damaged trust with teachers, and harm to their confidence and motivation. False accusations can also strain relationships with families and expose schools to complaints or legal challenges. Detection-focused approaches can foster a culture of suspicion and anxiety, undermining the relationships essential to learning.[12] These risks are particularly concerning when unreliable results disproportionately affect certain groups of students.

Given their unreliability, potential bias, and risk of harm to students, districts should avoid using AI detection tools to identify academic misconduct. Instead, educators should examine evidence of students' learning processes, discuss concerns directly with students, and follow established procedures for reviewing potential misconduct. Clear expectations for AI use and assignments that make student thinking visible offer a more constructive approach to academic integrity.

Uploading student work to third-party detection tools may also raise privacy concerns, including compliance with the Family Educational Rights and Privacy Act (FERPA), the Children's Online Privacy Protection Act (COPPA)[13] where applicable, and district data privacy requirements.

Designing assignments that encourage integrity

Clear expectations and thoughtful assignment design can reduce opportunities for misuse while strengthening student learning. Rather than relying primarily on detecting AI use after the fact, educators can design learning experiences that make student thinking visible, connect work to meaningful purposes, and establish when AI is and is not appropriate. The Task Force identified several strategies:

- **Build relationships and a culture of trust.** Create conditions where students can ask questions about AI use and seek help without fear.
- **Be clear about when and how AI may be used.** Establish expectations for each assignment, including when students should work independently.

10 Penn State, Academic Integrity Definition

11 OpenAI, New AI classifier for indicating AI-written text

12 Bowdoin Hastings Initiative, AI Detector Considerations for the Classroom

13 Federal Trade Commission, Children's Online Privacy Protection Rule. COPPA generally requires covered online services to obtain verifiable parental consent before collecting personal information from children under 13.

- **Teach AI literacy directly.** Help students understand appropriate uses, limitations, and their responsibility for their own learning.
- **Connect assignments to personal experience and local context.** Design work that requires students to apply ideas to their own communities, experiences, or questions.
- **Lower the stakes and pressure.** Provide opportunities for practice, feedback, and revision rather than relying exclusively on high-stakes products.
- **Make the learning process visible.** Incorporate drafts, checkpoints, reflections, and explanations of student decisions.
- **Build opportunities for independent thinking into class time.** Use discussions, demonstrations, debates, labs, and other activities where students apply and explain their understanding.
- **Ask students to reflect on their learning.** Have students explain how they approached the work, where AI helped or hindered, and what they learned.



Find the full academic integrity strategy guide, with examples for classroom practice, in Part 2, Section 3: Academic Integrity Practice Toolkit.

Establishing clear expectations for AI use

Responsibility for guidance sits at three levels:

- **Districts** set general guidance and grade-band distinctions: approved tools, limits on data entry, age-appropriate access, and what families should expect.
- **Schools** align expectations so they are consistent across a student's day.
- **Content-area teams** determine appropriate use in their discipline. This may differ for a math department vs. an English department because their learning goals differ.

Districts can draw on existing student advisory groups or create opportunities for student input when developing or revising AI guidance. Student perspectives can help identify gaps between policy and actual use, inconsistent expectations across classrooms, and areas where additional instruction or clarity is needed. Teachers can run a short anonymous survey at the start of a unit *(When have you used AI in this class? What are you unsure about? What should we make clearer?)* or an exit ticket after an AI-permitted task asking where the tool helped and where it got in the way.

The stoplight framework

Many K–12 schools and districts use a stoplight framework so that expectations are clear before students start each assignment. Red means no AI use. Yellow means limited AI use as the teacher specifies, with disclosure. Green means AI use is permitted or expected, with disclosure. Teachers pair the color with a short statement of what is and is not allowed, because "yellow" alone can be ambiguous. Using the stoplight framework consistently across a school helps reduce conflicting expectations across classrooms. When assignments permit or require AI use, schools should ensure students have access to approved tools and sufficient time to use them during school. Greeley-Evans School District 6 has implemented the stoplight approach districtwide, giving educators and students a shared vocabulary for when AI is restricted, limited, or permitted.



Use the stoplight template, implementation guidance, and five-level AI Assessment Scale in Part 2, Section 3: Academic Integrity Practice Toolkit.

Grade-band expectations

Expectations for AI use should evolve as students develop greater independence, judgment, and digital literacy. The following guidance offers a starting point for districts, rather than statewide requirements. Districts should adapt these expectations based on students' developmental needs, instructional goals, and applicable privacy and age restrictions.

Three levels of AI use, from teacher to student

Control of the tool shifts gradually as students get older. A use fits a level only when every condition listed for it is true.



The teacher operates the tool — The student operates the tool, within the teacher's limits

Default in grades K–5

Teacher-led

All of the following are true:

- The teacher is the only person using the tool, through a district-approved account and platform.
- The teacher chooses the tool and purpose and enters every prompt. Students may suggest ideas aloud but do not type into, speak to, or otherwise interact with the tool.
- The teacher reviews AI output before students see it and presents it as something to examine, not as an authority.
- No student names, work samples, or other personally identifiable information go into the tool unless a district data privacy agreement allows it.

Where the line falls

- ☑ Students watching AI or talking about it is teacher-led use.
- ☒ Students operating AI, even with a teacher nearby, is not.

Default in grades 6–8

Teacher-guided

All of the following are true:

- Students use a district-approved tool through an account or environment the district manages and covers with a data privacy agreement.
- The teacher sets the purpose, time frame, and limits of the task, and tells students in advance when AI may and may not be used.
- The teacher supervises, and students can explain what they asked the tool and how they used its response.
- The task asks students to think critically about AI output, such as checking facts, comparing sources, or revising, rather than accepting it.

Default in grades 9–12

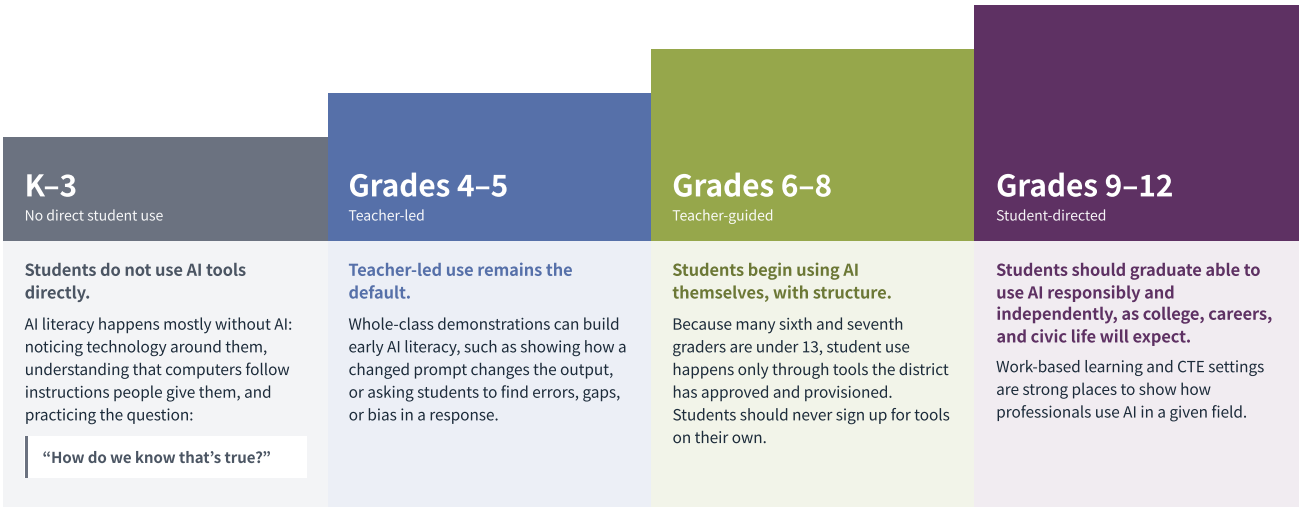
Student-directed

All of the following are true:

- Students decide when and how to use AI in their work, within the limits the teacher sets.
- Students use district-approved tools under data privacy agreements, with parental consent where a tool's terms or district policy require it.
- Students check AI output against reliable sources and their own knowledge and are responsible for the accuracy and quality of what they submit.
- Students disclose when and how they used AI and can explain what thinking remained their own.

AI use by grade band

Students take on more of the work as they get older, from noticing technology to independent, responsible use.

