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AI Adoption for K12

Moving Beyond Experimentation

September 2026

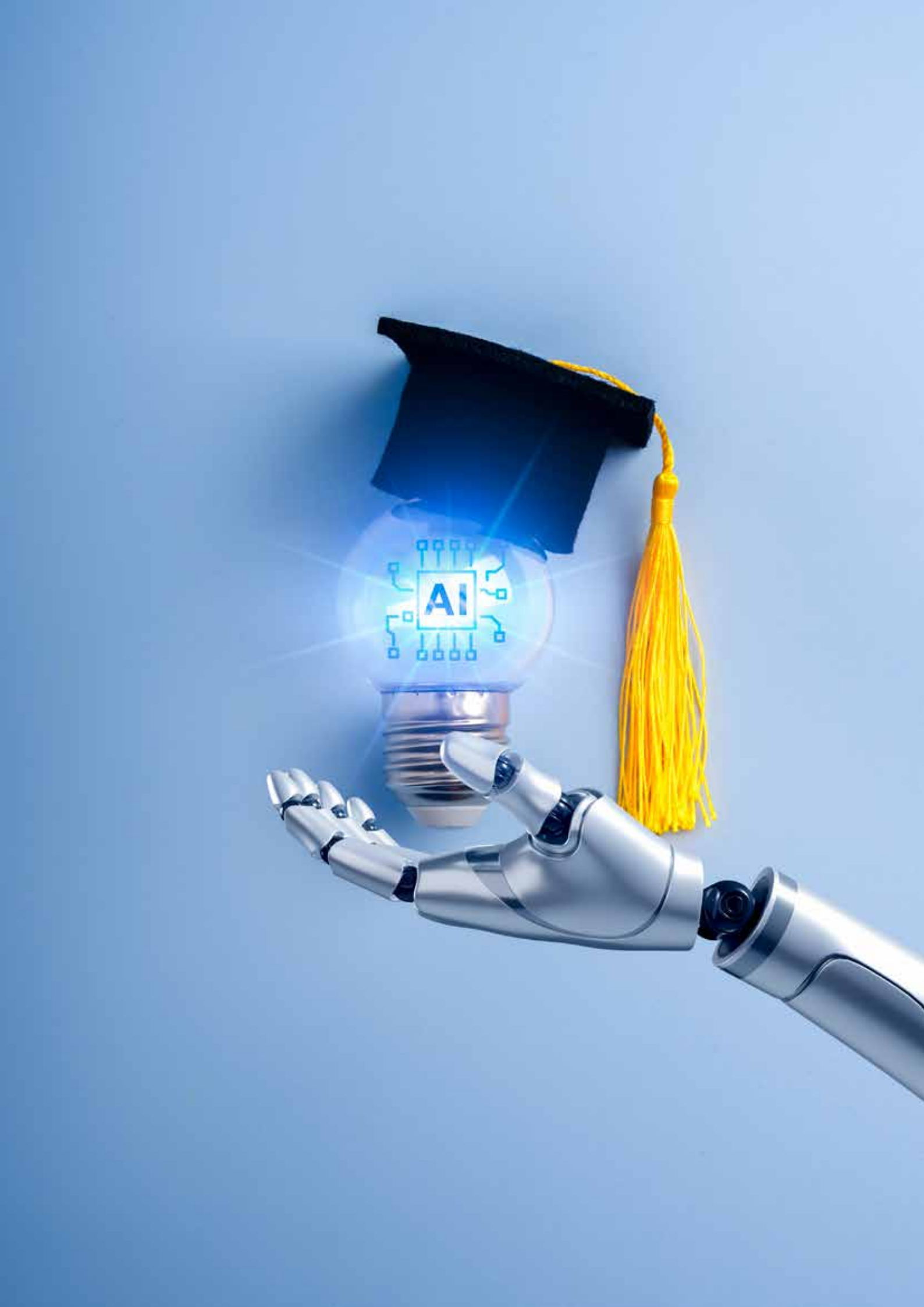

AI

Table of CONTENTS

FOREWORD FROM FICCI

Jyoti Vij
Director General
FICCI

Artificial Intelligence is rapidly emerging as one of the defining technologies of our time, with the potential to influence almost every sphere of economic and social activity. Education is no exception. As AI capabilities continue to evolve, they present significant opportunities to strengthen teaching and learning, enable more personalised educational experiences, support teachers, improve assessment practices, and enhance the effectiveness of school administration and decision-making.

For India, the conversation around AI in education assumes particular significance given the scale and diversity of our school education system. The opportunity before us is not merely to adopt new technologies, but to consider how they can be deployed meaningfully, responsibly and equitably to strengthen educational outcomes. This requires a clear understanding of where schools stand today, the capabilities and infrastructure they require, and the safeguards that must accompany adoption.

It is in this context that this study is particularly timely. By examining the evolving universe of AI applications across the K-12 education value chain, assessing the current state and maturity of adoption, and drawing upon experiences from schools and other stakeholders, the study seeks to bridge the gap between the potential of AI and its practical application within educational institutions. Importantly, the inclusion of primary research and outcome-oriented case studies brings an on-ground perspective to the discussion, helping identify not only where AI is being used, but where it is beginning to demonstrate meaningful value.

The study also recognizes that technology adoption cannot be viewed in isolation. Effective integration of AI requires an enabling ecosystem comprising institutional leadership, teacher preparedness, appropriate infrastructure, data governance, student safety and privacy, and clearly articulated frameworks for responsible use. Schools will need to make considered choices about technology and partnerships while ensuring that innovation remains aligned with their fundamental educational purpose.

India has an important opportunity to shape an approach to AI in education that reflects its own priorities and realities while drawing upon relevant global experience. This will require sustained collaboration among Government, educational institutions, industry, technology providers, academia, and other stakeholders. FICCI has consistently sought to facilitate such dialogue between Government and industry and to contribute towards policy frameworks that enable innovation while safeguarding the interests of learners and institutions.

I hope that the findings and frameworks presented in this report will serve as a useful reference for school leaders, policymakers, and the wider education ecosystem as they navigate their respective AI journeys.

As we look ahead, our endeavour must be to ensure that Artificial Intelligence strengthens, rather than substitutes, the human foundations of education. Technology must ultimately remain an enabler supporting teachers, empowering learners, and enabling institutions to deliver education that is more effective, inclusive, and future-ready.

FOREWORD FROM ARISE

Dr. Arunabh Singh
President, ARISE
Director & Co-founder, Nehru World School
& Healthy Planet Schools

Every leap in technology arrives with the same worry: that it will make us less than we were.

The worry is older than we remember. Socrates cautioned that writing would weaken memory. When the printing press filled Europe with books, scholars warned of an abundance no mind could absorb. The calculator would end arithmetic. The internet would end reading. Each time, something real did change. And each time, the capacity that seemed threatened did not vanish. It moved. Memory made room for reasoning. Reading became a universal skill rather than a rare one.

Artificial Intelligence brings the old worry back with unusual force. It touches on how students learn, how teachers teach, how knowledge is accessed and assessed, and eventually how we think about the purpose of education itself.

History does not tell us the fears were foolish. It tells us the outcome was never decided by technology. It was decided by how people adapted: what they chose to protect, what they chose to teach differently, and how quickly they learnt. The invention of the book did not produce readers. Teachers did.

That is the spirit in which this study has been prepared.

For school leaders, the question is no longer whether AI will have a role in education. The questions that matter are practical. Where can it genuinely improve learning and institutional effectiveness? What capacities must a school build to use it well? What must be safeguarded as adoption grows? And how do we make sure the technology serves the learner, and not the other way round?

These questions carry particular weight in India. Our schools differ enormously in readiness, infrastructure, capability, and experience with technology. There can be no single pathway to AI adoption. The honest starting point is to understand where a school stands today, and then chart a considered route towards where it wants to be.

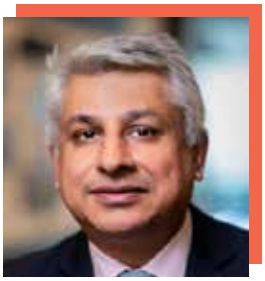
At ARISE, our work with school leaders keeps returning us to one lesson: meaningful change rarely comes from technology alone. It comes when leadership, people, processes, culture, and technology move together. AI can extend what a good educator is able to do and surface insights that were once out of reach. Its impact will depend on the choices that surround its use.

The teacher remains at the center of those choices. As information becomes ubiquitous, the distinctly human dimensions of education become more valuable, not less. Curiosity. Judgement. Empathy. Mentorship. The ability to make meaning of what one knows. No earlier technology managed to replace these, and there is little reason to believe this one will.

By combining primary research with case studies, expert perspectives, global benchmarks and an AI maturity framework, this study helps schools move from individual experimentation to responsible institutional practice. ARISE exists to help schools learn from one another and from evidence. In a field moving this quickly, learning together is how we keep pace.

Every generation before us has stood where we stand, uncertain whether a new tool would diminish the human mind or enlarge it. Every generation that adapted with care found that it enlarged it. The future of education will be shaped by technology. Its purpose will continue to be shaped by people. Our responsibility is to bring the two together thoughtfully, for every learner.

FOREWORD FROM EY-PARTHENON



Amitabh Jhingan

Partner, EY Parthenon International Education Practice
EY Global Education Sector Leader

Artificial intelligence is rapidly reshaping how organizations operate, make decisions, and create value. Education will be no exception. Yet, in K-12, the opportunity presented by AI comes with an important responsibility: technology must ultimately serve the needs of learners and educators, rather than become an end in itself.

Across schools, we are already seeing widespread adoption of AI and AI tools— from lesson planning and content creation to personalized learning, assessment, and school operations. However, adoption remains uneven. While some institutions are beginning to integrate AI into their strategy and workflows, many are still determining where to begin, what to prioritize, and how to translate promising experiments into sustainable practices.

The next phase of AI adoption must therefore move beyond experimentation towards purposeful, outcome-oriented, and institution-wide adoption.

This report, developed by EY-Parthenon in collaboration with ARISE, is intended to help schools make that transition. Drawing on perspectives from school leaders and educators, primary research, case studies, policy developments, global benchmarks, and expert views, it seeks to answer three practical questions:

Where can AI create value? Where is your school today? And what should you do next?

Importantly, the report goes beyond identifying opportunities. It focuses on operationalizing AI within the realities of a school — helping institutions prioritize use cases, determine the capabilities and resources required at different stages of maturity, establish responsible governance, assess technology choices, and align people, processes, data, and infrastructure for adoption at scale.

There is no single AI roadmap that will work for every school. The starting point, resources and aspirations will differ. What matters is having a deliberate pathway to move forward — starting with the right problems, building the right governing foundations, measuring what works and scaling responsibly.

Our hope is that this report serves not simply as a view of what the future of AI in K-12 could look like, but as a practical guide for school leaders seeking to make that future work in their institutions.

PREFACE

Dear Reader,

If you are a school leader, you are balancing learning outcomes, parent expectations, teacher capacity, student wellbeing, compliance, and the day-to-day realities of running a school.

If you are a teacher, you are managing classrooms, lesson planning, assessments, individual student needs and an ever-growing set of expectations on your time.

And if you are part of the school's operating staff, you are keeping increasingly complex academic and administrative systems running - often with limited time and resources.

Now, add AI.

Hundreds of new tools and rapidly changing capabilities present a significant opportunity, yet adoption in schools often remains slow. This inertia stems from slow operational processes and the chaotic day-to-day environment at the principal's level, where urgent priorities compete for limited time. Navigating questions around student safety, academic integrity, and responsible use without a cohesive plan creates fragmented experimentation and investment without clear outcomes - highlighting the urgent need for a systemic, rather than piecemeal, approach to AI implementation.

This report recognizes that schools do not need another list of things they should be doing.

Instead, it is designed to help educators cut through the noise: understand where AI can genuinely help, assess where their school is today, and identify the small steps for tomorrow.

METHODOLOGY

This knowledge report uses a **multi-part research approach**, bringing together secondary research, primary research and real-world evidence to develop a practical view of AI adoption across K-12 education.

Secondary research | Establish the evidence base

Review of Indian and global research covering AI in education and adjacent sectors, policy and regulatory developments, emerging use cases, technology and infrastructure requirements, responsible AI considerations, and evidence on adoption and impact.

Primary research | Understand the reality on the ground

Quantitative inputs from **27 school leaders, principals, teachers** and other stakeholders through surveys and qualitative interviews with **15+ experts** to understand how AI is being used today, where schools are seeing value, barriers to adoption, and the capabilities required to progress.

Case studies & benchmarks | Learn from what is working

Analysis of 10 Indian and global education systems, schools and AI implementations to identify outcome-oriented use cases, emerging practices and lessons from implementation — including what worked, what did not and the conditions required for success.

Expert perspectives | Challenge and enrich the findings

Perspectives from education, academia, EdTech and the broader AI ecosystem to test emerging hypotheses and bring a forward-looking lens to the implications for K-12 education.

Insights across these four sources are synthesized to identify areas of convergence and divergence and inform the report's **AI maturity diagnostic, priority use cases and stage-specific actions.**

The objective is not to prescribe a single AI roadmap for every school, but to provide an **evidence-based decision framework that schools can adapt to their own starting point, priorities, resources and aspirations.**

EXECUTIVE SUMMARY

Artificial Intelligence presents a transformative opportunity for K-12 education, yet adoption across Indian schools remains predominantly fragmented and ad-hoc. School leaders face a dual challenge: preparing students for an AI-driven workforce while simultaneously leveraging AI to enhance pedagogical quality and administrative efficiency ("The Dual AI Imperative").

