

Appendix A:

Guiding Questions for California's K-12 Educational Systems

Purpose

The questions below illustrate how the Five Pillars may inform decision making across different levels of California's educational system. They are intended as conversation starters for stakeholders/providers rather than evaluation checklists and are designed to promote system coherence by encouraging each educational partner to consider how AI can strengthen ambitious teaching, deeper learning, and continuous improvement within its sphere of responsibility.

State Policymakers and Legislative Staff

Primary Question

What investments are needed to build the capacity of classroom educators, leadership teams, and systems of support providers so that AI implementation moves beyond technology adoption, procurement, and contracting toward ambitious teaching and deeper learning?

Supporting questions might include:

- How can state policy encourage innovation (e.g., *AI Pedagogical Practice Priorities*) while preserving local flexibility and systems coherence?
- What statewide conditions will enable artificial intelligence to strengthen teaching, learning, assessment, and human development across California's diverse educational communities while advancing the state's commitments to equity and excellence?
- How should legislation encourage continuous improvement rooted in learning sciences rather than be led towards compliance alone?
- What evidence should inform future policy refinement for AI in K-12 education to ensure pedagogical innovation and better outcomes for the next generation of California students in a global marketplace?

These questions help state leaders consider how legislation, funding, and statewide policy can create the conditions under which AI advances ambitious teaching, deeper learning, educational equity, and continuous improvement across California's diverse educational communities.

California Department of Education and State Agencies

Primary Question

Where can existing guidance for AI Pedagogical Practice Priorities be strengthened through the learning sciences, collaborations with public university research partners, educator inquiry, and emerging evidence from classroom implementation?

Supporting questions:

- How can AI for deeper learning guidance align with existing dashboard priorities?
- How should statewide resources support continuous improvement with AI tools—those aimed at accomplished teaching, assessment for learning, and deeper learning in the curriculum—to leverage research knowledge bases?
- How can CDE and its agencies identify *AI Pedagogical Practice Priorities* within current policy frameworks rather than treat AI in education as an “add-on” with isolated initiatives or exceptional use-cases?
- How can agencies coordinate rather than duplicate implementation supports?

These questions help state agencies strengthen guidance, professional learning, and implementation supports so that *AI Pedagogical Practice Priorities* become integrated within California’s existing educational priorities rather than treated as a separate initiative.

California's Statewide System of Support

(County Offices of Education, CCEE, Geographic Leads, Statewide Leads, California Subject Matter Projects, technical assistance providers, and related partners.)

Primary Question

How can regional partners develop coherent, systems-sensitive indicators of responsible AI use, informed by the Five Pillars of Practice, across LEAs and districts?

Supporting questions:

- Which existing professional learning structures can support AI responsible, research-based integration of good practices that lead to deeper learning?
- How can promising AI practices be shared, evaluated, and vetted within and across regions?
- Where can new knowledge networks be integrated into existing ones to improve communication about shared *AI Pedagogical Practice Priorities*?
- What evidence of AI impact should regional networks collect to strengthen statewide learning goals?

These questions help California's System of Support translate statewide guidance into coherent regional implementation by building educator capacity, sharing promising practices, and strengthening continuous improvement State-wide priorities across local educational agencies.

District Leadership Teams

Primary Question

Which instructional goals (for example, Habits of Mind associated with the Accuracy or Accessibility pillar) should AI initiatives intentionally strengthen, and how might these serve as guideposts for identifying effective practice?

Supporting questions:

- How do the Five Pillars align with current district priorities?
- Which instructional goals (e.g., Habits of Mind associated with Accuracy or Agency or Authenticity) should AI initiatives support? As systematic indicators and/or guideposts for good practices?
- How will we know whether AI is improving student learning or substituting for it?
- How can AI become part of existing cycles of continuous improvement and when should it remain in its own lane?

These questions help district leaders ensure that AI strengthens existing instructional priorities, informs strategic decision making, and supports coherent systemwide improvement rather than competing or “crowding out” ongoing educational initiatives.

School Leaders

Primary Question

How should leadership teams facilitate conversations about the Five Pillars—or focus on the pillars most relevant to local needs (e.g., Agency, Accessibility, or Assessment)—as part of ongoing LCAP planning and school improvement?

Supporting questions:

- How should leadership teams facilitate conversations about the Five Pillars and/or focus on most salient issues associated with them (e.g., Agency, Accessibility, Assessment) as part of the LCAPs?
- What evidence should teachers, instructional coaches, and/or paraprofessionals examine together as part of the school improvement plans?
- How and when should AI for deeper learning become part of existing PLC work?
- How can AI-assisted assessment practices evolve with the habits of mind necessary to ensure trust in outcomes, and the validity and reliability of evidence of genuine learning?

These questions help school leaders create learning environments in which AI strengthens ambitious teaching, collaborative professional inquiry, trustworthy assessment, and deeper learning for all students.

Teacher Educators

Primary Question

How should educator preparation programs cultivate the professional judgment needed for AI-mediated teaching and assessment?

Supporting questions:

- What forms of professional judgment about AI uses should novice teachers develop?
- How should candidates learn to evaluate AI-supported instructional decisions and assessment information?
- How should preparation programs identify and support authentic evidence of candidate learning while incorporating responsible uses of and supports from AI tools?
- How should AI reshape clinical practice and supervision?

These questions help educator preparation programs cultivate the professional judgment, instructional expertise embedded in subject areas, and 21st century assessment literacies needed for effective teaching in AI-mediated learning environments.

Classroom Educators

Primary Question

How can AI extend students' opportunities to think, learn, create, and demonstrate understanding without replacing the cognitive work that promotes deeper learning and authentic development?

Supporting questions:

- When does AI enhance productive struggle?
- When do AI-mediated tools offload and substitute for learning?
- What counts as trustworthy evidence of student understanding and progress in a subject area (unit, lesson, etc.)?
- How should classroom assessment evolve to capture gains in both analog and digital learning environments?
- What can teachers do to preserve trustworthy evidence of student understanding while encouraging student creativity and other 21st century skills?

These questions help classroom educators make thoughtful instructional decisions about when AI should extend learning, when productive struggle should be encouraged and maintained, and how trustworthy evidence of student understanding and progress with the curriculum can remain visible throughout the learning process.

Next steps

Rather than prescribing a single implementation pathway, these guiding questions encourage every educational partner to contribute to a coherent, learning-centered approach to AI implementation while honoring California's tradition of shared responsibility, local decision making, and continuous improvement.

As California's K–12 AI policies continue to evolve, these questions should likewise evolve through ongoing educator inquiry, research-practice partnerships, and implementation experience. Future refinements will depend on the accumulation of trustworthy evidence from classrooms, schools, districts, county offices of education, institutions of higher education, and state agencies.

The ultimate purpose of policy is not simply to regulate the use of artificial intelligence, but to create the conditions and resources through which educators, leaders, researchers, and communities can engage in ongoing statewide conversations about how AI strengthens ambitious teaching, deeper learning, and human development for every learner.

Recommended citation:

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