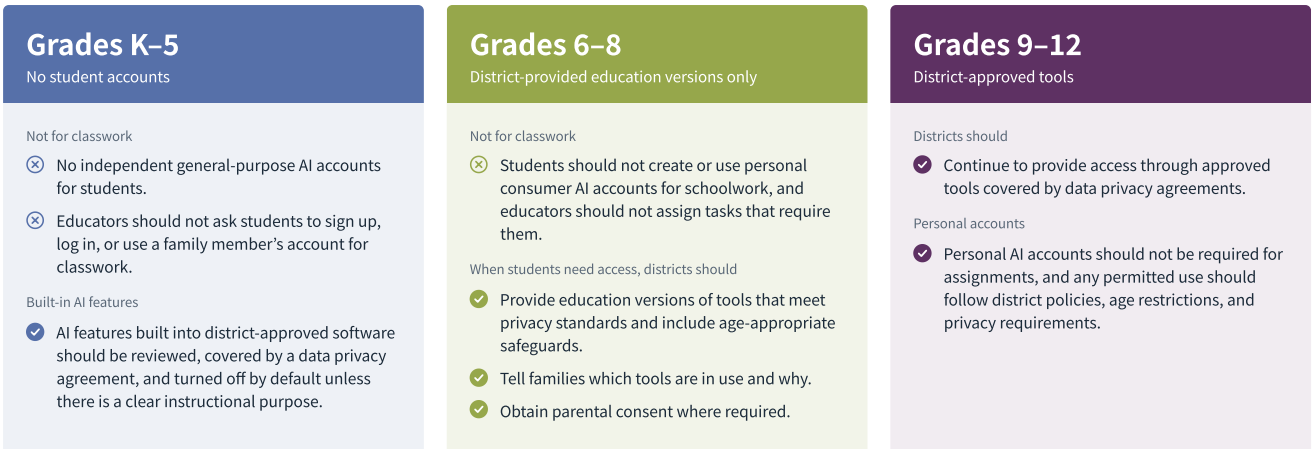


There are important reasons to limit independent AI use in elementary grades. Most general-purpose AI tools restrict use to people 13 and older, and some require parental consent for minors. These age restrictions and privacy requirements, including COPPA and Colorado's student data privacy laws, are intended to help protect children's personal information. Elementary students are also developing the literacy, numeracy, and reasoning skills they need to critically evaluate AI-generated content.

At the same time, elementary students can benefit from developmentally appropriate AI literacy activities and structured use of approved tools. In grades 4–5, for example, students might use AI to generate images for stories, receive feedback through a teacher-designed tool, or explore concepts such as pattern recognition and prediction through hands-on activities.[14] These experiences should be guided by educators, with appropriate safeguards, rather than involving unrestricted use of general-purpose chatbots.

Student accounts and access

Who holds an account changes as students get older. At every grade, access runs through district-approved tools covered by data privacy agreements.



The same questions of judgment, appropriate use, and preserving human expertise apply to educators' own work with AI.

14 ISTE+ASCD, Press Start: AI in Early Education

TEACHER USE OF AI

A 2025 Gallup and Walton Family Foundation survey of 2,232 U.S. public school teachers found that teachers who use AI at least weekly save an average of 5.9 hours a week, nearly six weeks over a school year. Teachers report time savings on administrative work, lesson preparation, grading, modifying materials, and analyzing student data. One finding stands out for district leaders: schools with a formal AI policy saw a 26 percent larger time dividend per teacher than schools without one.[15]

By reducing time spent on some routine tasks, AI may give teachers more time for instructional planning, individualized support, and relationships with students. With guidance, support, and space to explore, teachers' questions shift from permissive *("Am I allowed to use this?")* to adaptive *("How might this help me teach more effectively?")*, which builds toward fluency, creativity, and personalization.

FROM INSIGHT TO ACTION

Explore the research and survey findings on AI's impact on educator time in Part 2, Section 2: Research Notes.



15 Gallup and Walton Family Foundation, Teaching for Tomorrow: Unlocking Six Weeks a Year With AI

EDUCATOR SPOTLIGHT:

APRIL PRATT, HARRISON DISTRICT 2

FROM INSTRUCTIONAL CHALLENGES TO WORKING AI TOOLS

April Pratt, IB Instructional Coordinator, used agentic AI to build six tools for students, teachers, and school leaders. For each tool, she started with a problem, envisioned a solution, and used AI agents — including Claude and Perplexity — to plan, write, and test code. She refined each tool through an iterative process until it worked as intended. Educators remain responsible for decisions; the tools support their work.

AUDIENCE	TOOL	WHAT IT DOES
Students	WriteLab	Provides real-time rubric-based feedback on ideas, development and organization, and language across argumentative, narrative, and explanatory writing
Students	Explaining Evidence	Helps students develop analytical reasoning across comprehension, inference, thematic reasoning, and cross-text synthesis, including understanding why their evidence matters
Teachers	Custom Course Builder	Lets educators design self-paced professional learning around their own instructional goals
Coordinators	MTSS Coordinator Hub	Consolidates priority actions, meeting preparation, and plan development, with an assistant that highlights what needs attention this week, next week, and this month
Counselors	Electives Pathways	Automates elective placement and helps resolve scheduling conflicts, reducing days of spreadsheet work to minutes
Administrators and teachers	Attendance Documentation	Tracks attendance schoolwide, notifies teachers when a third unexcused absence requires a call home, and provides administrators with a consolidated view of student attendance

Source: April Pratt, IB Instructional Coordinator, Harrison School District 2

INSTRUCTIONAL COHERENCE

Districtwide guidance on acceptable use, expectations for all teachers, shared instructional norms, and vetted tools provide consistent expectations for students and keep them from receiving contradictory messages. When these conditions exist, AI can lower barriers to information and learning and help teachers meet individual students' needs.

Instructional coherence requires more than consistent rules for AI use. Districts also need to connect decisions about AI to their existing instructional priorities, curriculum, assessment practices, and expectations for student learning. Shared guidance and vetted tools help establish consistent expectations across classrooms while allowing teachers to make decisions based on the learning goals of their subjects and students. Without this alignment, students may encounter contradictory messages about when AI is appropriate and uneven opportunities to develop AI literacy.

The inconsistent experiences of Colorado students underscore the importance of aligning district guidance with classroom instruction so students encounter clear expectations and meaningful opportunities to learn about AI.

"My school has not told us about AI, hasn't encouraged us at all, just told us not to use it, and I think schools should teach us how to detect AI and teach us ways to use it ethically, how to identify and use it properly." — **Colorado high school junior**

"In my school we've talked some about AI, but always 'don't use it,' but in tech classes I have learned about prompts for researching and finding sources … and also for some individual learning; it could help students who are struggling." — **Colorado high school senior**

Connecting AI to existing instructional commitments

Districts can test any AI-supported practice against the instructional commitments they already hold.

COMMITMENT	THE QUESTION TO ASK ABOUT AN AI-SUPPORTED PRACTICE
Build relationships	Does this free teacher attention for students, or does it stand between the teacher and the student?
Meet the needs of all students	Does every student have equitable access to this tool, and does it advance Universal Design for Learning (UDL) by offering multiple means of representation, engagement, and expression?
Make learning relevant	Does this connect students to authentic work, including the AI-mediated work they will encounter?
Foster disciplinary literacy	Does this help students read, write, think, and communicate as an expert in the discipline would, or does it produce a passable artifact while bypassing that thinking?

PROFESSIONAL LEARNING

Professional learning is a key lever for not only building teacher awareness and fluency with AI tools but also reinforcing the district's vision, instructional strategy, and guardrails for AI use. As AI takes on a growing role in planning, assessment, feedback, and differentiation, professional learning can help educators distinguish between tasks AI can usefully support and the professional judgment and instructional practices they must continue to develop and exercise themselves. This is especially important for early-career educators, who are still building the instructional judgment that experienced teachers draw on when deciding whether, when, and how to use AI. Four design principles stand out in Colorado districts:

Differentiated entry points. Teachers do not start from the same place. Some have never opened a chatbot, while others are building custom tools. A kindergarten teacher, a chemistry teacher, and a special education case manager will use AI differently. A single training at a single pace overwhelms novices and loses experienced users. Strong programs offer novice, intermediate, and advanced pathways tied to subject and role.

Responsible use inside tool training. Bias, data privacy, and the limits of AI belong in the same session as tool use, not in a separate compliance module. When a teacher learns to generate a lesson plan, the same session should show how to check it for accuracy and stereotypes. When a teacher explores an AI feedback tool, the conversation should cover what student information can and cannot be entered.

Ongoing peer learning. One-time training is insufficient to build the confidence, judgment, and instructional practices needed for effective AI use. Professional learning communities, building-level AI leaders, and regular collaborative sessions let educators troubleshoot together and turn individual experiments into shared practice. National programs can complement district learning, but only the district can connect it to its own policies, approved tools, and community values.

Protected time for application and reflection. Educators need dedicated time to explore AI tools, apply them to authentic instructional challenges, evaluate the results, and learn with colleagues. Professional learning should create opportunities to test approaches in practice and reflect on what strengthens teaching and learning, rather than focusing primarily on demonstrations of new tools.



Explore national professional learning programs and curriculum resources in Part 2, Section 4: Professional Learning and Curriculum Resources.

TOOL SELECTION

AI tools vary widely in their capabilities, safeguards, and suitability for different educational purposes. Rather than selecting tools based on novelty or popularity, districts should begin with a clear instructional or operational need and evaluate whether a tool can address it responsibly and effectively. This guide does not endorse specific products; tools featured in Colorado examples reflect the choices of individual educators and districts. A consistent vetting process can help districts assess potential tools against five criteria:

- **Instructional fit:** Does the tool address a defined instructional or operational need and align with district priorities?
- **Safety:** Does it provide appropriate safeguards for the ages and needs of intended users?
- **Privacy:** Does the tool's handling of student and staff data meet district requirements and applicable privacy laws?
- **Accessibility:** Is the tool accessible to students and educators with disabilities, and does it meet the needs of multilingual learners?
- **Evidence:** What evidence supports its effectiveness, and how will the district evaluate its value after adoption?

These considerations apply equally to commercially available AI products and tools developed by educators or districts, which may require additional review of data access, security, testing, and ongoing maintenance.



Explore tool-vetting frameworks from the Consortium for School Networking, State Educational Technology Directors Association, EdTech Quality Collaborative, and Future of Privacy Forum in Part 2, Section 5: Tool Vetting Resources.