This report provides K-12 leaders with an evidence-based decision framework to transition from unstructured experimentation to purposeful, institutionalized adoption at scale.

Outlined here in are synthesized insights through a multi-part research combining global and Indian policy and literature review, **a survey of 27 K-12 educators, interviews and focus groups with 15+ school leaders and teachers, and global benchmarks and expert perspectives** from organizations including UNESCO, OECD, Harvard HGSE and TeachAI.

What we learnt as part of our research was that while awareness and individual teacher usage are high (51%[1] of EdTech-using teachers engage with GenAI), institution-wide integration remains low (only 13%–38%[2] reach advanced/structured deployment). Specifically, the research signals that schools face six operational barriers to responsible AI adoption.

- **Leadership and culture:** Limited leadership fluency and a risk-averse, operational culture that slows decision making and scale.
- **Teacher Capability:** Teachers need more practical training, confidence and time to integrate AI into their everyday workflows.
- **Policy and Governance:** Lack of clear guidelines on acceptable use, academic integrity and student safety creates uncertainty and hesitation.
- **AI Budget and ROI:** Budget constraints and unclear or unproven ROI make it difficult to move from pilots to scaled, long-term adoption.
- **Data & Infrastructure:** Concerns around data privacy, integration with existing systems and inadequate infrastructure limit adoption, especially at scale.
- **Curriculum & Systemic Barriers:** Rigid curriculum structures and high-stakes examinations continue to reward traditional modes of learning, limiting how far AI can be integrated in classrooms.

[1] BaSE 2025 Report

[2] QS I-GAUGE survey, 2026

To address these challenges and achieve sustainable impact, schools must first evaluate their current state based on the **AI Adoption Maturity Journey** below, moving from unstructured experimentation to full institutional integration:

STAGE 1: AI Aware	STAGE 2: AI Enabled	STAGE 3: AI Forward	STAGE 4: AI Native
Individual Experimentation Ad-hoc usage by motivated teachers using open free tools without formal policy or coordination.	**Structured Pilots** Targeted trials in selected departments with basic guardrails.	**Multiple Scaled Use-Cases** Proven value from AI formally deployed across teaching, assessment, and school operations.	**Institution-Wide Integration** AI is completely embedded into core culture, workflows, data systems, and strategic governance.

To navigate this maturity journey effectively, schools need a clear set of guiding principles. The **AIM Framework - Adopt** the right mindset, **Impact** before Scale, **Mobilize** the ecosystem - is designed to emphasize the thinking, strategic focus, and stakeholder engagement required to move seamlessly from one maturity stage to the next.

Operationalizing the AIM Framework across your school's maturity stage relies on practical, actionable toolkits. The six resources below offer structured blueprints, standards, and strategic pathways designed to support implementation at every step.

School AI Policy Blueprint

- Establish a tiered governance framework classifying usage into AI-Prohibited, AI-Assisted, and AI-Required levels across academic tasks.

Student AI Literacy

- Build age-progressive AI capabilities grounded in computational thinking and OECD human-centered principles.
- Emphasize critical questioning, fact-checking, and bias recognition over passive tool consumption.

Teacher Empowerment & Time Protection

- Develop staff confidence through a 4-phase capability pathway progressing from basic literacy to advanced peer coaching.
- Protect time saved through AI by actively scheduling dedicated collaboration windows and committees.
- Focus professional development on practical, day-to-day applications.

Data Protection Architecture

- Align technical and data guardrails strictly with the DPDP Act 2023 and DPDP Rules 2025 mandates.
- Mandate commercial enterprise agreements with zero data retention to protect student privacy and prevent model training.
- Implement role-based access controls and require third-party security certifications from vendors.

Prioritisation Strategy

- Leverage the AI Use Case Prioritisation Funnel - a tool that helps progressively narrow the universe of AI use cases to identify the one or few that best support the school's objectives and can be delivered with its available capabilities and resources.

Infrastructure & Tool Selection

- Prioritize enterprise solution partnerships to avoid the engineering overhead of custom internal builds.
- Evaluate tools similar to the Tulna Evaluation Framework across pedagogical alignment, content usability, and vendor data integrity pillars.

Sources: OECD & European Commission (2026); Government of India, Ministry of Electronics and Information Technology (2023, 2025); EdTech Tulna (2026); TeachAI (2025); UK Department for Education (2026).

AI transformation in K–12 will be defined not by speed, but by clarity of purpose and keeping students at the center. By solving real learning needs, empowering teachers, strengthening governance and measuring outcomes, schools can move from experimentation to responsible, evidence-led scale - protecting student agency while unlocking AI's potential.

THE DUAL AI IMPERATIVE FOR K-12

Preparing Students for the AI World

Artificial intelligence is rapidly transforming the workplace, reshaping how organizations operate and changing the very nature of work. The World Economic Forum estimates that **39% of workers' existing skills will be transformed or become outdated by 2030**. AI and big data are among the fastest-growing skills, but technology skills alone will not be sufficient. Creative thinking, resilience, flexibility, curiosity, lifelong learning and leadership are also rising in importance.[3]

The future therefore requires a combination of:

AI & digital fluency
understanding and working effectively with emerging technologies

Higher-order thinking
questioning, reasoning, and problem solving

Human capabilities
collaboration, communication, adaptability and judgement

Responsible citizenship
understanding the ethical implications and use of technology

AI Adoption in K12 schools

As schools navigate this transformation, adjacent industries offer critical lessons on driving value while managing risk.

Sector	How AI is Leveraged	Key Takeaway for K-12 schools
Healthcare (Diagnostic Assistance & Triage)	AI algorithms analyze medical imaging to assist radiologists in early disease detection, while automated triage bots handle routine patient inquiries.	Augmentation over replacement: AI scales human expertise and accelerates early diagnosis, but expert human judgment remains the non-negotiable decision-maker. School leaders must similarly treat AI as a co-pilot for educators, not a substitute for pedagogical oversight.
Finance (Fraud Detection & Hyper-Personalized Banking)	Financial institutions leverage predictive models to analyze transaction patterns in real time, detecting anomalies and tailoring financial advice to individual user habits.	Data-driven personalisation at scale: By unifying fragmented data, organizations can deliver proactive, individualized experiences while maintaining continuous risk monitoring. Schools can apply this to early-warning learning analytics and tailored intervention pathways.
Retail (Supply Chain & Demand Forecasting)	Global retailers use predictive AI to forecast inventory demand, optimize logistics routes, and reduce operational waste.	Operational efficiency unlocks core value: Streamlining administrative and logistical workflows frees up organizational capacity to focus on core human-centered service delivery—a direct parallel to automating administrative school burdens to return time to teaching.

[3] World Economic Forum, The Future of Jobs Report 2025 (Geneva: World Economic Forum, 2025).

Dual Imperative for K12 Education

Schools must prepare students for an AI-driven world while simultaneously leveraging AI to enhance teaching, learning, and operational efficiency. Beyond classroom instruction, AI offers significant potential to streamline school operations - such as optimizing school safety and compliance needs, automating routine administrative tasks, and streamlining resource allocation across departments - thereby enabling leaders to make better-informed decisions.

But adoption without purpose also carries risks. Questions around accuracy, bias, privacy, student safety, academic integrity, equity and over-reliance on technology require schools to make deliberate choices. UNESCO similarly calls for a human-centred approach to GenAI that combines opportunity with appropriate policy, capacity and safeguards.[4]

This creates the need for a practical roadmap for AI adoption in K-12.

This report seeks to help schools move from **awareness to experimentation to purposeful adoption and responsible scale**. The objective is not to encourage schools to adopt AI for its own sake, but to enable them to **prepare students for the future while using AI thoughtfully to strengthen teaching, learning and school effectiveness.**

[4] UNESCO, Guidance for Generative AI in Education and Research (Paris: UNESCO, 2023).

AI VISION FOR K-12

The most important question for schools is not how quickly they can adopt AI, but what kind of learning system they want to build as AI becomes part of everyday life.

As AI becomes increasingly embedded in how people learn, work and make decisions, schools need a clear view of what responsible adoption should look like. This section establishes that direction for K-12 education. It defines the role AI can play in strengthening learning, extending teacher capacity and improving school effectiveness, while preserving human judgement and student agency. It also maps AI opportunities across the K-12 value chain, examines how education systems globally are approaching adoption, and draws on expert perspectives to identify the principles that should guide schools as they begin their AI journey.

This direction is increasingly reflected in the frameworks being developed by leading international organizations.

UNESCO places human agency, inclusion, rights and learner wellbeing at the centre of AI in education.[5]

The OECD and European Commission define AI literacy as the knowledge, skills and attitudes needed to understand AI, critically evaluate its outputs and use it ethically and creatively.[6]

Brookings argues for AI that supports learning rather than simply supplying answers, while protecting against over-reliance.[7]

The International Baccalaureate and Cambridge International similarly emphasise inquiry, authentic student work, educator agency, safety and evidence of pedagogical value. (UNESCO, 2025; OECD & European Commission, 2026; Brookings Institution, 2026; International Baccalaureate, 2026; Cambridge International, 2026)[8]

Turning this vision into practice requires moving from aspiration to the specific problems schools are trying to solve. AI will not create value in the same way everywhere: the role it can play in supporting a student is different from the role it can play for a teacher, an assessor, a parent, a school leader or an administrative team. Each context carries a different educational purpose, level of human oversight, data requirement and risk profile. The practical question is therefore not simply "Where can AI be used?", but "Where can AI solve an existing learning or operating problem without weakening the human capabilities education is meant to build?"

Rather than organizing opportunities around technology categories, AI can support student learning, teacher work, assessment, parent engagement, school operations and leadership through a value chain approach and use this to prioritize use cases based on impact

[5] Organisation for Economic Co-operation and Development and European Commission, AI Literacy Framework for Primary and Secondary Education (2026).

[6] Brookings Institution, Center for Universal Education, A New Direction for Students in an AI World (2026).

[7] International Baccalaureate Organization, Artificial Intelligence in Learning, Teaching and Assessment (2025-26).

[8] Cambridge International Education, Artificial Intelligence in Teaching, Learning and Assessment and guidance on generative AI in coursework (2025-26).

K-12 VALUE CHAIN

K-12 Value Chain (from enrolment to lifelong learning)	Students — Personalised learning and holistic growth	Teachers — Higher impact teaching and mentoring	School Function — Efficient, safe and future-ready schools
1 **Access & Admissions** — Attract and enrol the right learners	• Scholarship eligibility & application assistant • Orientation AI agent • New-student profiles & class grouping	• Interview support • Application screening • SEN intake summaries	• Enrolment & capacity forecasting • Document audit & enrolment records • Admissions chatbot
2 **Curriculum** — Relevant, future-ready learning pathways	• Curriculum/syllabus navigator • Project ideation & AI electives • Subject/stream to career mapping	• Curriculum question bank • Content adaptation by cohort • Activity suggestions	• Curriculum gap analysis • Version management & board submissions • Shared resource repositories
3 **Learning & Personalisation** — Relevant, future-ready learning pathways	• Adaptive practice & read-aloud tutor • Multilingual support • Personalised study tools & support plans	• Differentiated lesson plans • Intervention suggestions • Personalised resources	• Learning-outcome dashboards • Equity gap monitoring • Usage analytics & accessibility monitoring
4 **Evaluation** — Assess, inform and improve	• Adaptive quizzes & test practice • Self-assessment & revision • Oral/written response practice	• Question generation & rubric creation • Draft grading support • Assessment-informed interventions	• Performance benchmarking • Results processing & record validation • Assessment data anomaly detection
5 **Student Support** — Support well-being and inclusion	• Study coach & interview practice • Accessibility tools • Well-being and career exploration	• At-risk student alerts • IEP drafting & mentoring summaries • Intervention suggestions	• Intervention effectiveness analysis • Parent communication (drafting/translation) • Attendance & risk dashboards
6 **Operations** — Run safe, efficient and enabling day-to-day operations	• Timetable assistant • Library/school services enquiry bot • AI academic calendar	• Attendance reports • PTA meeting summaries • Substitute planning	• Workforce, budget and resource planning • Compliance monitoring & route optimisation • Predictive maintenance (IoT)
7 **Capability Training** — Build AI readiness for all	• AI literacy modules • Digital-skills diagnostics	• AI teaching assistant bot • Teaching practice feedback • AI competency diagnostics	• Leadership simulations & capability-gap analysis • Talent recruitment & onboarding agents • Role-specific training plans
8 **Governance & Safeguards** — Use AI responsibly and safely	• Secure access & age controls • Academic-integrity prompts • AI literacy on responsible use	• AI knowledge assistant • Citation/source checking • AI content verification	• AI-use audit logs • Cyber-threat monitoring • Vendor management tools

Enabled outcomes

Future-ready learners (understand, question and use AI responsibly)

Operational efficiency (more time and resources for teaching and learning)

Built on trust

Safe & age-appropriate use | Privacy, safeguarding & equity | Human-led decisions

While mapping these potential use cases illustrates where AI can be applied, understanding how to successfully operationalize them requires looking beyond possibilities to real-world execution.

GLOBAL BENCHMARKS

We have studied global examples where AI adoption is beginning to move beyond isolated experimentation towards more structured integration into teaching, learning and school operations. As part of our analysis of this transition we have tried to understand— what problems are being prioritized globally, how teachers are being supported, how AI is being embedded into existing platforms and classroom routines, and what evidence and safeguards are guiding scale. These examples are reference points for understanding what more mature adoption can look like in practice.

Country	How is AI adopted?	Takeaway for schools
	**In Espírito Santo Brazil** the *State public-school system used* AI enabled writing feedback and addressed a clear teacher bottleneck: frequent, individualised feedback. A randomised evaluation across 178 public schools and about 19,000 students found essay-score gains of around 0.09 standard deviations, alongside more practice and feedback.[9]	**Define the problem:** Start with a clearly articulated need - for school, teacher, parent, or student - and test whether AI is >genuinely improving outcomes before scaling.
	**Broward County, Florida**, *public school district* moved from fragmented experimentation to a district-wide governance model. An AI Task Force spanning teachers, principals, students, IT and administrators set common guidance, while school AI liaisons, role-based training and prompt libraries supported a 20,000-license Copilot rollout.[10]	**Institutionalise Adoption:** Use cross-functional ownership, local champions and common guidance to turn scattered experimentation into a system capability.
	**South Australia**, *Public-school system uses* EdChat, a safe, custom generative AI chatbot designed for public school systems in partnership with Microsoft, was trialled with more than 10,000 students and 2,000 staff before wider rollout. Teachers used it for lesson planning and adaptation; students used it for explanations, practice and quizzes. The review found 94% of student interactions were curriculum-related.[11]	**Embed safe guardrails:** Give teachers and students an approved AI environment with built-in safeguards and clear boundaries, rather than leaving each classroom to navigate consumer tools independently.

[9] Abdul Latif Jameel Poverty Action Lab (J-PAL). Evaluation of AI-Enabled Writing Feedback in Espirito Santo Public Schools, Brazil. 2024.
[10] Northwest Council for Computer Education (NCCE). Broward County Public Schools Districtwide AI Implementation Case Study. 2026.
[11] South Australia Department for Education. EdChat Insights Report. Adelaide: Government of South Australia, 2025

Country	How is AI adopted?	Takeaway for schools
	**The Ministry of Education in Singapore** deployed AI-powered features including an Adaptive Learning System (ALS) for mathematics, a Short Answer Feedback Assistant, and a Language Feedback Assistant.[12] Instead of giving raw answers, these tools deliver scaffolded hints based on learning science. Over 70% of educators and 80% of students actively use SLS, significantly cutting grading hours for formative work while keeping pupil data confined within government-controlled servers.[12]	**Leverage shared infrastructure:** Integrate AI into the platforms and workflows teachers already use so curriculum alignment, data controls and teacher oversight can be applied consistently. Shared infrastructure makes quality, oversight and data controls easier to apply consistently.
	**UK Department for Education's** technical guidelines require edtech vendors to enforce age-appropriate content moderation, avoid using children's data or student work to train commercial models, and comply with UK GDPR and *Keeping Children Safe in Education* (KCSIE) mandates.[13]	**Set vendor standards:** Make child safety and data use non-negotiable procurement criteria: require age-appropriate moderation, protect student data and work from commercial model training, and verify compliance before approving a tool.

Across very different systems, a common pattern is emerging: **start with an educational need; support teachers to use AI well; embed successful applications into everyday workflows and shared platforms; retain professional judgement, and scale only with evidence, safeguards and human oversight.**

DESIGN PRINCIPLES FOR AI ADOPTION IN K-12 SCHOOLS

Drawing on perspectives from leading education researchers and institutions we have tried to establish a few design principles that should be used to guide decisions around AI Adoption in K-12 Schools. Across the perspectives, four principles consistently emerge: begin with a clearly defined learning outcome, use AI to deepen rather than bypass thinking, retain teacher judgement and accountability, and scale only where there is evidence of value.

Learning-first adoption would require schools to use AI selectively - where it strengthens learning, extends teacher capacity, and can be governed with confidence.

[12] Singapore Ministry of Education and GovTech Singapore. Student Learning Space: AI-Enabled Adaptive Learning and Feedback Materials. 2024-26

[13] UK Department for Education and Oak National Academy. Guidance on Generative AI Product Safety and Use in Education. 2024-26.

01 Begin with the learning outcome, not the tool

AI adoption should begin with the learning problem being solved. The question is not where AI can be inserted, but whether it can improve feedback, access, practice, teacher capacity or another clearly defined outcome. Introducing AI without a defined educational purpose risks adding activity without adding value.

What this means for schools: Before approving a tool or use case, define the problem, the intended learner or teacher behaviour, and the outcome that should improve.

"We need to shift the narrative - not by asking how we can fit AI into education, but by starting with the end goal: What learning outcomes do we want to achieve, and can AI meaningfully contribute to them?"[14]

Ying Xu, Harvard Graduate School of Education | "AI Can Add, Not Just Subtract, From Learning" (2025)

02 Design AI to deepen thinking, not bypass it

AI can improve task performance without necessarily improving learning. If a tool removes the reasoning, effort, or productive struggle that a task is designed to develop, students may complete work more efficiently while building less independent capability. The emerging direction is towards AI that scaffolds thinking rather than supplies answers.

What this means for schools: Use AI to support the thinking process. Preserve moments where students must attempt, explain, verify, revise and demonstrate what they can do without AI support.

"Use AI tools that teach, not tell."

Brookings Center for Universal Education | A New Direction for Students in an AI World (2026)

03 Keep the teacher as the designer and accountable decision-maker

AI should extend teacher capacity, not displace professional judgement. Teachers remain responsible for deciding when AI is pedagogically appropriate, interpreting its outputs, adapting them to learner context and preserving the relationships and judgement that technology cannot replicate. As adoption becomes more sophisticated, educator agency becomes more important, not less.

What this means for schools: Scale teacher-facing and teacher-supervised uses first. Higher-autonomy student uses should require stronger evidence, safeguards, and human oversight.

"Educators shape how AI is used in learning. This requires professional knowledge, openness to new approaches, school-level governance, and clear accountability for outcomes."[15]

International Baccalaureate | Draft AI Design Principles (2026)

[14] Xu, Ying. "AI Can Add, Not Just Subtract, From Learning." Harvard Graduate School of Education, 2025.

[15] International Baccalaureate Organization. Draft AI Design Principles. 2026.

04 Treat evidence as part of the design - not a post-pilot add-on

Evidence on AI in K-12 is growing quickly, but rigorous evidence of impact remains limited. Stanford SCALE reviewed more than 800 AI-related K-12 studies and identified only 20 with strong causal evidence. Early findings also reinforce an important distinction between performance with AI and durable learning without it: design and pedagogy matter as much as access to the technology itself.

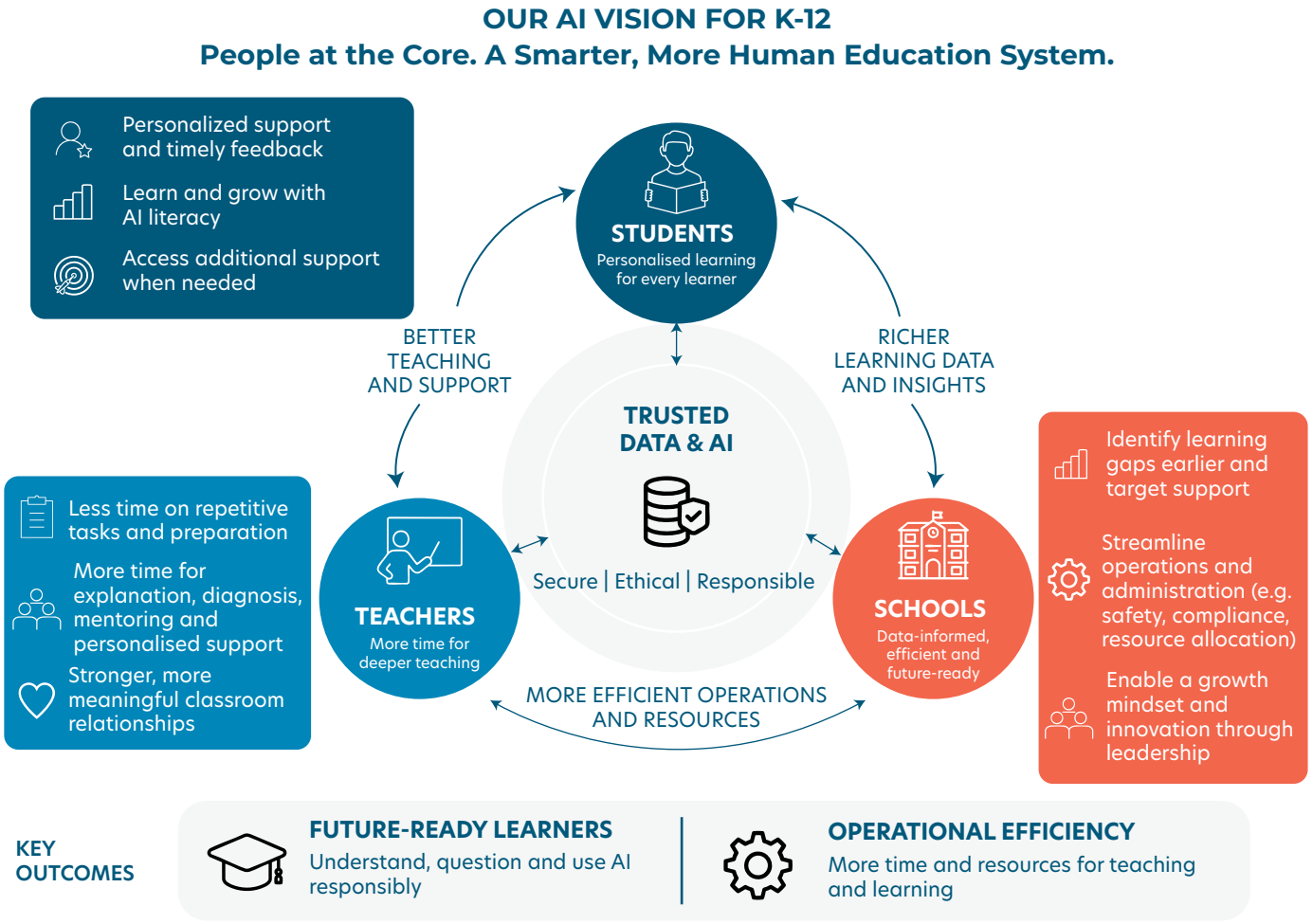
What this means for schools: Establish a baseline, define success measures before a pilot begins, and track learning, teacher, and operational outcomes. Scale should follow demonstrated value - not novelty or usage alone.

"Stay grounded in what research currently shows - and where more evidence is needed. Use evidence of impact to inform policy and buying decisions."[16]

Stanford SCALE Initiative | The Evidence Base on AI in K-12: A 2026 Review

Together, these design principles reinforce the report's central direction: AI should be adopted selectively, with teachers at the center, clear safeguards and evidence of impact. The ideal future is not a classroom in which every interaction is mediated by AI. It is a system in which AI extends the reach of good teaching while preserving human judgement, relationships, and student agency.

In this future, AI is not a separate technology programme sitting at the edge of the school. It becomes a governed capability woven into selected parts of the learning and operating mode. The level of AI autonomy should increase only where the evidence, data, safeguards, and human oversight are strong enough to support it.



[16] Stanford SCALE Initiative, The Evidence Base on AI in K-12: A 2026 Review (2026).

CURRENT STATE OF AI ADOPTION IN K12

While the previous section outlined a vision for purpose-led, human-centered AI in education, understanding the path forward requires an honest appraisal of where schools stand today. This section examines the current landscape across Indian K-12 education, beginning with the evolving policy and regulatory direction shaping institutional responsibilities. It then presents insights from our primary research on the real-world state of adoption, followed by a deep dive into the systemic barriers inhibiting progress across different school boards. Finally, through evidence-based success stories and the AI Adoption Maturity Framework, this section provides school leaders with a practical lens to diagnose their institution's current baseline and chart the next steps in their journey.

INDIAN POLICY & REGULATORY DIRECTION

India's AI-in-education policy has evolved from introducing AI as a discrete skill to embedding AI literacy and computational thinking more broadly. The direction is now towards **integration, teacher capability, governance, shared infrastructure and evidence of impact.**[17]

2019-20

AI enters the curriculum

- CBSE introduced AI as an optional skill subject for Classes IX and XI in 2019.[18]
- By 2024-25, AI was offered by 4,543 schools in Class IX and 944 schools in Class XI, supported by partnerships with Intel, IBM and Microsoft.[19]

2020-23

From a specialist subject to classroom integration

- NEP 2020 broadened the agenda towards technology-enabled, competency-based education, while DIKSHA expanded digital access.[20]
- The National Curriculum Framework for School Education 2023 reinforced interdisciplinary teaching, higher-order thinking and competency-based learning.[21]

[17] NITI Aayog, National Strategy for Artificial Intelligence: #AIforAll (New Delhi: Government of India, 2018).

[18] Central Board of Secondary Education (CBSE). Circular Acad-14/2019: Introduction of Artificial Intelligence as a New Subject from Academic Session 2019-20. New Delhi: CBSE, 2019.

[19] Government of India, Ministry of Education. Parliamentary Response on Artificial Intelligence Education in CBSE Schools. New Delhi, 2025.

[20] Government of India, Ministry of Education. National Education Policy 2020. New Delhi: Government of India, 2020.

[21] National Council of Educational Research and Training (NCERT). National Curriculum Framework for School Education 2023. New Delhi: NCERT, 2023.