Keeping Educators in the Loop

Across decisions about instruction, assessment, professional learning, and tool selection, one principle remains constant: AI can support educators' work, but it cannot replace their professional judgment. Teachers bring knowledge of their students, expertise in how learning happens, and relationships built on trust. Those human capabilities must continue to guide decisions about when and how AI belongs in teaching and learning.

DISTRICT SPOTLIGHT:

ST. VRAIN VALLEY SCHOOLS

BUILDING A DISTRICTWIDE CULTURE OF AI LEARNING

St. Vrain Valley Schools has spent three years building a districtwide approach to AI that reaches teachers, staff, students, and families. Led by Jason Kelsall (Senior Manager of Enterprise Systems), Courtney Groskin (Learning Coach), and Matt Moulton (Instructional Coordinator), the work is grounded in a theory of action: when people gain experience using generative AI personally and professionally, they will be better equipped to make thoughtful decisions about its use in their classrooms and roles. To this end, the district prioritizes early AI exploration and training, guided by beliefs that people are naturally curious and that knowledge and experience help replace fear with informed judgment.

All of the district's AI work is anchored in its ETHOS framework: Ethical, Transparent, Human-centered, Opportunity-focused, and Safe. Posters and guiding questions keep these values visible in schools. St. Vrain has developed several complementary approaches to building AI knowledge and capacity:

- **School champions.** The goal is an AI Champion in every school who partners with school leaders, brings AI into professional learning, and builds a culture of innovation. Fifty-two Champions meet monthly online and earn compensation or salary credit.
- **In-person events.** Monthly after-school pop-ups provide low-stakes, hands-on opportunities for staff to experiment with AI, often with student facilitators. Participation grew from 212 attendees across eight events in the first year to 400 across 11 events in the second. A district AI Summit drew 250 attendees in year three.
- **Flexible courses.** Offerings support different levels of experience, including Exploration AI, The Journey, the AI Tool Course, and Elementary AI Literacy. An AI Bingo challenge offers salary credit and school prizes, and the district podcast, Exploration AI: Beyond the Algorithm, extends learning.

The work extends beyond educator professional learning to reach the school board, principals, 2,000 teachers, and 3,000 staff. Student AI Ambassadors lead training for teachers, schools, and the community, and family nights have been held at each high school. Student programming has also expanded, from a virtual high school program in spring 2025 to an in-person offering that fall, followed by an Educator AI Fellows program focused on design thinking with Playlab in spring 2026.

St. Vrain's lessons for other districts:
Progress comes from starting early, keeping entry low-stakes, rewarding participation, and letting teachers, principals, and students lead.

DISTRICT SPOTLIGHT:

GREELEY-EVANS SCHOOL DISTRICT 6

DEVELOPING AI LEADERS FROM WITHIN

Greeley-Evans School District 6 is building AI expertise from within by preparing educators to lead professional learning and support colleagues across its 29 schools. Through its AI Leadership Development Program, the district is developing a network of AI-fluent educators who serve as building-level leaders and coach colleagues to use AI responsibly and in alignment with district values.

The district recruited 58 educators already using AI to participate in completing five two-hour sessions, facilitated by fellow educators who completed advanced training through CEI's ElevateAI Fellows Program.

The sessions progress from foundational AI knowledge and ethics to practical application and leadership:

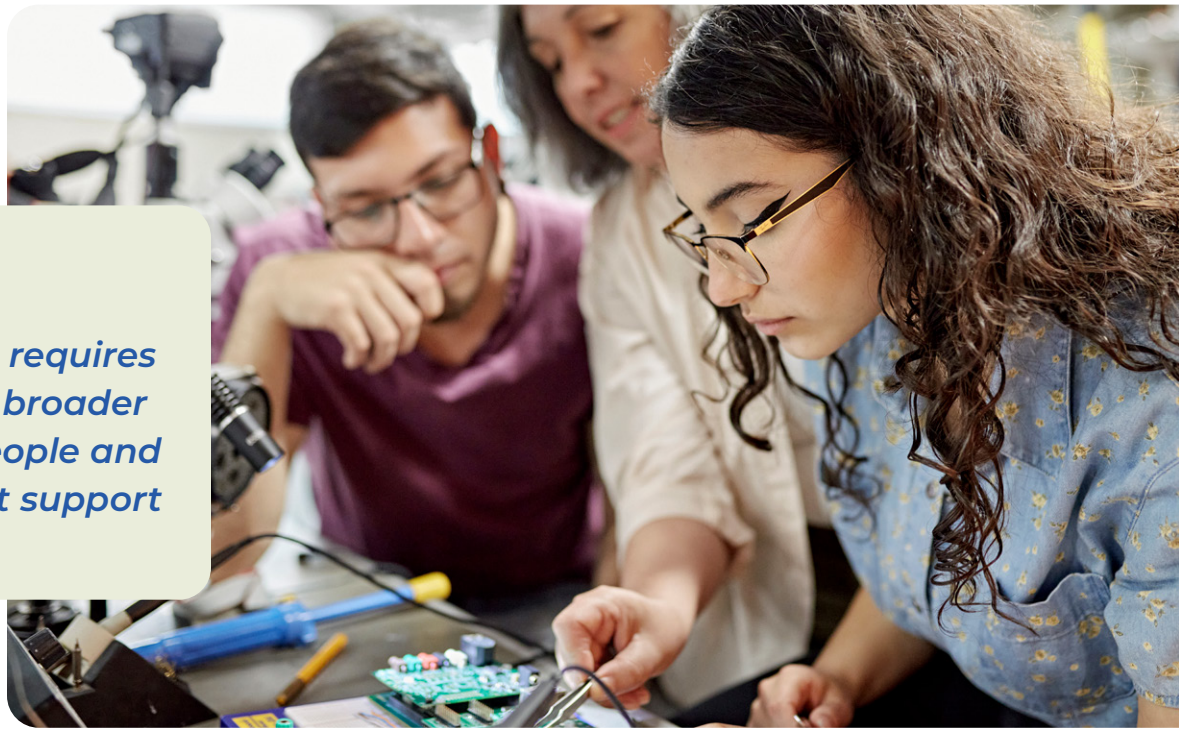
- **Foundations and ethics:** Building shared understanding of AI and its responsible use.
- **Safety and integrity:** Managing AI tools with attention to safety, integrity, and transparency.
- **Application and instructional leadership:** Applying AI tools and designing building-level professional learning.
- **Adult learning and change management:** Supporting colleagues with different levels of readiness and responding to resistance.
- **Implementation planning:** Using peer feedback and developing a delivery plan for each school.

The result is an AI leader in every building and a cross-building network for sharing resources. By developing expertise among existing educators, Greeley-Evans is creating a model that can be repeated as AI tools and practices evolve, reducing reliance on outside consultants.

Greeley-Evans' lesson for other districts: ***Sustainable, equitable AI integration depends less on any one tool than on trusted educators who understand both the technology and their colleagues' needs.***

SUPPORTING STUDENTS BEYOND THE CLASSROOM

CORE IDEA:
Responsible AI implementation requires attention to the broader ecosystem of people and experiences that support young people.



Young people's experiences with AI extend well beyond the classroom. They encounter it while learning, creating, exploring careers, seeking advice, and navigating personal and social questions. Understanding those experiences — and engaging students, families, counselors, and other trusted adults — is an important part of responsible AI implementation.

STUDENT EXPERIENCE AND VOICE

As schools navigate how to respond to AI, students' firsthand experiences offer important insight into how the technology is being used and what support young people need. In 2026, CEI launched its first State Student Advisory Council, bringing together 28 students ages 14–17 from across Colorado. Over six months, council members shared their perspectives, reviewed guidance, and conducted peer interviews to explore students' experiences with AI and identify what they want educators and state leaders to understand.

"We don't want it gone, we just want to understand how to use it well."

"That we need more clear rules and not expect students to somehow know."

"There should be more education in schools on the topic of AI over privacy, environmental damage, economic impacts, how it can be used in the workforce, and how to prompt it correctly to benefit learning."

"Something that stuck with me is that most people are not honest about if or how they use AI. I think there is a sense of shame all around in society. I think it's good to not promote total reliance on AI, but I also think it makes it a lot harder to address what is really going on."

"It's how you apply yourself and hold yourself responsible for learning and being able to navigate it."

These perspectives reinforce that students need more than rules about AI. They want clear expectations, opportunities to understand the technology and its implications, and support in exercising their own judgment about when AI strengthens learning and when it gets in the way.

AI use is already common among young people and extends beyond academic tasks. Common Sense Media's 2026 census of 1,204 young people ages 9–17 found that 86 percent had used AI, with many reporting regular use.[16] Young people also encounter AI companions and chatbots designed for ongoing conversation, including discussions about relationships, personal concerns, and emotional well-being.

These uses raise distinct questions about safety, privacy, and healthy relationships. Some research has identified associations between AI companion use and loneliness, but the direction of that relationship remains unclear. The findings reinforce the importance of helping students recognize the limitations of AI-based support and maintain access to trusted peers and adults.



Explore national data on how young people are using and experiencing AI in Part 2, Section 9: National Student AI Use Data.

Implications for schools:

- Establish clear expectations for student AI use, including approved tools and appropriate boundaries.
- Teach students to evaluate AI outputs, recognize limitations, and understand risks associated with personal or sensitive information.
- Create opportunities for students to discuss how they are using AI, including situations where it may be replacing their own thinking or affecting their well-being.
- Reinforce the importance of trusted adults, peer relationships, and existing student support systems when students encounter harmful content or seek emotional support from AI.