Governance and evidence become the next gaps

2023–25

- The Digital Personal Data Protection Act 2023 and Rules in 2025 made consent, data access, retention and vendor use practical school responsibilities.[22]
- At the same time, CBSE had scaled AI participation and teacher training without formally assessing whether the curriculum improved computational thinking or coding proficiency.[23]

2025–26

Towards mainstream AI literacy and shared infrastructure

- The ₹500 crore AI Centre of Excellence for Education points towards shared national infrastructure, Indian-language capabilities and reusable tools.[25]
- The 2026-27 CBSE Computational Thinking and AI curriculum for Classes III-VIII also moves AI towards age-progressive problem-solving, computational thinking and responsible use.[24]

What does the policy journey tell us?

India has moved from treating AI as a discrete skill towards broader integration, and now towards the governance, infrastructure and evidence required to scale its use responsibly. The central challenge is therefore shifting from **defining ambition to enabling effective implementation**. Schools are navigating differences in board-level guidance, institutional readiness, teacher capability and access to infrastructure, creating varied starting points for adoption. The next phase will depend on how effectively schools translate national policy direction into **classroom practice, institutional safeguards, teacher capability and measurable learning outcomes**.

[22] Government of India, Ministry of Electronics and Information Technology. Digital Personal Data Protection Act, 2023. New Delhi: Government of India, 2023.

[23] Government of India, Ministry of Electronics and Information Technology. Digital Personal Data Protection Rules, 2025. New Delhi: Government of India, 2025.

[24] Government of India, Ministry of Finance. Union Budget 2025-26: Budget Speech. New Delhi: Government of India, 2025.

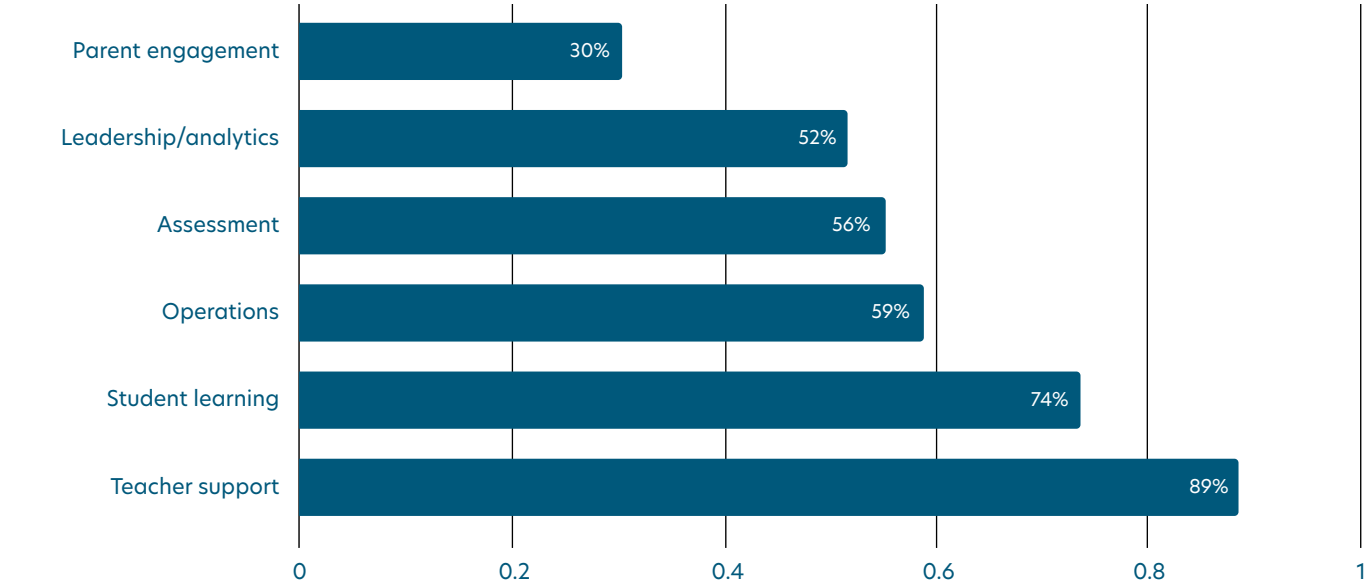
To build a practical view of AI adoption across K-12 education, we conducted three-part primary research across the ARISE network of schools - a quantitative school survey, a case study survey, and a set of qualitative discussions.

At the heart of the research are insights from **27 school stakeholders and 15+ in-depth interviews and discussions with school leaders, principals, teachers, and experts**, providing a grounded view of how AI is being adopted today, where schools are seeing value, and what is holding them back.

The findings that follow surface the **patterns, points of divergence and real-world challenges** shaping schools' journey from experimentation to responsible, outcome-oriented adoption.

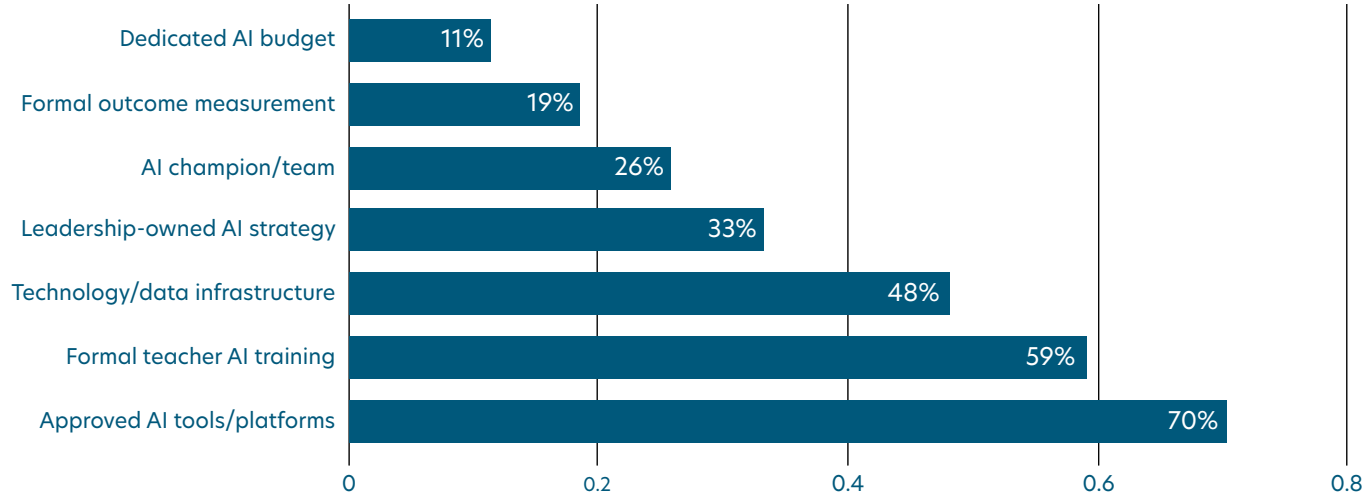
What we have learnt from the research is that artificial intelligence is beginning to reshape education in much the same way it is reshaping the workplace. Unlike earlier waves of education technology, generative AI is widely accessible, easy to use and often adopted by students and teachers before schools have formally decided how it should be used.

Current AI Uses Reported



Source: ARISE-EYP school survey, 2026 (n=27). Multi-select responses.

Institutional Capabilities Reported



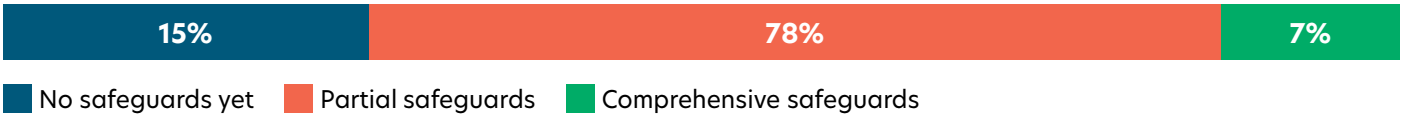
Source: ARISE-EYP school survey, 2026 (n=27). Multi-select responses.

Schools have made greater progress in building teacher capability and introducing basic safeguards than in establishing the leadership ownership, governance, infrastructure, and outcome measurement needed to scale AI systematically.

Where the 27 survey respondent schools sit by dimension

1. AI literacy & student safeguards

proxy: breadth of student safeguards in place



78% have at least one safeguard, but only 7% are comprehensive. Just 30% run actual student training on responsible AI use — the safeguards that exist lean toward restriction, not literacy-building.[37]

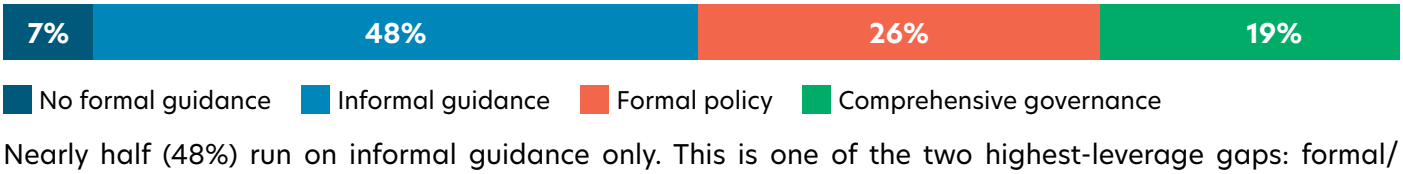
2. Leadership strategy & capacity

proxy: dedicated AI capacity/ownership

52% still run AI in either no capacity or one person's informal effort. Only 33% report a genuinely leadership-owned AI strategy separately; capacity and strategy ownership are both thin at the top.[37]

3. Governance & data protocols

proxy: school's AI governance today



Nearly half (48%) run on informal guidance only. This is one of the two highest-leverage gaps: formal/comprehensive governance is associated with a 38-point jump in adoption maturity.[37]

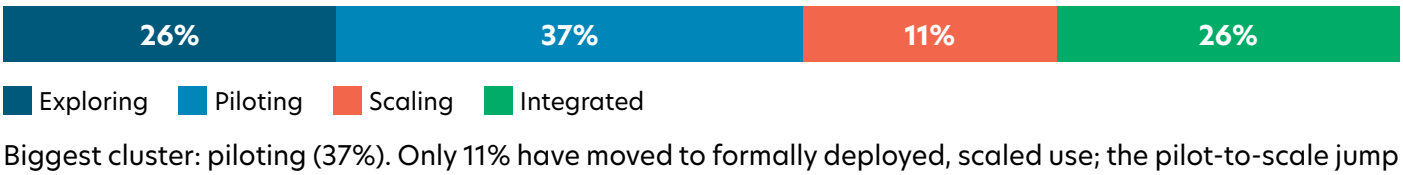
4. Teacher capability

proxy: formal teacher AI training in place

The most-built capability after tool access: 59% have formal training in place. Still, that leaves two in five schools relying on informal, self-directed teacher upskilling.[37]

5. AI use cases

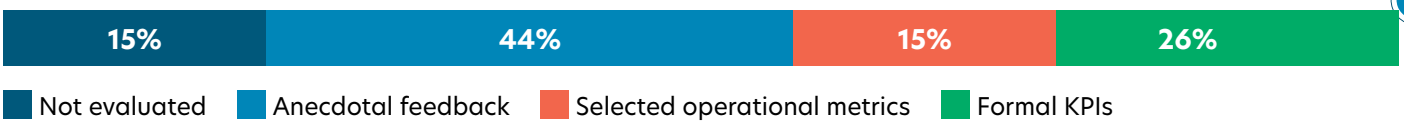
proxy: overall AI adoption stage



Biggest cluster: piloting (37%). Only 11% have moved to formally deployed, scaled use; the pilot-to-scale jump is the single largest gap in the sample.[37]

6. Outcome-based approach

proxy: how AI impact is evaluated



The other highest-leverage gap: 44% still rely on anecdote alone. Structured measurement carries the single strongest statistical association with mature adoption in this sample (+45 points).[37]

7. Technology infrastructure

proxy: technology/data infrastructure in place

The least-built foundation in the map: just under half have the underlying data/tech infrastructure in place. Technology/integration is also cited by 31% as a top-three barrier to scaling.[37]

WHAT SCHOOLS MOVING AHEAD ARE DOING DIFFERENTLY

The FICCI, ARISE, and EYP led School Survey 2026 findings are complemented by case studies, which surfaced examples of AI adoption across teacher workflows, capacity-building, student innovation and adaptive learning. These cases provide a closer look at how schools are translating experimentation into practice.

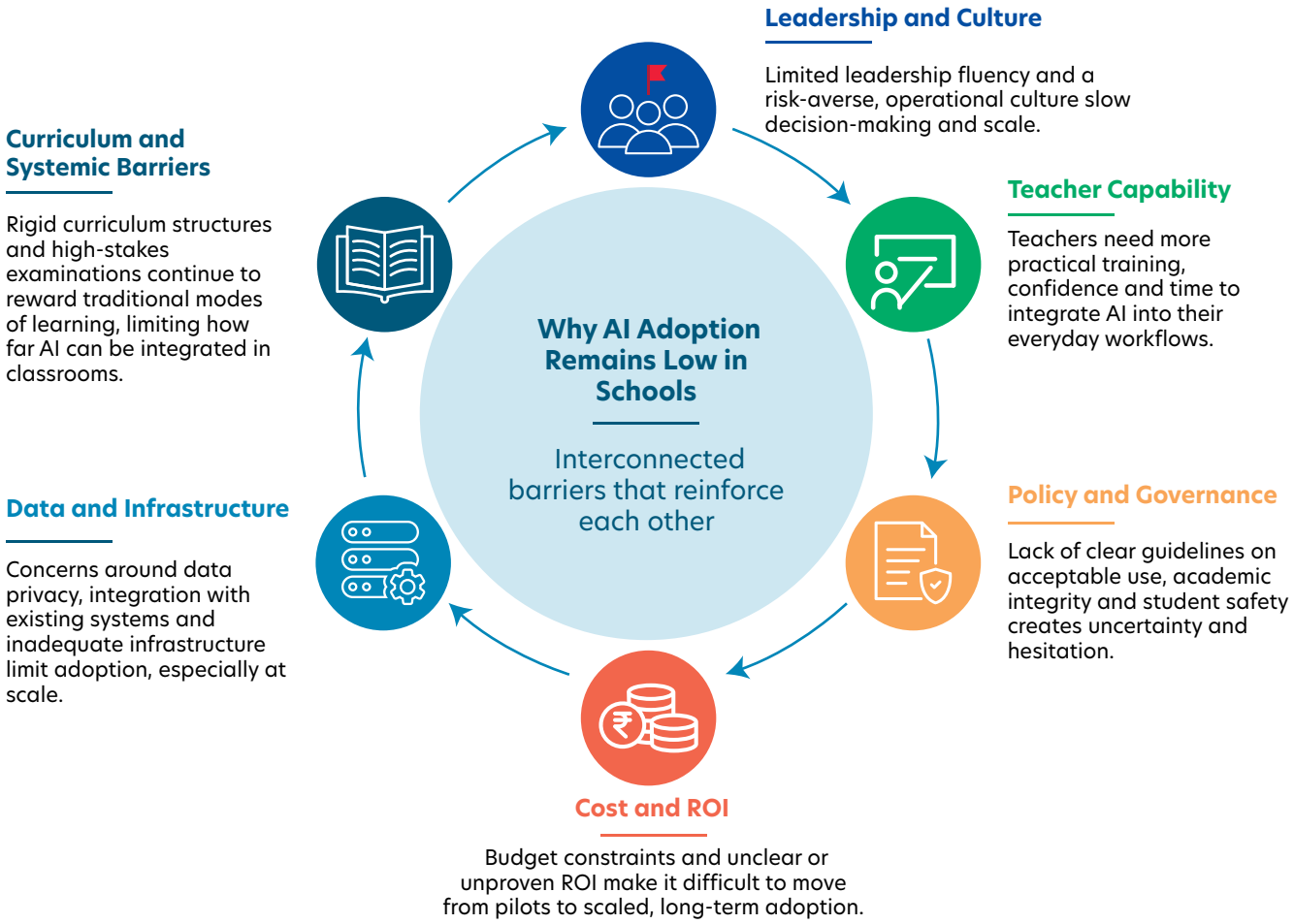
Across the case studies, a consistent pattern emerged: the AI tool itself was rarely what drove the outcome. Meaningful use was instead enabled by the structures schools built around the technology.

Key Insights

- **Let experimentation happen before policy is perfect.** Ungoverned pilots still surfaced real guardrails (human review, accuracy checks, age-appropriate access), so waiting for a formal strategy isn't a prerequisite to starting.
- **Budget training in months and sessions, not a single launch day.** Confidence and daily use only emerged after a sustained, multi-session programme with a named AI champion and a pre-approved toolset.
- **Teach AI as a builder's skill, not just a user's skill.** Students who built real models (CNNs, IoT sensors, decision platforms) developed deeper problem-solving and ethical-reasoning skills than tool-users alone, especially when anchored to a framework like NEP 2020.
- **Treat adoption as an instructional-loop redesign, not a tool rollout.** Gains came from leadership-owned strategy, data infrastructure, and a pre-AI baseline, not the AI tool itself.

CHALLENGES IN ADOPTION

As part of the primary research, we spoke with school leaders and education experts regarding six main challenges: **leadership alignment and school culture, teacher capability and change readiness, policy governance & safeguards, institutionalization, affordability & access, and systemic barriers.**



FICCI, ARISE, and EYP led Survey 2026 (n=27); Outcome definition: "mature" means the respondent selected Scaling or Integrated; "early" means Exploring or Piloting. Structured/formal measurement is associated with a 44.9-point maturity uplift: 63.6% of respondents with structured measurement are Scaling/Integrated, versus 18.8% without it (risk ratio 3.39; Fisher p=0.040; approximate 95% CI 1.11–10.34). Three or more enabling capabilities show the largest uplift at 47.3 points (61.5% versus 14.3%; RR 4.31; p=0.018). Formal/comprehensive governance is directionally strong at +38.3 points, although its p-value is 0.057.[37]

1. Leadership alignment and school culture

Secondary evidence suggests that India does not have an AI awareness problem as much as an institutionalization problem. Teachers are already experimenting; BaSE 2025 found that 51% of EdTech-using teachers use GenAI for teaching or school-related activities. At the same time, the QS I-GAUGE survey found strong leadership intent and willingness to invest in capability, yet only 13% reported advanced, system-wide integration.[2]

The primary research points in a similar direction: AI is already used for teacher support, student learning, assessment, and operations, but the systems around that use are thinner.

We took our research a step further by uncovering the "Why" behind this.

- What we learnt tells us that while leadership intent is important, it is not sufficient. Respondents shared that leadership fluency on practical use of AI remains uneven, impact is rarely measured formally, and scaling introduces new budget and integration requirements. As a result, **AI often remains a collection of promising experiments rather than an embedded organizational capability**.
- School culture also matters. In more hierarchical or operations-led environments, experimentation and teacher-led innovation can be harder to sustain. Several respondents emphasized that leaders need to create space for experimentation, communicate why AI matters and visibly support its use before adoption can spread across the institution.

> *Define your value proposition. That's the first thing I would do. Why are you doing this? What problem are you really solving?"*[37]
>
> **— Chairman, Interview respondent, FICCI, ARISE, and EYP led primary research 2026**

2. Teacher capability and change readiness

The FICCI, ARISE, and EYP led School Survey 2026 results reported **89% of respondents reported AI already being used for teacher support**, making it the most common AI use case reported. However, only **60% said formal teacher AI training was already in place**.[37] This suggests that adoption is often moving ahead of structured capability building, leaving teachers to learn through individual experimentation.

Change readiness is closely linked to workload. In a focus group discussion with principals, one school leader observed that a few teachers initially see learning AI as "added work", even when the intended outcome is to reduce planning or administrative time. Others described a mindset in which using AI can be seen as relying on a "crutch", creating social resistance in addition to a skills gap.[37]

The more successful examples were highly practical. A senior school owner described the effective use of a hands-on teachers' workshop at his school. During the workshop, teachers brought repetitive tasks or data problems and solved them with AI during the session. Once teachers saw immediate value in their own workflow, adoption became easier. This suggests that merely awareness sessions are unlikely to be enough; capability building needs to be sustained, use-case based and connected to the work teachers already do.[37]

> *"Teachers think that learning AI is an added work for them, instead of understanding that it can minimize their work."*[37]
>
> **— Principal, Interview respondent, FICCI, ARISE, and EYP led primary research 2026**

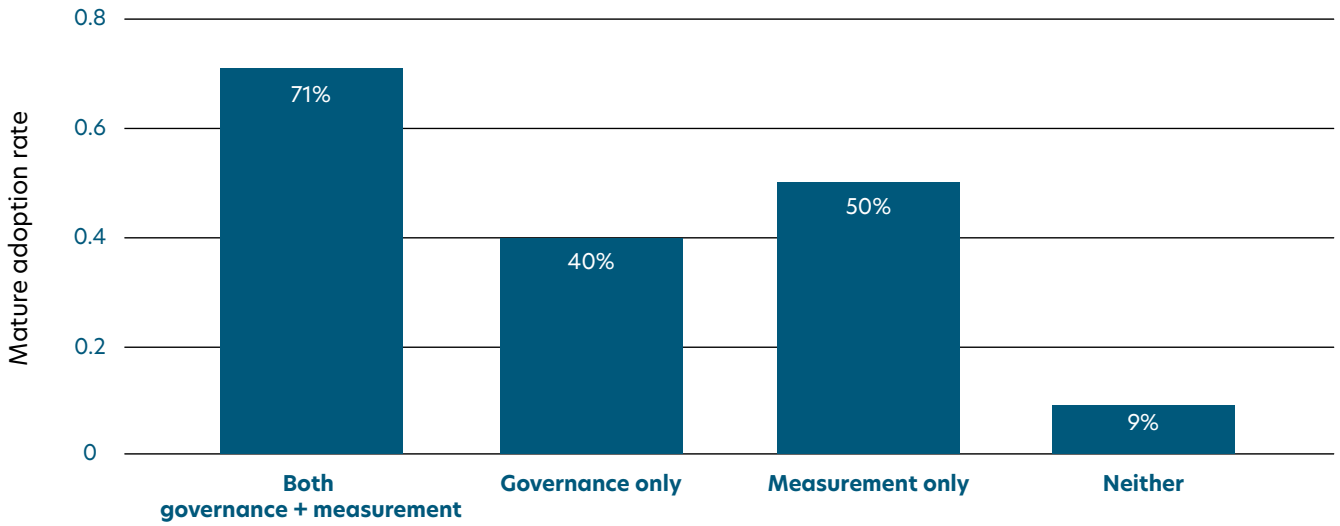
Survey respondents reinforce that teacher readiness depends not only on training, but on the support systems around it — **peer learning, practical use-case based upskilling, internal AI champions and clear guidance on approved tools**.[37]

PEER LEARNING *"Building awareness. Sharing best practices."*[37]	**PRACTICAL UPSKILLING** *"Build AI readiness among educators through focused training on practical, responsible, and effective use of AI in teaching and school operations."*[37]
CREATE AI CHAMPIONS *"Identify and support a small AI champion/team to pilot effective AI tools, train teachers, and share successful practices across departments."*[37]	**TOOLS + GUARDRAILS** *"Provide access to approved AI tools along with clear guidelines and basic training for effective and responsible use."*[37]

3. Policy and Governance

Schools recognize the need for AI guardrails, but governance is still catching up with adoption. Our primary research suggests that governance has greater relevance to maturity when paired with structured measurement. Here, governance defines acceptable and consistent practice; measurement establishes whether that practice creates value. The combination provides a more credible foundation for scaling than either mechanism operating alone.

Maturity by Governance-Measurement Combination



FICCI, ARISE, and EYP led School Survey 2026; Outcome definition: "mature" means the respondent selected Scaling or Integrated; "early" means Exploring or Piloting. Five of seven respondents with both formal governance and structured measurement are Scaling/Integrated (71.4%). The rate falls to 40.0% with governance alone, 50.0% with measurement alone and 9.1% among the seven respondents with neither.[37]

In a survey conducted by Khaitan Public Schools of 136 CBSE teachers, **76% said their schools either have or are developing a formal AI policy, while 91% want clear rules defining when and how students may use AI in academic work**.[25] The gap is therefore less about recognizing risk and more about translating policy into approved-use rules, named ownership, oversight and accountability.

Safeguards are not only about privacy or academic integrity. Interviewees also raised a learning question: **when does AI support student thinking, and when does it replace the cognitive work students still need to do themselves?** An ARISE lead described a deliberately cautious approach to direct AI use among young learners because the long-term effects on foundational writing, mathematics and other core skills remain uncertain

PISA 2025 sharpens the issue for AI. Students who reported using AI for specific schoolwork tasks such as summarizing texts, drafting written assignments, or conducting preliminary research tended to score lower in science than non-users, by around 20 PISA points on average. However, OECD also reports that moderate general-purpose AI use can be associated with similar or slightly stronger performance when students have opportunities to build AI literacy.[26] **These relationships are associations, not evidence that AI use causes lower performance**. They nevertheless support the case for learning safeguards: schools need clearer boundaries around where AI should assist learning and where independent work should be protected.

This uncertainty slows institutional adoption because leaders are reluctant to scale student-facing use without clear boundaries. It can also create inconsistency across classrooms, with similar student behavior treated differently by different teachers. Governance therefore needs to cover not only acceptable use and safety, but also safeguards for learning itself.

> *"The time has come when we need to formulate a policy."*[37]
>
> **— Principal, Interview respondent, Principal FICCI, ARISE, and EYP led primary research**

[25] Khaitan Public School, Survey of 136 CBSE Teachers on AI Policy and Use (2026).

[26] Organisation for Economic Co-operation and Development, PISA 2025 Results, vol. 1 (2026); and PISA 2022 Results, vol. 2 (2023). The reported relationships are associative and should not be interpreted as causal effects.

4. Affordability and demonstrated value

Primary research suggests that affordability becomes a more significant constraint as schools move from individual experimentation to institution-wide adoption. Of the 27 schools surveyed, only 11% reported having a dedicated AI budget. Free tools allow teachers and leaders to test AI with limited financial commitment, but scaling can require enterprise licenses, specialized education platforms, integration with existing school systems and most importantly time for implementation support.[37]

This distinction was particularly clear in the interviews. A lead member at ARISE described cost as the principal constraint in moving further despite strong willingness to adopt AI. Free tools allowed substantial experimentation, but enterprise accounts and specialized reading or mathematics platforms introduced costs that were difficult to absorb, particularly where schools had limited flexibility to increase fees.[37]

For schools operating within constrained budgets, these costs can limit both the pace and scale of adoption. Interviewees also highlighted challenges in identifying solutions that meet schools' specific needs, including uneven quality across providers, expensive international products, and limitations in areas such as regional-language support.

Another school owner highlighted the need to connect AI with institutional systems such as the ERP and avoid different teams independently using multiple tools for the same workflows. This represents a second generation of digital readiness: schools may already have devices, connectivity, and common platforms, but scaled AI adoption requires a small set of approved tools, clear access rights, integration with existing systems and accountable ownership.[37]

Access to fit-for-purpose solutions is part of the same challenge. The focus group discussion with principals pointed to a crowded provider landscape, uncertainty over which tools best meet specific teacher or student needs, and the need for dedicated AI budgets as adoption becomes more systematic.