16 Common Sense Media, The Common Sense Media Census: AI Use by Tweens and Teens

COUNSELORS

School counselors support students across academic development, college and career planning, and social-emotional well-being, positioning them to help schools understand and respond to the ways AI is affecting young people. The American School Counselor Association's ethical standards provide a useful foundation for this work, emphasizing student well-being, privacy, equity, agency, and collaboration with families.

- **Academics.** Counselors can advocate for developmentally appropriate AI use and help students reflect on whether their AI habits support their own goals.
- **College and career.** Counselors can help students understand AI's implications for the workforce, connect those changes to their Individual Career and Academic Plan (ICAP), and navigate ethical AI use in applications.
- **Social-emotional.** Counselors can help students navigate away from AI companions and chatbots, promote digital well-being, and reinforce the importance of human relationships and trusted adults.

Recognizing and responding to student needs. Counselors may encounter students using AI for emotional support, relationship advice, or other personal decisions. They can help students understand the limitations of these tools, recognize potentially harmful interactions, and identify trusted people and appropriate sources of support. When AI-related experiences raise concerns about student safety or well-being, counselors can respond through existing school support systems and established procedures, including consultation, assessment, referral, and crisis response when warranted.

A seat at the policy table. AI is a student well-being issue, not only a technology one. Counselors bring expertise in student development, equity, and the academic, career, and social-emotional needs of young people. Their perspectives can help districts understand how students experience AI, identify emerging concerns, and develop guidance that reflects students' needs. Districts should include counselor perspectives in AI planning and governance, provide relevant professional learning, and integrate this work into existing responsibilities and structures rather than add to already full caseloads.

Counselor guidance developed with the National Center for Women & Information Technology (NCWIT): Kelsey Kman, Program Manager, and Joanne Esch, Ph.D., Education Research Associate.

COUNSELOR SPOTLIGHT:

STACEY FAIR, ESTES PARK

COUNSELOR POCKET COACH

Estes Park counselor Stacey Fair built Counselor Pocket Coach on Playlab for rural counselors who often work alone with limited resources. In her words, building it "was a little like assembling the ultimate counselor survival kit." Instead of snacks, sticky notes, and a stress ball, she packed it with ASCA standards, Section 504 policy, MTSS frameworks, and her preferred counseling approaches.

She configured the coach not to offer generic advice. It asks one focused question at a time to understand the problem before suggesting solutions. It was designed, she says, for "the counselor who does it all, usually alone, and still shows up every Monday ready to go" — including counselors who are also licensed therapists navigating the pressures of a small tourist town.



Use the counselor toolkit, including domain-specific checklists and advocacy talking points, in Part 2, Section 8: Counselor Toolkit.

FAMILIES AND COMMUNITY

Students' experiences with AI extend beyond school. They encounter AI through social media, games, search engines, and other digital tools, often in ways that families and educators are still learning to understand. Families bring important perspectives on how young people are using AI, what concerns them, and what they hope schools will prioritize. Meaningful family engagement is therefore an important part of developing responsible, community-informed approaches to AI in education.

Engage families as partners in decision-making. Districts should create opportunities for families to help shape AI policies and practices, not simply receive information after decisions have been made. Existing family advisory groups, listening sessions, surveys, and community forums can help districts understand families' experiences, priorities, and questions. Family perspectives are particularly valuable when districts are establishing expectations for student AI use, determining appropriate tools and safeguards, and considering how AI may affect learning, privacy, and student well-being. Engagement should be accessible to families across languages, backgrounds, and levels of familiarity with technology.

Communicate clearly and transparently. Families should understand where, how, and why AI is being used in their children's education. District communications should explain which tools are approved, what students are expected to do independently, how student information is protected, and whom families can contact with questions or concerns. Because AI tools and school practices are evolving, districts should communicate regularly, invite feedback, and be transparent about what they are still learning or deciding.

Help families navigate AI beyond school. Families are making decisions about AI use at home, often without clear guidance about age-appropriate access, privacy, academic integrity, or AI tools designed for companionship and emotional support. Schools can help by sharing accessible resources, offering opportunities to explore and discuss AI, and providing practical frameworks that families can adapt to their own values and circumstances. These supports should reinforce students' ability to evaluate AI-generated information, protect personal information, maintain healthy relationships, and recognize when AI is replacing rather than supporting their own thinking.

Colorado districts are already experimenting with approaches to family engagement. St. Vrain Valley Schools, for example, has hosted family AI nights at its high schools, creating opportunities for families to learn about AI and ask questions. As districts develop their approaches, the goal is not simply to increase families' awareness of AI, but to build an ongoing partnership that helps schools make informed decisions and supports young people across home and school.



Explore state and national family engagement resources, a customizable family letter, and a Family AI Agreement in Part 2, Section 10: Family Engagement Toolkit.

CLOSING: DESIGNING THE FUTURE OF LEARNING

The future of AI in Colorado classrooms will be decided by the choices local educators, communities, leaders, and systems make about how AI is used, for whom, and to what end. The districts, teachers, counselors, and students featured in this guide have made those choices deliberately. They started from a vision for students, tested ideas within clear guardrails, and kept people at the center of every decision. The examples shared here show Colorado districts and educators exploring different approaches, learning from experience, and making decisions grounded in their priorities for students. This is really the only way for schools, often built to move more slowly than the outside world, to be responsive to emerging technology — a responsiveness now required for preparing students for an increasingly complex world.

Three commitments run through this work.

- **Human-centered design** to ensure AI strengthens the relationships, thinking, and experiences that learning depends on, rather than allowing technology to displace them.
- **Instructional coherence** to ensure students experience consistent and meaningful expectations from one classroom to the next, grounded in districts' instructional priorities.
- **Ethical responsibility** to protect student privacy, address bias and potential harm, and preserve human judgment in decisions that affect young people.

The nature of Colorado's commitment to local control in education means that the state will continue to have varied approaches and speeds for building the conditions and capabilities needed for responsible AI use. While this approach allows for early adopters to move quickly and nimbly, it also heightens the risk of some students being left behind in the development of AI literacy and fluency. We urge the continued commitment of state leaders to resource collective learning and action to reduce these gaps.

The most important questions ahead, however, are not about AI itself. They are about the instructional challenges schools have been working to address for decades: meeting the needs of multilingual learners[17], expanding access to rigorous and relevant learning, and helping teachers ignite the curiosity of every student in a classroom. Schools remind us that human development is a social experience, with relationships often at the center of learning, and the quality of young people's social relationships may come to matter more and more in the tech-enabled years ahead. The opportunity is not simply to introduce more tools but to determine where AI might help educators make meaningful progress on these longstanding priorities.

As in past eras of American history, changes in society will push schools to revisit the purpose and design of what is offered to young people. Colorado educators bring deep expertise, professional judgment, and a commitment to their students to this work. AI introduces new possibilities and responsibilities, but it does not change what matters most. The path forward is to make intentional choices about AI that strengthen teaching and learning while keeping young people and their futures at the center.

17 Initiatives such as Multilingual by Design, which supports the development of AI tools specifically for multilingual learners, offer an example of this approach.

ACKNOWLEDGEMENTS

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- **Samantha Agoos,** State Science Supervisor – STEM Lead, Colorado Department of Education
- **Quentin Biddy,** Assistant Research Professor, Institute of Cognitive Science, University of Colorado Boulder
- **Dr. Wendy Birhanzel,** Superintendent, Harrison School District 2
- **Joanne Esch, Ph.D.,** Education Research Associate, College of Engineering & Applied Science, University of Colorado Boulder
- **Alexander Harris,** Head of AI Engineering, Visible Ventures; Head of AI and Platform, M|C Partners
- **Jason Kelsall,** Senior Manager of Enterprise Systems, St. Vrain Valley Schools
- **Zach Kennelly,** Co-Founder, Thoughtline Education
- **Kelsey Kman,** Program Manager, NCWIT Counselors for Computing, University of Colorado Boulder
- **Evan Lapka,** Senior Customer Success Manager, MagicSchool
- **Elaine Menardi,** Executive Director and Chief Innovator, Colorado AeroLab, Inc.
- **Anna Otto,** Computer Science and Online Learning Coordinator, Adams 12 Five Star Schools
- **Gin Randolph,** Assistant Director of Technology, Colorado Digital Learning Solutions; Program Manager and Gifted Coordinator, Colorado Digital Learning Solutions and Uncompahgre BOCES
- **Antonio Vigil,** Director of Innovative Classroom Technology, Aurora Public Schools
- **Ayush Vispute,** High School Student, Academy District 20
- **Alexander Zhang,** Student, Stanford University; Graduate, Boulder Valley School District

COLORADO EDUCATION INITIATIVE TEAM

- **Rebecca Holmes,** President and CEO
- **Amber Elias,** Vice President, Policy and Partnership
- **Samantha Olson,** Vice President, Strategy
- **Patty Quiñones,** Senior Partner, Leadership and Innovation
- **Cassandra Quillen,** Assistant Director, Communications and Marketing
- **Kate Wagner,** Assistant Director, Implementation and Partnership




Colorado
Education
Initiative

NOVEMBER 2026

COLORADO'S AI EDUCATION JOURNEY

PART 2: FROM INSIGHT TO ACTION

TOOLS AND RESOURCES FOR PUTTING AI INTO PRACTICE

We invite you to access and share Colorado's AI Education Journey Part 1 and Part 2 using this QR code.