To synthesize, interviewees highlighted the need for clearer use-case prioritization, common workflows, approved tools, stronger integration with existing school systems and clear ownership of implementation. Several also cautioned against exploring tools for their own sake. **Schools need to begin with a defined problem, test whether AI meaningfully addresses it and use evidence to determine whether a pilot should be scaled**.[37]

> *"The problem happens when you're not able to show value... they're doing extra work, and they're not getting benefits."*
>
> **— Interview respondent, FICCI, ARISE, and EYP led primary research 2026**

5. Curriculum and systemic barriers

Schools can only change classroom practice so far when curriculum expectations and high-stakes assessment continue to reward traditional modes of learning.

This emerged as one of the clearest systemic barriers in the qualitative interviews, even though it was not a standalone option in the structured barrier coding. Principals in the FGD repeatedly described the examination system as a constraint on AI adoption. **Where students are ultimately judged through high-stakes, individual and often pen-and-paper examinations, teachers have strong incentives to continue teaching towards those formats**.

One of the CBSE school principals summarized the issue directly: "Our limitation is the exam system." Other participants similarly argued that AI adoption has to work backwards from assessment. A clear direction is needed from education boards and government on what is expected and permitted use of AI.37

While the National Education Policy (NEP 2020) mandates AI integration, the structural reality differs deeply between CBSE, CISCE, State Boards, and International (IB/Cambridge) schools. The core challenges stem from stark inequalities in freedom to change lessons, infrastructure, and budget.

IMPACT OF AI ON STUDENTS

AI use among students is not waiting for schools to catch up. As students increasingly use AI to learn, search, create and seek advice, lack of institutional adoption can create a gap between access to AI and the literacy to use it responsibly. This has been reflected in a few areas outlined below.

1. AI bias and hallucinations

Generative AI can confidently produce inaccurate or biased information. OECD warns that its authoritative tone can create an "illusion of infallibility," making the ability to question and verify AI outputs increasingly important.[27]

For children, the risk is compounded by limited AI literacy. UNICEF's consultations with children aged 10–17 found misconceptions about AI accuracy and privacy, including indications that some children place significant trust in chatbot responses or do not fully understand hallucination and data risks.[28]

2. Using AI as a shortcut rather than strengthen learning

AI can complete essays, solve problems and generate answers without students necessarily developing the underlying skills. Recent Common Sense Media research found that 39% of U.S. teens surveyed felt they miss out on learning when AI completes assignments, even while many also report that AI helps them understand schoolwork.[29]

3. Struggling to distinguish real from synthetic

AI generated sophisticated images, audio and videos are becoming increasingly easy to create. UNICEF identifies deepfakes and AI-generated sexual imagery among emerging risks for children, reinforcing the need for education around verification, consent, digital citizenship and responsible creation.[28]

4. Treating AI as a trusted confidant

Young people may also turn to conversational AI for personal or emotional advice. The American Psychological Association cautions that adolescents can have difficulty distinguishing simulated empathy from genuine human understanding and calls for stronger safeguards around AI companions and mental-health applications.[30]

Common Sense Media found that among U.S. teens who encountered AI blocking at school, 59% reported switching to a personal device; only 27% said a teacher had ever discussed how to use AI safely. UNESCO made a similar point earlier: without institutional guidance, generative AI risks becoming embedded in education in **unplanned ways with unintended consequences**.[29]

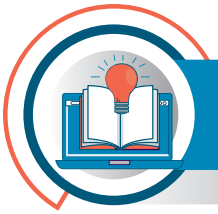
The answer is therefore neither unrestricted adoption nor blanket prohibition. Schools have an opportunity and duty to make student AI literacy a priority It is only when students' long-term well-being and outcomes are kept at the center, that schools can be rightly addressed as AI ready.

[27] Organisation for Economic Co-operation and Development, OECD Digital Education Outlook 2026: Exploring Effective Uses of Generative AI in Education (Paris: OECD, 2026).

[28] UNICEF, guidance and consultations on AI and children, including child safety, privacy, deepfakes and synthetic content (2025-26).

[29] Common Sense Media, research on teens' use of generative AI for schoolwork and school AI restrictions (2025-26).

[30] American Psychological Association, health advisory on generative AI chatbots and wellness applications for adolescent mental health (Washington, DC: APA, 2025).



FROM EXPERIMENTATION TO IMPACT: A PRACTICAL ROADMAP FOR RESPONSIBLE AI ADOPTION

To translate this vision into real-world impact, schools must move beyond fragmented experimentation toward a structured, intentional approach to AI adoption.

This section outlines a practical roadmap for responsible AI integration, featuring stage-gated guidelines tailored to school maturity and curriculum, and the core guiding principles of the AIM Framework.

Our conversations with school leaders suggest that AI adoption often starts from the bottom-up and rarely follows a linear technology rollout. Leaders and teachers are experimenting across student learning, teacher support, assessment and operations, but relatively few have institutionalized AI across the school. The challenge increasingly shifts from "What can AI do?" to "Where should we focus, how do we know it works, and what needs to change for it to scale responsibly?"[37]

There is no single AI adoption blueprint for every school. The appropriate next step depends on the school's starting point, priorities and resources. **Progress therefore means solving the challenges of the current stage before adding more use cases.**

STAGE-GATED GUIDELINES FOR SCHOOL AI ADOPTION

This framework provides school leaders with a structured, stage-by-stage guide to evaluate their current AI maturity, address critical operational questions, and execute high-priority action items while avoiding common pitfalls.

Dimension	AI AWARE (Individual Experimentation)	AI ENABLED (Structured Pilots)	AI FORWARD (Multiple Scaled Use-Cases)	AI NATIVE (Institution-Wide Integration)
Current State "Where am I?"	Individual teachers, staff, and students experiment informally with ad-hoc AI tools with minimal institutional oversight.	School initiates targeted, structured pilots across selected cohorts or academic departments.	Multiple proven AI use-cases are formally deployed across teaching, operations, and assessment.	AI is fully embedded into strategic culture, core workflows, data systems, and policy frameworks.
Key Question	Where should we start?	What works and is worth scaling?	How do we make it stick?	How do we continuously improve?
Strategic Shift	**Explore → Focus**	**Pilot → Prove**	**Scale → Institutionalize**	**Integrate → Optimize**
Priority Action Items "What to do next"	• AI literacy for Students • Build foundational AI literacy among teachers and staff. • Establish basic data protocols and dos/ donts on AI use. • Identify real operational, teaching, and learning problems. • Prioritize 1-2 high-value use cases.	• Run structured, time-bound pilots. • Define clear success metrics upfront. • Provide hands-on staff training. • Evaluate tools rigorously; scale or stop based on evidence.	• Formalize school-wide AI policy and ownership. • Build role-based capability across teams. • Integrate proven tools into daily workflows. • Allocate dedicated budget and resources.	• Embed AI into long-term institutional strategy. • Continuously monitor outcomes and risks. • Optimize tool portfolio and software stack. • Refresh skills and governance regularly.

Dimension	AI AWARE (Individual Experimentation)	AI ENABLED (Structured Pilots)	AI FORWARD (Multiple Scaled Use-Cases)	AI NATIVE (Institution-Wide Integration)
Teacher Actions "How to integrate AI into the curriculum"	• Help students understand the potential impact of misusing AI • Adapt lesson plans and resources. • Generate differentiated examples and practice.	• Embed AI in selected lessons and projects. • Use AI for formative assessment and feedback. • Require students to critique and acknowledge AI use	• Use AI routinely across lesson plans for all subjects and grades. • Personalize practice to learning gaps. • Assess AI-assisted work with common rubrics.	• Use adaptive pathways and continuous diagnostics to shape instruction • Use AI tutors/ copilots for routine learning while teachers focus on coaching and judgement
Critical Pitfalls "What NOT to do"	Not prioritizing AI literacy amongst students; chase novel tools or launch too many disconnected initiatives at once	Scale adoption prematurely simply because a tool is popular or trendy.	Treat successful pilots as self-sustaining without ongoing support.	Assume existing tools, policies, or skills will remain sufficient over time.

The stage-gated roadmap above defines what schools need to build institutionally as they mature. The next question is how that maturity translates into classroom practice. Curriculum and assessment requirements shape where AI can be used, how student work is evaluated and what must remain unaided, and learning pathways will differ by board. The guide below shows how teaching methods, assessment design and student AI use should evolve as schools move from experimentation to structured adoption and, ultimately, curriculum integration.

CURRICULUM-SPECIFIC PATHWAYS FOR SYSTEMIC AI ADOPTION

Curriculum requirements shape acceptable guardrails for AI use, the pathway to systemic adoption will differ across school boards. This framework sets out the priority actions for each curriculum context, showing how schools can progress from early experimentation to structured, institution-wide AI adoption.

STATE BOARD	CISCE	CBSE	IB / CAMBRIDGE
AI Integration is Evolving; varies by state. • National direction introduces AI & Computational Thinking from Grade 3 under NCF-SE 2023.[31] • States/UTs adapt curriculum, resources and teacher training through their own systems. • There is no single State Board AI curriculum or common generative-AI policy.	**AI integrated with a formal subject focus.** • CISCE publishes Robotics & Artificial Intelligence for ICSE, covering data, computer vision, NLP, Python, cybersecurity, ethics and projects.[31] • The board's teacher primer includes activities, lesson plans and assignments.[31] • Guidance is stronger on teaching AI as a subject than on cross-curricular generative-AI use.	**Broader curriculum AI integration.** • CBSE publishes a CT & AI curriculum for Classes III-VIII (2026-27), with student and teacher handbooks.[32] • AI (417) continues as a secondary-level skill subject.[32] • CBSE's AI Integration Manual gives cross-subject lesson examples and guidance on responsible use.	**Explicit AI use and assessment guidance.** • IB covers AI in learning, teaching and assessment, including bias, checking outputs and acknowledging AI use.[7] • Cambridge addresses generative AI in coursework and authentication.[8] • Both emphasise academic integrity, human judgement and authentic assessment.

[31] Council for the Indian School Certificate Examinations (CISCE). Robotics and Artificial Intelligence Curriculum and Teacher Primer for ICSE. New Delhi: CISCE, 2024-26

[32] Central Board of Secondary Education (CBSE). Computational Thinking and Artificial Intelligence Curriculum for Classes III-VIII, Academic Session 2026-27. New Delhi: CBSE, 2026.

INDIVIDUAL SCHOOL ASSESSMENT EXERCISE

To kickstart transition, school leadership teams must first establish an honest baseline of their current capabilities. The AI adoption maturity framework outlined below is designed to serve as the foundation for a practical school-level diagnostic.

Dimension	STAGE 1: AI AWARE Individual Experimentation	STAGE 2: AI ENABLED Structured Pilots	STAGE 3: AI FORWARD Scaled Use Cases	STAGE 4: AI NATIVE Systemic Integration
AI Literacy for Students	Foundational digital safety and conceptual awareness built without direct chatbot interactions.	Supervised student interaction emphasizing prompt design, bias detection, and output verification.	AI utilized as a collaborative thinking partner for problem-solving, critical analysis, and project co-creation.	Systemic AI fluency where students ethically build, evaluate, and govern real-world AI applications.
Leadership Strategy	Informal stance with minimal leadership engagement or formal strategic alignment.	Executive sponsorship established with baseline guidance and support for departmental pilots.	Clear institutional roadmap with dedicated ownership, cross-functional teams, and resource allocation.	Strategic integration across all school functions with continuous improvement and evidence-based oversight.
Governance & Data Protocols	No formal policy; relies on general user discretion regarding basic data safety and privacy.	Initial governance framework defining acceptable use, academic integrity, and preliminary data privacy rules.	Formal policy aligned with regulatory mandates (e.g., DPDP Act), zero data retention, and vendor compliance standards.	Comprehensive risk governance featuring continuous monitoring, automated compliance checks, and secure enterprise architecture.
Teacher Capability	Basic awareness and self-taught prompting skills; manual verification required for all outputs.	Structured upskilling in lesson planning and assessment design; supported by internal AI champions.	Advanced pedagogical integration, higher-order thinking design, and AI-assisted feedback analytics.	Widespread AI fluency with peer coaching, action research, and continuous collaborative innovation.
AI Use Cases	Ad-hoc individual usage by motivated educators, primarily for personal productivity and content creation.	Targeted trials in selected departments focusing on lesson planning, resource generation, and administrative tasks.	Multiple proven use cases formally deployed across instruction, formative assessment, and school operations.	AI fully embedded into institutional workflows, driving personalized learning and strategic decision-making.
Outcome-Based Approach	Focus on immediate time savings, convenience, and reducing routine administrative workload.	Pilots tracked against qualitative user feedback and preliminary efficiency indicators.	Formal measurement of learning outcomes, teacher time savings, and cost-benefit metrics prior to scaling.	Demonstrable, sustained impact on student achievement, operational efficiency, and institutional ROI.
Technology Infrastructure	Opportunistic reliance on consumer devices and free web-based tools with no dedicated architecture.	Approved tool repositories and basic user access controls integrated into existing platforms.	Scalable enterprise licenses, cloud security, API integrations, and single sign-on (SSO) authentication.	Interoperable, enterprise-grade AI infrastructure integrated across ERP, LMS, and analytics systems.

Rather than treating AI adoption as an all-or-nothing transition, schools can use this matrix to self-assess their maturity across each distinct dimension - such as governance, data readiness, and staff literacy. Because schools rarely progress uniformly across all dimensions, an institution might find itself at the 'AI forward' stage in its technical infrastructure while still 'AI aware' in terms of formal governance and data policies. The goal is not to achieve the highest score everywhere, but to identify strengths, gaps and the most important next steps.