CONTENTS

Frameworks and Readiness Tools 3

Research Notes 5

Academic Integrity Practice Toolkit 7

Professional Learning and Curriculum Resources 11

Tool Vetting Resources 12

Legal and Privacy Reference 13

Resource Constraints: Cost Considerations 14

Counselor Toolkit 14

National Student AI Use Data 15

Family Engagement Toolkit 16

Glossary 19

Additional Resources and References 21

SECTION 1

FRAMEWORKS AND READINESS TOOLS

How national organizations define readiness, literacy, and fluency

Organizations in this field often blur these terms, and as districts mature, the terms can seem interchangeable. Digital Promise treats understanding, evaluating, and using AI as concurrent. ISTE+ASCD reframes "readiness" as a student capability beyond literacy. CoSN uses "readiness" to mean a district's institutional maturity. A peer-reviewed analysis by Thomas Rogers, "From Understanding to Creating: Bridging AI Literacy and AI Fluency in K–12 Education" (*Journal of Teaching and Learning*, 2025), places the dividing line between literacy and fluency at creation.

Frameworks for district use

FRAMEWORK	ORGANIZATION	USE IT FOR
AI Literacy Framework (Understand/Evaluate/Use)	Digital Promise	Defining student and educator AI literacy outcomes
Five Big Ideas in AI	AI4K12	Organizing K–12 AI concepts by grade band
AI standards	ISTE/CSTA	Aligning AI instruction to computer science standards
Profile of an AI-Ready Graduate	ISTE+ASCD	Connecting AI to a Portrait of a Graduate
K–12 Gen AI Readiness Checklist and Maturity Tool	CoSN/Council of the Great City Schools	Assessing district organizational readiness (see also Section 5)
Policy Lab	EDSAFE AI Alliance	Drafting responsible AI policy

ALIGN: AI District Planning Guide

Texas Advanced Computing Center, The University of Texas at Austin (2026). Developed with the ALIGN AI District Strategic Planning Committee. Licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International.

ALIGN: AI District Planning Guide

ALIGN is a district-level planning framework that treats AI guidance as a living document, reviewed at least once a year. Part 1 highlights three of its elements; the details follow.

GOVERNANCE STRUCTURE AND ROLES

BODY	MEMBERSHIP	ROLE
Core Leadership Team	Superintendent or designee, chief technology officer, chief academic officer	Final decision authority; checks every initiative for instructional impact, risk and compliance, and sustainability
Expanded Advisory Group	Teachers across grades and content areas, campus administrators, students, families, counseling or mental health staff, community or industry partners	Feedback on proposals, insight into classroom and community impact, and support for pilots

ALIGN recommends regular meetings (monthly or quarterly), a formal proposal review, pilot and evaluation protocols before scaling, a fast-track pathway for low-risk ideas, and annual or biannual audits of approved tools. It assigns responsibilities to curriculum and instruction, technology, professional learning, and campus leadership, and applies one decision filter to every proposal:

Is it safe? **Does it work?** **Can we sustain it?**

PHASED IMPLEMENTATION

PHASE	TIMEFRAME	FOCUS
1. Definition and planning	Months 1–3	Form the governance council; assess needs and infrastructure; draft initial guidance on privacy, integrity, and responsible use
2. Exploration and pilot	Months 4–9	Create a sandbox for teacher experimentation; pilot tools in selected grades, content areas, or schools; collect data on usability, impact, and workload
3. Expansion and capacity building	Year 2	Expand access to approved tools, publish guidance districtwide, provide role-based professional learning, develop early adopters as leaders, communicate with families
4. Optimization and innovation	Year 3+	Use data to refine, integrate AI into operations where appropriate, retire tools that do not show value, explore advanced uses

MEASURING SUCCESS

DOMAIN	WHAT TO MEASURE	EVIDENCE MAY INCLUDE
Clarity and systems	Accessible guidelines, consistent expectations across schools, use of approved tools	Published guidance, approved-tools list and usage data, staff surveys
Staff capacity and confidence	Understanding of expectations, confidence applying AI, participation in professional learning	PD completion data, self-assessments, AI-integrated lesson plans or workflows
Instructional impact	Changes in practice, efficiency in planning and feedback, student engagement	Observations, teacher-reported time savings, student work samples

DOMAIN	WHAT TO MEASURE	EVIDENCE MAY INCLUDE
Student AI literacy	Ability to use, evaluate, and create with AI; understanding of ethical use; growth over time	Portfolios, performance tasks or capstones, assessments of critical AI use
Community AI literacy	Family understanding of responsible use and expectations; participation in learning sessions	Attendance at family events, post-event surveys

Planning tools. ALIGN's appendices include an implementation workbook (current-stage ratings across action areas, a principles self-assessment, roadmap planning, and academic integrity disclosure expectations) and an implementation checklist for use with a governance council.

Adapting ALIGN for Colorado

- **Legal references.** ALIGN cites Texas law (Texas Education Code Chapter 32, HB 3512, SB 12). Colorado districts should substitute Colorado requirements, including the Student Data Transparency and Security Act (see Section 6).
- **Literacy progressions.** ALIGN's student literacy ladder (awareness, functional use, critical thinking, creative application) parallels Part 1's literacy-to-fluency distinction. Districts using both should choose one progression.
- **Levels of use.** ALIGN points to North Carolina's levels of AI use. Part 1's grade-band expectations and stoplight framework serve the same purpose for Colorado.
- **Small systems.** Part 1's First Steps for Small Systems recommendations scale ALIGN's governance model down for districts with limited staff.

SECTION 2

RESEARCH NOTES

As school districts integrate AI into classrooms and systems, key lessons are emerging both from practice and from targeted research. This section highlights some of the key findings informing emerging best practices.

Assessing durable skills with AI

The arrival of generative AI makes durable skills deeply important, but efforts to assess durable skills with AI should be treated with caution. Algorithmic bias is a key risk in K–12 AI use: systems trained on historically biased data can perpetuate educational inequities, and predictive analytics and automated grading that are not audited for fairness may disproportionately harm marginalized students (Tao et al., 2026). Proxies for durable skills are especially prone to this; markers like "communication style" can correlate with demographic factors rather than capability. For students still developing these skills, "style" may reflect culture, disability, and language background.

Research on human-in-the-loop assessment design suggests the strongest models keep a person in the evaluative role. This matches how counselors and educators already work: AI can flag a shift in participation patterns, peer feedback, or reflections over time, but a person who knows the student interprets what it means and decides what response, if any, is needed.

The Brookings Institution's 2026 report *A New Direction for Students in an AI World: Prosper, Prepare, Protect*, based on interviews across 50 countries, found AI can undermine young people's foundational development in ways productivity gains cannot offset, particularly students' ability to form relationships, recover from setbacks, and maintain mental health. Assigning an automated grade to collaboration or resilience risks treating a relational, developmental process as a fixed output, but using AI to enhance the "human in the loop's" capacity to deepen personal support can have the opposite effect (Sharma et al., 2023).

Cognitive offloading and productive struggle

- **Definition.** Risko and Gilbert's 2016 paper "Cognitive Offloading" (*Trends in Cognitive Sciences*) is the standard reference.
- **Productive struggle.** Bonner (*District Administration*, September 2026) argues that working through difficulty is what drives learning and cognitive development. The Stanford Center for Teaching and Learning (2026) advises educators to normalize cognitive effort and confusion and to discuss what it is like to grapple with concepts.
- **First-draft thinking.** An *Education Week* article (Prothero, 2026) quotes an educator who sees the blank page, or the math problem with no steps yet, as a moment of friction where students draw on their own knowledge; even a helpful AI explanation can skip it.
- **Tutor design.** Bastani et al. (*PNAS, 2025*) studied nearly 1,000 high school math students. Those using a standard ChatGPT-style tutor performed better during practice but worse once AI was removed. A tutor designed to give teacher-written hints rather than answers reduced the harm.

Bias in AI teacher assistants

Common Sense Media's AI *Risk Assessment: AI Teacher Assistants* (August 2025) tested widely used tools including MagicSchool, Khanmigo, Curipod, and Google Gemini for Education. Asked to generate intervention plans, the tools recommended more punitive measures for hypothetical students with Black-coded names. The report described such tools as potential "invisible influencers" whose content may carry bias, inaccuracies, or one-sided perspectives, and found lesson plans that relied on stereotypes and failed to debunk misinformation.

AI detection tools

- Liang et al. (2023, *Patterns*, Stanford) found AI-writing detectors frequently misclassified essays by nonnative English writers as AI-generated.
- Many detector vendors claim 98–99% accuracy but do not publish false-positive rates; third-party evaluations find high false-positive rates (Weber-Wulff et al., 2023).
- OpenAI discontinued its AI text classifier in 2023, citing low accuracy.

Teacher time savings

Gallup and the Walton Family Foundation, *Teaching for Tomorrow: Unlocking Six Weeks a Year With AI* (2025), surveyed 2,232 U.S. public school teachers. The findings are shared below.

60%
Teachers who used an AI tool for work in the 2024–25 school year

32%
Teachers who use AI weekly

5.9 hours
Average weekly time saved by weekly users (about six weeks over a 37.4-week year)

26%
Additional time dividend in schools with a formal AI policy

50%
Teachers who believe AI will reduce overall workload

SHARE OF AI-USING TEACHERS REPORTING TIME SAVED, BY TASK



SECTION 3

ACADEMIC INTEGRITY PRACTICE TOOLKIT

A state example: Massachusetts

The Massachusetts Department of Elementary and Secondary Education's AI guidance, developed with an AI task force of 14 districts in partnership with ISTE+ASCD, names academic integrity as a principle: AI should reinforce learning rather than short-circuit it, with clear expectations emphasizing originality, transparency, and reflection. It suggests students add an "AI Used" section to their work explaining which tools they used and how.