A step-by-step guide to conduct this self-assessment is outlined below.

- **Bring the right people together:** leadership teams should convene a cross-functional group of change agents - comprising academic heads, IT administrators, operational leads, and teacher representatives - to evaluate the school's standing across each of the core dimensions.
- **Assess each dimension separately:** Discuss where your school sits today — AI aware, AI enabled, AI forward, AI only — using real examples as evidence.
    - **AI Literacy for Students:** How are students learning to use AI safely, critically and responsibly — from understanding the basics to using, evaluating and eventually creating with AI?
    - **Leadership & Strategy:** How clearly are we leading AI adoption? Do we have leadership ownership, priorities and a roadmap for how AI should be used and scaled?
    - **Governance:** Do we have the right guardrails? Are there clear rules for acceptable use, academic integrity, student privacy and AI vendors?
    - **Data Protocols:** How secure, organized, and interoperable school datasets are for personalization and analytics? What are the data protection dos/donts?
    - **Teacher Capability:** How effectively are teachers using AI in their work? Are they moving from basic productivity uses toward meaningful integration into teaching, assessment and feedback?
    - **AI Use Cases:** How widely and systematically are we using AI? Is use limited to individuals, or is AI being applied across teaching, learning, assessment and operations?.
    - **Outcome-based Approach:** Do we know whether AI is creating value? Are we measuring time saved, learning outcomes, teacher effectiveness, cost, safety and equity—and using this evidence to make decisions?
    - **Technology Infrastructure:** Can our technology support AI reliably and at scale? Consider devices, connectivity, platforms, access controls, integration, security and data architecture.
- **Map your maturity footprint:** Mark your stage for each dimension on the AI Adoption Map. Avoid averaging the scores into one overall maturity rating. The differences between dimensions are often more useful than the overall score.
- **Discuss the gaps:** Ask three simple questions: Where are we strongest? Where are we getting stuck? Which 1-2 gaps are most important to address next?
- **Agree on the next move:** Use the assessment to select 2-3 practical actions for the next 6-12 months. Revisit the map periodically to track progress.

This multidimensional view helps identify specific institutional bottlenecks, prevents disjointed experimentation, and establishes a realistic, evidence-based baseline to guide the next strategic steps.

CORE GUIDING PRINCIPLES FOR IMPLEMENTATION [THE AIM FRAMEWORK]

Regardless of where a school sits along the maturity continuum, these three foundational principles anchor sustainable and responsible AI integration.

[A] Adopt the Right Mindset	**Lead with conviction; empower teachers to experiment.** Treat AI as an institutional shift that augments educators—not a tech project that replaces them.
[I] Impact Before Scale	**Focus on evidence, not enthusiasm.** Start with a defined problem, break it down, recognize patterns, set success metrics, and scale based on proven educational or operational value.
[M] Mobilize the Ecosystem	**Build with, not for.** Actively involve teachers, students, school leaders, administrators, and parents in shaping governance and rollout.

AI IN ACTION: A RESOURCE KIT BUILT BY SCHOOL LEADERS AND TEACHERS

For AI to create meaningful value in schools, adoption needs to go beyond introducing new tools. Schools need the right people and skills, reliable data and systems, clear processes, and appropriate governance and safeguards. These elements need to work together so that AI can be used consistently, responsibly and in ways that support teaching, learning and school operations. The focus should therefore be on building the overall conditions for adoption, rather than deploying individual solutions in isolation.

Six Practical Resources to Support Schools Transition from Experimentation to Impact

RESOURCE 1: BUILD A COMPREHENSIVE SCHOOL AI POLICY

Developing an effective AI policy requires an inclusive, strategic approach that balances innovation with academic rigor and safety:

- **Form a Cross-Functional AI Steering Group:** Convene school leadership, academic heads, IT directors, teacher champions, and student/parent representatives who shall be the change agents to ensure diverse operational alignment.
- **Define Acceptable vs. Unacceptable Use Tiers:**
  - **AI-Prohibited (Unaided):** Foundational skill assessments, in-class timed exams, and core conceptual building tasks.
  - **AI-Assisted (Co-Pilot):** Ideation, outline drafting, research synthesis, grammar checking, and language translation—requiring mandatory disclosure and prompt logs.
  - **AI-Required (Integrated):** Complex problem-solving, AI critique exercises, data analysis, and digital literacy assignments.
- **Establish Academic Integrity & Attribution Standards:** Require explicit citation models (documenting tool used, prompt sequence, and output modified) rather than relying on punitive bans. Shift focus toward oral defenses (vivas) and process-oriented evaluations.
- **Institute Data Privacy & Safety Rules:** Mandate that no student Personally Identifiable Information (PII) or confidential institutional records are entered into unvetted commercial AI models.
- **Outline Community Training Needs:** Offer iterative, practical training for educators; Co-create simple classroom "house rules" with students and send clear guidance home to parents so expectations are shared across the board.
- **Publish:** Distill the policy into an accessible 1-page quick reference guide for teachers, parents, and students.
- **Review Iteratively:** Conduct bi-annual reviews to keep pace with evolving technological capabilities.

THREE PRACTICAL MOVES TO CONFIDENTLY START TOMORROW

- **Adopt Established Global Frameworks:** Adapt proven frameworks from TeachAI or Code.org Policy Toolkit, UNESCO's Guidance for Generative AI in Education, or established district models rather than starting from scratch.
- **Create a 1-Page Quick-Reference Card:** Distill key rules into clear "Do's and Don'ts" for visual display in classrooms and staffrooms.
- **Appoint a Designated AI Lead:** Establish clear ownership to answer faculty queries, monitor tool compliance, and bridge IT, academics, and administration.

RESOURCE 2: FORMALIZE AGE-PROGRESSIVE AI LITERACY FOR STUDENTS

In alignment with **NEP 2020** and **CBSE's Computational Thinking and AI (CT&AI) Curriculum (Classes III-VIII)**, AI literacy must be embedded as a core 21st-century capability across the K-12 learning continuum, moving beyond standalone coding or ICT classes.

GUIDING PRINCIPLES

- **Student Safety:** Prioritize student understanding of AI usage
- **Pedagogy over Tool Usage:** Focus on computational thinking, inquiry, and reasoning rather than mere software consumption.
- **Critical Evaluation & Verification:** Train students to question, fact-check, and critique AI-generated outputs while recognizing algorithmic bias, hallucinations, and privacy risks.
- **Scaffolded Progression:** Transition from demystifying AI concepts in primary years to critical inquiry in middle school, culminating in ethical co-creation and real-world project application in secondary grades.

The OECD's human-centred guiding principles serve as the ethical foundation for the age-progressive framework, ensuring that as students advance from discovering AI in primary grades to creating real-world solutions in secondary school, their learning remains safe, inclusive, and grounded in human agency.

PRIMARY
Classes III-V | ~8-11 years

DISCOVER

Understand AI in everyday life

Build foundational awareness, curiosity and safe habits.

KEY FOCUS AREAS

- What is AI? Human vs. machine intelligence
- Digital safety and responsible use
- Recognising AI in everyday life

MIDDLE
Classes VI-VIII | ~11-14 years

EXPLORE

Question and evaluate AI

Start using AI tools purposefully, while developing critical thinking.

KEY FOCUS AREAS

- Prompt design and iteration
- Spotting bias and hallucinations
- Fact-checking and source evaluation
- Using AI as a thinking and learning partner

SECONDARY
Classes IX-XII | ~14-18 years

CREATE

Apply AI for real-world impact

Use AI ethically and effectively to solve problems, create and contribute.

KEY FOCUS AREAS

- Advanced research and synthesis
- Academic integrity and attribution
- Real-world projects and problem solving
- Leadership and societal impact (e.g., AI for inclusion, sustainability, community)

FIVE GUIDING PRINCIPLES (OECD, 2026)

1. HUMAN-CENTRED AND INCLUSIVE

Ensure AI benefits all learners and respects human agency, diversity and well-being.

2. SAFE, ETHICAL AND RESPONSIBLE

Build understanding of risks, rights and responsibilities, with a focus on safety, fairness and integrity.

3. EQUITABLE ACCESS AND OPPORTUNITY

Build understanding of risks, rights and responsibilities, with a focus on safety, fairness and integrity.

4. HIGH-QUALITY TEACHING AND LEARNING

Use AI to support deeper, more engaging and personalised learning experiences.

5. PREPARE FOR A CHANGING WORLD

Develop the skills, mindsets and values to learn, work and contribute in an AI-enabled future.

> **"AI literacy is not about learning to use a tool, but about equipping every learner to live, learn and work in a world with AI."**
>
> **OECD (2026),** Empowering Learners forthe Age of AI

Leadership Insight

"Teach students how not to trust AI completely... it is pattern recognition, it can lie very confidently. The goal is to teach them to ask the right questions and double-check, validate, and evaluate sources."

— Manit Jain, ARISE Co-Chair

AN UNCONVENTIONAL APPROACH: LET STUDENTS WRITE THE RULES

One way to build AI literacy is to move beyond telling students how to use AI responsibly - and let them **debate and define responsible use themselves.**

Create a Student-led AI Charter

- **Form small groups** of 4-5 students.
- Give each group four questions: **What is AI? When should we use it? When should we not use it? When to speak to a human?**
- Ask students to discuss, debate and visually map their answers - using charts, colours, stickers or drawings.
- Bring the class together to compare responses. Discuss areas of agreement, disagreement and anything they may have missed.
- **Co-create a simple Classroom AI Charter** capturing the principles students agree to follow.
- Display it in the classroom and **revisit it as students' use and understanding of AI evolves.**

RESOURCE 3: MAKE TEACHERS THE ENGINE FOR ADOPTION

To build teacher confidence without overwhelming staff, professional development and time reinvestment must be structured systematically.

STAGE-GATED TEACHER CAPABILITY DEVELOPMENT

Stage	Share	Offering	Share	Offering
Goal	Make AI approachable, safe and immediately useful to build teacher confidence	Apply AI to real teacher workflow	Use AI intentionally to improve teaching and learning	Build internal capability that sustains adoption
Focus areas	• Basic AI knowhow & prompt engineering • Recognizing AI bias and limitations • Mandatory human verification of all AI outputs	• Lesson planning • Rubrics & assessments • Knowing when AI is appropriate • Administrative productivity	• Higher-order thinking rather than shortcut it; • AI-assisted student feedback & grading support • Cohort assessment trend analysis • Knowing when not to use AI	• Establishing AI teacher champions & action research • Peer mentoring across school networks • Co-designing innovative learning models specific to curriculum

Stage	Share	Offering	Share	Offering
Suggested Initiatives	• Fortnightly hands-on training on AI use • Overcoming the perception that learning AI is "additional work" through knowledge sessions, success stories from peer and support groups • AI Skills Passport - an EYP and Microsoft training • Safe experimentation guidelines & basic prompt libraries to build confidence ("learning how to fish")•	• Periodic collaboration time for teachers • Co-creation of lesson plans & differentiated worksheets • Curriculum-based integration guidelines • Board-aligned next steps for school faculties • Role-based workflow templates	• Classroom experimentation + reflection • Measure impact on time, quality or learning • Share proven practices across departments	• Inter-school AI Learning Circles • Best-practice innovation repository by school or network group

PROTECTING AND REINVESTING TEACHER TIME

Drawing from primary research with department heads and teachers, four strategic pillars ensure that time saved through AI implementation is protected and reinvested into high-impact activities:

Strategic Pillar	Focus Area	Operational Guidelines
Dedicated Operational Space	Provide & Preserve Dedicated Planning Time	• Actively schedule protected collaboration time for teachers within daily timetables • Do not assign substitution duties or routine administrative tasks at this time.
Institutional Ownership	Establish Structured AI-Led Committees	• Form teacher-led AI committees • Encourage peer observation to share best practices, structure integration efforts, and foster an environment to move from experimentation to impact.
Targeted Capability	Deliver Practical, Role-Based Training	Focus training on tangible, day-to-day applications rather than technical theory, shifting staff from basic AI awareness to genuine pedagogical confidence.
Human-Centric Balance	Balance Technology with Human Pedagogy	Maintain a strong focus on social-emotional learning (SEL), mentorship, and innate human interactions, ensuring AI enhances rather than replaces meaningful classroom relationships.

As we take this to the real world, we need to remind ourselves we don't train teachers on AI. Help teachers solve real problems with AI.

Start with everyday workflows where value is immediately visible, create safe opportunities to practise, protect time to learn together, and enable confident teachers to bring their peers along.

RESOURCE 4: IDENTIFY DATA PROTOCOLS

Schools must establish clear technical and operational guardrails to remain compliant with the **Digital Personal Data Protection (DPDP) Act 2023 / DPDP Rules 2025**:

- **Data Minimization:** Strictly prohibit uploading unencrypted student PII, medical records, financial data, or full academic registries to public AI models.
- **Enterprise Licensing & Zero Data Retention:** Mandate commercial agreements with AI vendors that guarantee student data and inputs are not used to train foundation models or retained on external servers.
- **Role-Based Access Control (RBAC):** Restrict system access based on user role and age tiers, ensuring administrative data layers remain completely isolated from student-facing tools.

These protocols only hold if they're applied at the point where data actually enters a tool. Here are practical moves for teachers, starting tomorrow:

SIX PRACTICAL MOVES TO CONFIDENTLY START TOMORROW

- **Anonymize Before Upload:** Remove student names, roll numbers, photos and contact info from any file before pasting it into an AI tool. Use initials or a class code instead.
- **Stick to the approved tool list:** Only use AI tools your school's policy has cleared. Don't sign up for a new app on your own "just to try it" with class work or student data, even if it's free. RBAC's boundary only functions if teachers stay inside it.
- **Turn off "improve the model" settings:** In every AI tool you use, check settings for an option like "use my data to train/improve the model" and switch it off.
- **Keep everything on school systems:** Save prompts, AI outputs and any student-related files in your shared school drive, not personal email, WhatsApp, or a personal phone.
- **Get Consent Before Grading With AI:** Tell students when their work is going into an AI tool for feedback or grading, since unapproved processing of identifiable student work is the exact exposure Data Minimization is designed to prevent.
- **Flag mistakes the same day:** If you accidentally upload a report, health note, or assessment with identifying details, tell your AI lead or IT contact immediately. Most slips are easy to fix if caught fast, and hard to fix if not.

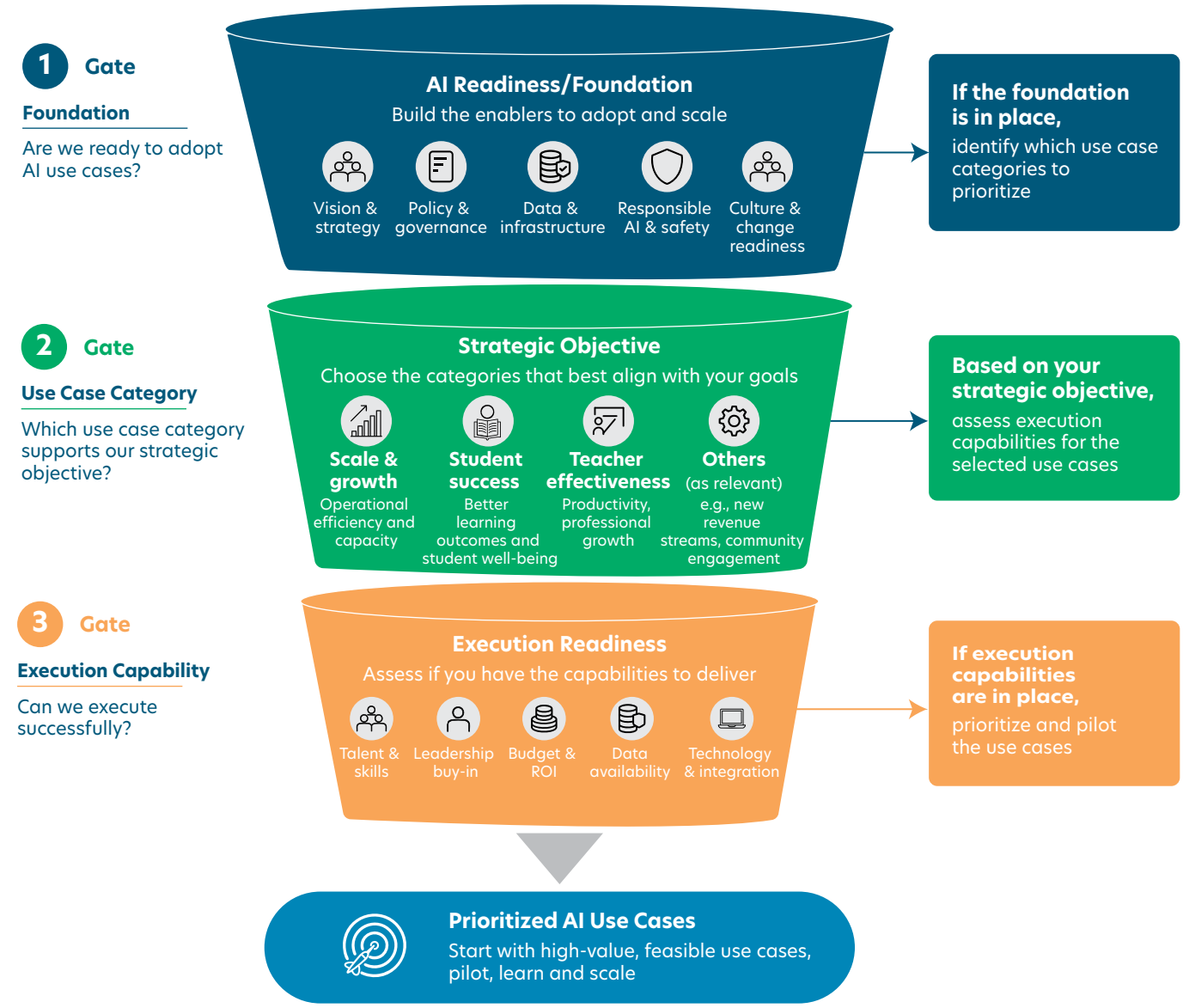
RESOURCE 5: AI USE CASE PRIORITIZATION

Schools must establish an AI Readiness Foundation, ensuring AI literacy, protecting student safety, promoting ethical use and setting clear safety guardrails.

The AI Use Case Prioritization Funnel is a tool that helps progressively narrow the universe of AI use cases to identify the one or few that best support the school's objectives and can be delivered with its available capabilities and resources. The funnel has three successive gates—AI Readiness Foundation, Strategic Objective and Execution Readiness. Use cases that pass through all three gates form a shortlist of high-value, feasible options. Schools can then select one or a few for small-scale pilots, define success measures and assess results before committing resources to wider adoption.

AI Use Case Prioritization Funnel

From readiness to impact: a structured approach to identify and prioritize the right AI use cases



	Use Case A: AI-assisted lesson planning	Use Case B: AI-generated student progress reports
Gate 1 — Foundation / AI readiness	Ready — Can be piloted with limited student data and clear teacher review	Partially ready — Requires stronger student-data privacy, access and governance
Gate 2 — Strategic fit	High — Directly reduces lesson preparation time and supports teaching quality	High — Reduces reporting workload and improves consistency
Gate 3 — Execution capability	High — Existing GenAI tools; limited integration; modest training required	Medium — Requires reliable student data, SIS/ERP integration and stronger controls
Decision	Prioritize now	Sequence for later

RESOURCE 6: ADOPT THE AI INFRASTRUCTURE

AI infrastructure decisions should follow the use case, not precede it. Primary research suggests that most schools do not need to build proprietary AI solutions. Instead, leaders should first determine **what problem needs solving, whether an existing enterprise solution can address it, and whether the school has the capabilities to implement and sustain it.**[37]

The choice should consider not only upfront cost, but also **integration with existing workflows, quality of output, data protection, age appropriateness and the ongoing capacity required to maintain the solution.**

STRATEGIC DECISION FRAMEWORK: BUILD, BUY, OR PARTNER

Approach	Best suited for	Key advantages	Risks & watch-outs	Strategic guidance
BUY (Turnkey Commercial)	Standard operational workflows, core LMS/ERP upgrades, automated grading, and administrative productivity tools.	• Rapid deployment and immediate ROI. • Vendor-managed security, updates, and maintenance. • Low internal technical burden.	• Ongoing licensing overheads. • Vendor lock-in and minimal customization. • Data ownership and retention terms require strict vetting.	Default Starting Strategy Prioritize proven, enterprise-ready platforms over internal development to solve common educational needs efficiently.
PARTNER (Co-Development)	Staff capability development, specialized curriculum integration, and niche student-facing learning initiatives.	• Access to specialized domain expertise. • Shared risk and accelerated capability building. • Tailored fit for curriculum-specific requirements.	• Dependency on external vendor roadmaps. • Coordination overhead and governance alignment. • Potential loss of capability upon contract exit.	Capability Enabler Engage external partners to accelerate institutional capability, ensuring clear IP terms and knowledge transfer mechanisms.
BUILD (Custom Internal)	Highly proprietary workflows, unique multi-campus data systems, or large school networks with dedicated engineering capabilities.	• Complete customization and operational control. • Full ownership of proprietary IP and data architecture. • Seamless deep integration with legacy systems.	• High total cost of ownership (TCO). • Substantial engineering, security, and maintenance overhead. • Risk of technological obsolescence and technical debt.	Strategic Exception Reserve for unique operational differentiators where existing market solutions are fundamentally insufficient and long-term funding is secure.

"Building systems internally is very difficult... A school might assign 3-5 people, whereas an EdTech platform has 100 people on curriculum and 30 on tech. Schools should leverage existing enterprise solutions rather than trying to build from scratch." **- EdTech Founder**[37]

TOOL EVALUATION FRAMEWORK

When evaluating third-party EdTech and AI applications, school leadership could apply a framework similar to the Tulna Evaluation Framework. This framework outlines questions across three non-negotiable pillars before the final sign-off:[36]

- **Pillar 1: Pedagogical Alignment**
  - Does the tool promote active learning, reasoning, and scaffolding, or does it simply supply direct answers?
  - Is the content mapped accurately to board-specific curriculum learning objectives?
- **Pillar 2: Content Usability & Quality**
  - Are explanations age-appropriate, accurate, and free from bias or harmful content?
  - Is the user interface intuitive for teachers and students with minimal training?
- **Pillar 3: Data Safety & Vendor Integrity**
  - Is user data strictly protected, encrypted, and compliant with DPDP rules?
  - Does the vendor explicitly guarantee that student inputs will not be used to train commercial models?

Ultimately, AI infrastructure choices must reflect an institution's operational readiness and strategic vision rather than technical sophistication alone. Sustainable implementation relies on selecting scalable solutions that seamlessly integrate into existing workflows while safeguarding data integrity. By prioritizing long-term educational value over complexity, school leaders can ensure technology investments directly enhance teaching and learning outcomes.

[36] EdTech Tulna, Tulna Evaluation Framework for EdTech and AI Applications (2026).

[37] ARISE and EY-Parthenon. School Survey, Case-Study Survey, Interviews and Focus Groups. Primary research, 2026.

CONCLUSION

India's K-12 education system is entering a new phase of AI adoption. The question is no longer whether schools will use AI, but **how they can use it in ways that genuinely improve teaching, learning and school effectiveness** - while preparing students to navigate an AI-enabled world safely and responsibly.

The evidence reviewed in this report suggests that the strongest approaches are not technology-led. They begin with clear educational needs, strengthen the role of the teacher, establish appropriate safeguards, build capability alongside access, and scale only when there is evidence of value.

The opportunity is significant. AI can help teachers spend less time on repetitive tasks and more time with students; support more timely feedback and differentiated learning; improve access to high-quality resources; and strengthen school operations and decision-making. But these benefits will not come from fragmented experimentation alone. They require leadership commitment, teacher confidence, reliable infrastructure and data, clear governance, and thoughtful integration into existing teaching and school workflows.

Equally important is **student AI literacy**. Children are already encountering AI inside and outside the classroom. Schools therefore have an important role not simply in providing access, but in helping students develop the judgement to **question AI-generated information, recognize bias and misinformation, preserve independent thinking, protect their privacy, create responsibly, and know when human judgement and support matter more**. Responsible adoption is therefore also a means of protecting students as they grow up alongside increasingly powerful AI.

For each school, the starting point will be different. That is why the practical roadmap in this report focuses on the **next sensible step** — whether that means strengthening leadership and student AI literacy, introducing a few high-value use cases, strengthening governance, or moving toward deeper integration.

FICCI, ARISE and EY-Parthenon envision this report as a practical companion for school leaders navigating that journey. Its purpose is to help schools cut through the noise, make more informed choices, and move from isolated experimentation towards more confident and responsible adoption. The schools that make the most of AI will not necessarily be the ones that move fastest. They will be the ones that are clear about **what they want AI to improve, how they will support their teachers, how they will protect and prepare students, and how they will know whether it is working**.

The opportunity for Indian K-12 is not simply to adopt AI, but to build the capability to use it well—moving from experimentation to confidence, and from confidence to responsible scale, with student learning, safety and well-being at the centre.

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Note: This report contains AI-generated visual content; all text is original.

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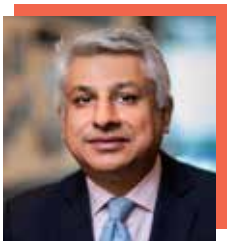

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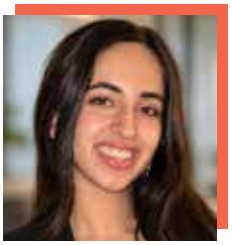

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ABOUT FICCI

Established in 1927, **FICCI** is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

ABOUT ARISE

ARISE (The Association for Reinventing School Education) is an autonomous body that brings together some of the country's most progressive and intellectual minds including School Promoters, Edupreneurs & Leaders who remain committed and focused on serving as a beacon for change within the diverse and dynamic landscape of India's school education system. Living up to the motto '**Student First**', ARISE recognises the complexity and the unique challenges faced by both independent private schools and public / government schools and will continue to play an important role to be a collaborative platform to bring together forward-thinking school founders, educators, policy makers, think tanks, educationists, civil society experts and technical experts. **As a collegium, ARISE represents over 1800+ Schools, 95,000 Teachers, and 1.5 Million Students.**

ABOUT EY PARTHENON

EY-Parthenon is the leading strategic advisor to the education sector globally, with a dedicated global education team that completes 300+ projects annually. EY-Parthenon Education Strategy Consultants help clients negotiate the changing currents in the sector so that they not only adapt but also adopt strategies and collaborations that future proof their operation from the rapidly changing external environment. With global experience and deep sector knowledge, the education strategy practise at EY Parthenon is serving a spectrum of clients that include Investors, Private Operators, Universities, Governments and Foundations across a range of growth, investment, transformation and value creation related projects.