Ten strategies for assignments that encourage integrity

1. **Make the process visible, not just the product.** When only the final essay is graded, the final essay is the only thing a student needs to produce. Breaking assignments into stages (brainstorming notes, an outline, a rough draft, peer feedback, a revision) shifts the focus to how students think. Feedback on each stage makes shortcuts harder and less useful, and shows teachers each student's writing voice over time.

2. **Connect assignments to personal experience and local context.** AI is good at general content and poor at knowing a student's life, classroom, or community. Prompts that draw on students' experiences, a class discussion, a family interview, a local issue, or an event at school are much harder to outsource. Instead of "Explain the causes of the American Revolution," ask "Which cause of the American Revolution do you think would have most angered people in our community at the time, and why?"

3. **Do more of the thinking work in class.** Timed writes, handwritten drafts, whiteboard work, and small-group tasks let teachers see thinking as it happens. Homework can shift toward reading, preparation, or revision, where shortcuts matter less.

4. **Add a conversation component.** Short conferences, oral explanations, presentations, or check-ins ("Walk me through how you got this answer," "Tell me about the choice you made in this paragraph") let students show understanding. They give students who did the work a chance to shine and give teachers a low-stakes, non-accusatory way to follow up.

5. **Use formats less suited to AI.** Hands-on projects, physical models, labs, annotated sketches, audio or video reflections, debates, or analysis of materials available only in class (a photo, a demonstration, a guest speaker) require student participation and give students with different strengths more ways to show what they know.

6. **Ask students to reflect on their learning.** Brief reflections ("What was the hardest part of this assignment?" "What would you do differently next time?") build self-awareness, are hard to fake, and show teachers where students are struggling, which is often why a student reaches for a shortcut.

7. **Lower the stakes and the pressure.** Students often misuse AI when overwhelmed, short on time, or afraid of failing. Frequent low-stakes practice, chances to revise, reasonable workloads, and flexible deadlines when appropriate reduce that pressure.

8. **Be clear about when and how AI may be used.** State expectations for each assignment, since acceptable use differs between a brainstorm and a final essay. When AI is permitted, ask students to note how they used it or submit their prompts.

9. **Teach AI literacy directly.** Have students critique or fact-check an AI response, or compare it to their own writing, so they see AI as a tool with limits rather than a replacement for thinking. Pair this with age-appropriate conversations about honesty and why learning matters.

10. **Build relationships and a culture of trust.** Students who feel known by their teachers are less likely to cheat. Talking openly about integrity, explaining why assignments matter, and treating mistakes as part of learning make honest work the norm.

The stoplight framework: implementation guide

Why schools use it. A single school-wide AI rule rarely fits every task. Brainstorming topics with AI is very different from having AI write the essay, and an in-class writing assessment has different goals than a multi-week research project. The stoplight lets teachers match AI use to the purpose of each assignment: if the goal is a skill the student must perform independently, AI is restricted; if AI could support learning, it may be allowed. It also gives students a shared vocabulary that reduces accidental dishonesty.

How teachers put it into practice. Post the color at the top of the assignment sheet, in the learning management system, or on the board. Pair it with a short statement of what is and is not allowed, because "yellow" alone is ambiguous. For example: "Yellow: You may use AI to brainstorm three topic ideas, but your outline and essay must be your own. Paste your AI conversation at the end." At yellow and green, disclosure is essential: a brief AI-use statement, a citation in the works-cited list, or screenshots. Explain the reason for the color. "I need to see your own reasoning so I know what to reteach" earns more buy-in than a simple prohibition.

Known challenges. Inconsistent use across teachers confuses students, so adopt it building-wide. Enforcement at red cannot rely on detection tools; use in-class work, drafts, conferences, and knowledge of students' voices. Green assignments need in-school time and school-provided tools so home access is not a barrier. Any tool students use must comply with student privacy law and district policy.

Template: Assignment AI-use label

COLOR	LABEL	WHAT STUDENTS MAY DO	DISCLOSURE REQUIRED
Red	No AI	Complete all work without AI tools	None
Yellow	Limited AI	Use AI only for the steps the teacher names (for example, brainstorming or feedback on a draft); the rest is the student's own work	Brief AI-use statement or pasted conversation
Green	AI permitted or expected	Use AI throughout, within course limits; verify output and own the final product	AI-use statement explaining how AI shaped the work

Assignment statement: "This assignment is [color]. You may: _____. You may not: _____. To disclose AI use: _____."

Grade-band use levels: text version

Part 1 presents these as graphics. This text version supports screen readers, translation, and districts adapting the language for local guidance.

Teacher-led use DEFAULT IN GRADES K–5

Teacher-led use means all of the following are true:

- The teacher is the only person using the tool, through a district-approved account and platform.
- The teacher chooses the tool and purpose and enters every prompt. Students may suggest ideas aloud but do not type into, speak to, or otherwise interact with the tool.
- The teacher reviews AI output before students see it and presents it as something to examine, not as an authority.
- No student names, work samples, or other personally identifiable information go into the tool unless a district data privacy agreement allows it.
- **Grades 4–5.** Exploratory teacher-guided use of approved, age-appropriate AI tools, with clear boundaries.

Students watching AI or talking about it is teacher-led use. Students operating AI, even with a teacher nearby, is not.

Teacher-guided use DEFAULT IN GRADES 6–8

Teacher-guided use means all of the following are true:

- Students use a district-approved tool, through an account or environment the district manages and covers with a data privacy agreement.
- The teacher sets the purpose, time frame, and limits of the task, and tells students in advance when AI may and may not be used.
- The teacher supervises, and students can explain what they asked the tool and how they used its response.
- The task asks students to think critically about AI output, such as checking facts, comparing sources, or revising, rather than accepting it.

Student-directed use DEFAULT IN GRADES 9–12

Student-directed use means all of the following are true:

- Students decide when and how to use AI in their work, within the limits the teacher sets.
- Students use district-approved tools under data privacy agreements, with parental consent where a tool's terms or district policy require it.
- Students check AI output against reliable sources and their own knowledge, and are responsible for the accuracy and quality of what they submit.
- Students disclose when and how they used AI and can explain what thinking remained their own.

BY GRADE BAND

- **K–3.** Students do not use AI tools directly. AI literacy happens mostly without AI: noticing technology around them, understanding that computers follow instructions people give them, and practicing the question "How do we know that's true?"
- **Grades 4–5.** Exploratory teacher-guided use of approved, age-appropriate AI tools, with clear boundaries. Whole-class demonstrations can build early literacy, such as showing how a changed prompt changes the output, or asking students to find errors, gaps, or bias in a response.
- **Grades 6–8.** Students begin using AI themselves, with structure. Because many sixth and seventh graders are under 13, student use happens only through tools the district has approved and provisioned. Students should never sign up for tools on their own.
- **Grades 9–12.** Students should graduate able to use AI responsibly and independently, as college, careers, and civic life will expect. Work-based learning and CTE settings are strong places to show how professionals use AI in a given field.

STUDENT ACCOUNTS AND ACCESS

- **K–5.** Districts should not create student accounts on general-purpose AI platforms. Educators should not ask students to sign up, log in, or use a family member's account for classwork. AI features built into district-approved software should be reviewed, covered by a data privacy agreement, and turned off by default unless there is a clear instructional purpose.
- **Grades 6–8.** Students should not create or use personal consumer AI accounts for schoolwork, and educators should not assign tasks that require them. When students need access, districts should provide education versions of tools that meet privacy standards and include age-appropriate safeguards, tell families which tools are in use and why, and obtain parental consent where required.

- **Grades 9–12.** Students should use district-approved tools for schoolwork. Personal AI accounts should not be required for assignments, and any permitted use should follow district policies, age restrictions, and privacy requirements.

The AI Assessment Scale

The AI Assessment Scale (AIAS), developed by Mike Perkins, Jasper Roe, Leon Furze, and Jason MacVaugh, offers five levels: no AI, AI for planning, AI for collaboration, full AI use, and AI exploration, where students use AI creatively to solve problems. It has since been refined through research, institutional use, and international feedback.

Districts wanting finer distinctions can map the five levels onto the three stoplight colors: no AI to red; planning and collaboration to yellow; full use and exploration to green.

STOPLIGHT COLOR	AIAS LEVELS
Red	No AI
Yellow	AI for planning · AI for collaboration
Green	Full AI use · AI exploration

Resources: AI Assessment Scale

SECTION 4

PROFESSIONAL LEARNING AND CURRICULUM RESOURCES

National professional learning programs

These programs complement district-designed professional learning, but they do not replace the personalized learning that makes professional development suited for each district's unique context.

PROGRAM	ORGANIZATION	WHAT IT OFFERS
AI courses and educator certification	ISTE+ASCD	Structured courses and formal recognition of educator AI literacy
AI literacy lessons and educator resources	Common Sense Media	Free classroom lessons and teacher guides
Trailblazer Fellowship	aiEDU	12-week program on responsible AI use and classroom application
AI Competency Framework for Teachers	UNESCO	Guidance for teacher training, assessment design, and professional growth in AI knowledge and ethics

Curriculum resources for teachers

RESOURCE	DESCRIPTION
AI K–12 Skills Progression Guide for Educators	Maps AI and computer science standards across K–12 with grade-specific resources (Colorado Education Initiative) Link
AI Literacy Curriculum Hub	Curated list of AI curriculum resources with detailed descriptions (AI for Equity and Erica Murphy, Hendy Avenue Consulting) Link
Acronyms for AI Prompts	Acronyms that help students write effective prompts (CU Boulder) Link
K–12 Curriculum	Research-based K–12 curriculum and activities (aiEDU) Link
Blueprint for Action: Comprehensive AI Literacy for All	Recommendations for policymakers and system leaders (EDSAFE AI Alliance) Link
Curricula	Classroom lessons and curricula (MIT RAISE) Link
AI Literacy Resources	AI literacy resources for high school (Stanford CRAFT) Link

SECTION 5

TOOL VETTING RESOURCES

Listing does not imply endorsement.

RESOURCE	DEVELOPED BY	USE IT TO
K–12 Gen AI Maturity Tool	CoSN with the Council of the Great City Schools	Rate readiness across seven domains (operational, data, technical, security, legal and risk, and more) at emerging, developing, and mature levels, before deciding what to buy Link
K–12 Community Vendor Assessment Tool (K–12CVAT)	CoSN with SETDA	Send vendors a standardized questionnaire on data privacy, cybersecurity, and infrastructure; drops into an RFP or purchase review Link
EdTech Quality Indicators Guide	EdTech Quality Collaborative (1EdTech, CAST, CoSN, Digital Promise, ISTE, SETDA)	Evaluate tools before and after purchase on five indicators: evidence-based design, product safety, inclusivity, usability, interoperability Link
AI and accessibility guidance	CoSN and CAST	Check that AI tools work for students with disabilities Link
Checklist for vetting generative AI tools	Future of Privacy Forum	Map vetting against FERPA, COPPA, and PPRA Link

SECTION 6

LEGAL AND PRIVACY REFERENCE

LAW	WHAT IT COVERS	RELEVANCE TO AI
FERPA (Family Educational Rights and Privacy Act)	Student education records	Limits what student information can be shared with AI vendors, including uploads to detection tools
COPPA (Children's Online Privacy Protection Act)	Personal information from children under 13	Requires parental consent before online services collect it. FTC amendments took effect June 23, 2025; full compliance was required by April 22, 2026
PPRA (Protection of Pupil Rights Amendment)	Surveys and data collection on protected topics	Relevant when AI tools collect sensitive student information
State student privacy laws	More than 40 states have laws modeled on California's SOPIPA	These laws typically bar edtech companies from selling student data, using it for targeted advertising, or building non-educational profiles. California, Colorado, Connecticut, Illinois, and Virginia have updated their laws to address AI and algorithmic processing
Colorado Student Data Transparency and Security Act	Student personally identifiable information, applies to vendor contracts as well	Vendors may not sell student personally identifiable information or use PII for targeted advertising, and must destroy PII when the contract terminates. Districts must increase security of student records collected, maintained, or shared through digital tools or state systems. Parents may inspect, review, copy, and correct PII records.
Take It Down Act (May 2025)	Non-consensual intimate images, real or digitally manipulated	It is a federal crime to knowingly publish these images. The FTC enforces a requirement that platforms remove reported images and digital forgeries within 48 hours
State Accessibility Requirements (HB21-1110)	Educational opportunities and accommodations based on disability status	Prohibits discrimination based on disability, and requires entities to ensure technology systems are accessible
Chatbot Safety Act (HB26-1263 - Conversational Artificial Intelligence Service Operator Requirements)	Operators of chatbot tools, particularly those accessed by minors	Imposes new requirements to protect minors from excessive or inappropriate engagement with conversational AI tools
Colorado Automated Decision-Making Technology Act (SB26-189)	Developers of tools used to generate information that supports consequential decision-making	Provides consumer protection through regulation of developers of tools used in making decisions impacting access to education, employment, housing, financial or lending services, insurance, health-care services, or essential government services and public benefits

Nearly every state that has adopted AI guidance advises against entering personally identifiable information into AI tools.

As districts develop their plans for AI, review CDE's Data Privacy and Security website alongside applicable student data privacy and digital accessibility requirements. These laws may apply differently depending on the tool, its intended use, and whether the district or a vendor provides it. Districts should work with legal counsel to determine which requirements apply.

SECTION 7

RESOURCE CONSTRAINTS: COST CONSIDERATIONS

Planning for cost

AI tools carry costs beyond the initial license. Questions districts can ask before adopting a tool:

- **Licensing.** Is pricing per student, per teacher, per school, or districtwide? What happens at renewal, and is there a price lock?
- **Usage.** Does the tool charge by usage (for example, per request or per token), and is there a cap? Who monitors usage, and what happens when a limit is reached?
- **Overlap.** Do existing district platforms already include AI features that meet the same need?
- **Support.** What professional learning, integration, and data privacy review will the tool require, and who will provide it?
- **Exit.** If the district stops using the tool, can it export its data and confirm deletion?

SECTION 8

COUNSELOR TOOLKIT

Developed with NCWIT.

Domain checklist

DOMAIN	COUNSELOR ACTIONS
Academic	• Discuss honesty and integrity in academic work • Discuss levels of appropriate AI use • Ensure privacy and data protection for each student • Promote equity and access for all students
College and career	• Discuss AI and automation in ICAP conversations • Discuss ethical AI use in application processes • Share timely information on AI's workforce impacts and emerging opportunities
Social-emotional	• Educate students and families on AI companions and chatbots • Include AI topics in SEL and digital wellness lessons • Prioritize relationships • Support families

Counselors in practice

- Review and weigh in on district AI policies.
- Integrate AI safety, ethics, and reliability into classroom and small-group lessons.
- Build peer-helper programs so students support one another.
- Help families understand and manage AI use at home.
- Pursue AI literacy training from trusted, non-industry sources. (Well-vetted tools can be used to support the counselor role and provide activities and resources.)

Advocacy talking points

- **Mental health:** "Students are using AI companions for emotional support without safeguards. Policy has to address mental health, not just academic integrity."
- **Development:** "AI policy must be age-appropriate. What works in high school may harm an elementary student."
- **Relationships:** "Is AI use reducing student-teacher interaction?"
- **Equity:** "If our data shows disparate impact on specific student groups, we need to monitor and address it immediately."

SECTION 9

NATIONAL STUDENT AI USE DATA

Source: Common Sense Media, *The Common Sense Media Census: AI Use by Tweens and Teens* (2026), released June 8, 2026; survey of 1,204 young people ages 9 to 17.

Schools are a major entry point. School-issued devices are the second most common way young people access AI. Districts need clear, consistent policies that limit students to approved tools, and teachers need guidance from administrators rather than making these decisions alone.

Struggling students may rely on AI most. Students who have trouble focusing or persisting are more likely to use AI for homework, raising concern that AI may replace skill-building for those who most need it. Daily users showed signs of dependence, including worry they could not answer questions without AI. Most students say they prefer to try on their own first; educators can reinforce that by modeling independent problem-solving and choosing tools that guide rather than answer.

AI can hide what students need. When students take questions to AI instead of a teacher, teachers may lose sight of where students are struggling and need new ways to check for understanding.

Inappropriate content often goes unreported. About one in six young people encountered inappropriate content while using AI, and few told an adult. Vet tools carefully and make reporting easy and normal.

Students overtrust AI. Many believe AI is always accurate and morally sound, and also think adults understand AI less than they themselves do. Far fewer have had AI safety conversations than use the tools.

AI-generated sexual imagery. Common Sense Media found that 18% of teens had personally created AI sexual content or knew someone who had, and the harm falls mostly on female students. District response protocols are in Part 1; the federal Take It Down Act is summarized in Section 6.

Social and emotional concerns. Students may bring sensitive questions about health, bodies, relationships, feelings, and their future to AI instead of to trusted adults. Higher AI use was linked to more loneliness and lower happiness. Common Sense Media rates AI mental health apps and general chatbots used for mental health support as an "unacceptable risk" for teens, and recommends that minors not use AI companion apps. Relationships with caring adults and peers remain the best protection.

SECTION 10

FAMILY ENGAGEMENT TOOLKIT

Where to look: state and national family resources

RESOURCE	WHAT IT OFFERS
Oregon, Generative AI in K–12 Classrooms	Some of the strongest state framing on family partnership: transparent communication about whether, how, and why AI is used; a Community Engagement Toolkit that includes parents, community leaders, and Tribes in decision-making; ready-to-use family resources
Ohio AI Toolkit (with aiEDU)	Seven-part resource with a dedicated parent on-ramp alongside educator and policymaker sections
AI Literacy Toolkit for Families (Common Sense Media and Day of AI)	Free short videos, conversation cards, hands-on activities, an implementation guide, slides, and customizable templates for schools

Template: Family letter

Aligned to the stoplight framework presented in Part 1 and detailed in Section 3 of Part 2.

Dear **[DISTRICT NAME]** families,

Artificial intelligence tools are part of everyday life now, and they are showing up in schoolwork and at home. We want you to know how we are handling AI at **[DISTRICT NAME]**, what we expect from students, and how to reach us with questions.

Students may use AI tools for schoolwork only when a teacher says so. Every assignment carries one of three labels. Red means AI is not permitted, and the work must be done without AI help. Yellow means students may use AI for specific steps the teacher names, and must say how they used it. Green means AI use is permitted or expected, and students must explain how it shaped their work. If you are unsure which applies, ask your student to show you the assignment; it should say. Students in grades **[GRADE RANGE]** have school accounts for **[APPROVED TOOLS]**, which carry safety settings that personal accounts do not. Students below grade **[GRADE]** do not have AI accounts. If an assignment involves AI, there is always a way to complete it at school, so no student is disadvantaged by what is available at home.

Our teachers may use AI to help plan lessons, build practice materials, and draft communications. A teacher is responsible for anything they send home or put in front of students, whether or not AI helped produce it.

We ask a few things of you. Talk with your student about when AI helps their learning and when it replaces it. Know that many AI chatbots, especially companion or "AI friend" apps, are designed for adults and are not safe for children; most require users to be at least 13, and some 18. Use the family agreement enclosed with this letter to set expectations at home that work for your family. And tell us when something concerns you.

We are hosting a Family AI Night on **[DATE]** at **[LOCATION]**. No experience with AI is needed, and interpretation, childcare, and food will be provided. RSVP at **[LINK]** or **[PHONE]**. We are also looking for family members to serve on our AI advisory group; if you are interested, contact **[NAME]** at **[EMAIL]**.

Sincerely,

[NAME], **[TITLE]**
[EMAIL] **[PHONE]**

Template: Family AI agreement

For families to complete together. Not returned to school.

This agreement is for our family to complete together. There are no right answers, and we do not send it back to school. The point is that everyone at home knows the same rules.

What AI is for. We think AI is useful for _____. We also want to keep doing _____ ourselves, because doing those things is the point.

Schoolwork. School rules come first. When an assignment is red (no AI), that is the rule no matter what this agreement says. Where AI is allowed, we agree it can explain something the student did not understand, quiz the student before a test, give feedback on the student's own writing, help break a big assignment into steps, and _____. We agree it should not write something the student turns in as their own, do the thinking part of an assignment, or _____.

Privacy. We agree never to type these into an AI tool: our full name, address, school name, or phone number; photographs of ourselves or other people; anything about another person's private life; passwords or account numbers; and _____.

Companion apps. Some AI apps are built to feel like a friend, a partner, or a therapist, and companies design them to keep people talking. They are not safe for kids, and most require users to be at least 13 or 18. Our family's rule about these apps is _____. If one of them ever says something that scares, upsets, or confuses you, come tell an adult. You will not be in trouble.

Where and when. AI use in our home happens in _____ (for example, a shared space such as the kitchen or living room) and does not happen _____ (for example, after nine at night, in bedrooms, or during meals). The accounts we use are _____ (a school account, a family account, or none).

Checking. AI makes things up and states them confidently, so before we believe or use something an AI told us, we will _____ (for example, check one other source or ask an adult).

Telling someone. If an AI tool gives us something upsetting, wrong, or unfair, or if someone uses AI to be cruel to another person, we will tell _____, and no one will be punished for telling.

Signed by student _____, adult _____, and adult _____, on _____.

SECTION 11

GLOSSARY

1 Artificial intelligence (AI)

Computer systems designed to perform tasks that usually require human intelligence, such as understanding language, recognizing images, solving problems, or making decisions. *In practice:* writing assistants, automated feedback tools, translation features, adaptive learning platforms, image generators.

Reference: NIST Computer Security Resource Center (CSRC), Glossary: Artificial Intelligence

2 AI literacy

Competencies that let a person critically evaluate AI technologies, communicate and collaborate with AI, and use it as a tool at school, at home, and at work. *In practice:* digital citizenship units on recognizing AI-generated content; side-by-side comparison of AI-written and student-written paragraphs; research lessons pairing "verify before you trust" with source-checking; staff professional learning that builds shared vocabulary before new tools roll out.

Reference: Long, D., & Magerko, B. (2020), What is AI Literacy? Competencies and Design Considerations

3 Agentic AI

An AI system that can pursue a goal with limited human supervision, planning steps, using tools, and taking actions on its own rather than responding once to a single prompt. *In practice:* IT help desk agents that resolve routine tickets; adaptive tutoring that adjusts practice without re-prompting; early-warning systems that flag students from attendance or grade data; tools that coordinate multi-step tasks like substitute placement.

Reference: IBM, What Is Agentic AI?

4 Machine learning (ML)

A way of building AI in which a system learns patterns from large amounts of example data rather than following step-by-step instructions written by a programmer. *In practice:* a spam filter that learns from millions of labeled messages; most classroom AI tools are built on machine learning.

Reference: NIST CSRC, Glossary: Machine Learning

5 Generative AI

AI that creates new content (text, images, audio, video, or code) based on patterns learned from training data. *In practice:* chatbots such as ChatGPT, Claude, Gemini, and Microsoft Copilot, and image generators such as DALL-E and Midjourney.

Reference: NIST AI 600-1, Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile

6 Large language model (LLM)

The kind of AI system behind most text chatbots, trained on enormous amounts of text to predict likely next words and produce fluent writing. *In practice:* LLMs do not "know" facts as people do; they generate plausible text, which is why answers must be verified.

Reference: IBM, What Are Large Language Models?

7 Prompt/prompting

The instruction, question, or request a user gives an AI tool. Clarity, specificity, and context strongly affect the response. *In practice:* teaching students to write clear, purposeful prompts ("prompt literacy") is becoming a core digital skill alongside research and citation.

Reference: IBM, What Is Prompt Engineering?

8 Hallucination

When AI generates information that sounds confident but is incorrect or invented, including fabricated quotes, citations, or historical "facts." *In practice:* the central reason students must check AI output against trusted sources. Hallucinations are not lies; the model produces statistically likely text, which is not always true.

Reference: IBM, What Are AI Hallucinations?

9 Training data

The text, images, or other examples an AI system learns from. Its size, quality, and biases shape what the AI knows and how it responds. *In practice:* most models have a knowledge cutoff and may not know recent events or research.

Reference: NIST, Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile

10 Algorithm

A set of step-by-step rules a computer follows to perform a task, make a decision, or solve a problem. *In practice:* algorithms power search engines, social media feeds, grading tools, plagiarism checkers, and AI systems.

Reference: North Carolina Department of Information Technology, AI Glossary

11 Bias (in AI)

Systematic unfairness in an AI system's outputs, usually from imbalanced, incomplete, or skewed training data or from design choices. *In practice:* facial recognition that performs worse on darker skin tones; writing assistants that reinforce stereotypes. Discussing AI bias supports equity, media literacy, and critical thinking.

Reference: NIST, AI Risk Management Framework 1.0

12 Chatbot

A program that uses AI, often an LLM, to hold a back-and-forth text or voice conversation. *In practice:* general chatbots students use, and customer-service bots embedded in websites and apps.

Reference: IBM, What Is a Chatbot?

13 Cognitive offloading

Using an external tool to reduce the mental effort a task demands. It becomes a learning concern when a student offloads the thinking a task was designed to build, rather than a routine step. *In practice:*

Helpful: AI formats a bibliography so a student can focus on the argument; a calculator handles arithmetic so a student can set up the model.

Risky: AI drafts the whole essay or solves a proof (sometimes called cognitive outsourcing).

Safeguards: students annotate which AI suggestions they accepted or rejected and why; "progressive disclosure" tasks show hints before a full solution.

Reference: University of Technology Sydney, Artificial Intelligence, Cognitive Offloading and Implications for Education

14 Risk mitigation

Identifying, evaluating, and reducing a technology's potential harms through specific controls, policies, and safeguards, rather than eliminating the technology. *In practice:* vetting vendors for FERPA and COPPA compliance; limiting AI tools' access to student records through role-based permissions; training staff on acceptable use; publishing clear, audience-specific guidelines; building AI literacy across staff, students, and families.

Reference: Colorado Education Initiative, Colorado Roadmap for AI in K–12 Education

SECTION 12

ADDITIONAL RESOURCES AND REFERENCES

Listing does not imply endorsement.

Organizations and professional learning

- aiEDU
- AI for Education
- CodeAI
- Common Sense Media
- Consortium for School Networking (CoSN)
- eNetLearning AI Course for Educators
- inquiryHub Professional Learning
- Mark Cuban Foundation AI Bootcamps
- NCWIT
- The Rithm Project: Immersive Futures
- Vendor Professional Learning (examples include):
  - Brisk Teaching
  - MagicSchool

Curriculum and university resources

- AI Assessment Scale (AIAS)
- Creating AI Usage Guidelines for Students, Edutopia
- Resources and Tools, MIT RAISE
- AI Teaching Strategies, Stanford Center for Teaching and Learning
- Resources, Stanford CRAFT
- AI Competency Framework for Teachers, UNESCO
- AI Guidelines, Yale Poorvu Center

Policy and guidance

- Sample Policy, Colorado Association of School Boards
- Colorado Roadmap for AI in K–12 Education, Colorado Education Initiative
- Ohio's AI in Education Coalition: AI Strategy, InnovateOhio
- Massachusetts Guidance for Artificial Intelligence in K–12 Education, Massachusetts Department of Elementary and Secondary Education
- Multilingual by Design
- Generative Artificial Intelligence (AI) in K–12 Classrooms Guidance, Oregon Department of Education
- Student Data Privacy and Data Ethics Scenarios for School Leaders, Student Privacy Compass

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- GPT Detectors Are Biased Against Non-Native English Writers, Patterns, 2023
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- Students Are Worried That AI Will Hurt Their Critical Thinking Skills, Education Week, 2026


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