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The goals of the Omni-AI Alliance are:

1. Transforming teaching and learning by applying cognitive science and efficient AI-enabled workflow to how we select, create and distribute knowledge paths.
2. More human learning schooling models using AI agents to provide reporting, management, and resource logistics.
3. Establishing central enterprise “minds” in an ecosystem of quality edtech curriculum tools and apps.
4. Through transition leadership, edtech vision, and revival of attention on all domains of human intelligence, gain education outcomes of higher achievement, paths to jobs and new industries being created by and for graduates.

The Work of the Edtech Vision Core Circle (committee) is defined as:

- Drafting Omni-AI Core **AI governance¹ standards** that define, and support human centered AI design and development.
- Create needed **technical standards, registries and certifications.**
- Creating **shared language** for administrators, technologists, and policymakers, preventing fragmentation in school AI adoption.

- Support **new learning and schooling models** enabled by all current and future aspects of AI technology.
- Design an efficient and economical human centered “AI as Infrastructure” **proof of concept** to address and expand the specific enterprise technology architecture of K16 education. This includes the full scope of the education enterprise with significant emphasis on how we support, select, create and scale student success.
- **Offer guidance** by helping with documentation, design, adoption and transition processes to for school governing bodies to arrive at positive outcomes.
- Providing AI driven **professional learning opportunities** for teachers, administrators, technologists, and policymakers through virtual meetings, live events, and reference documents.

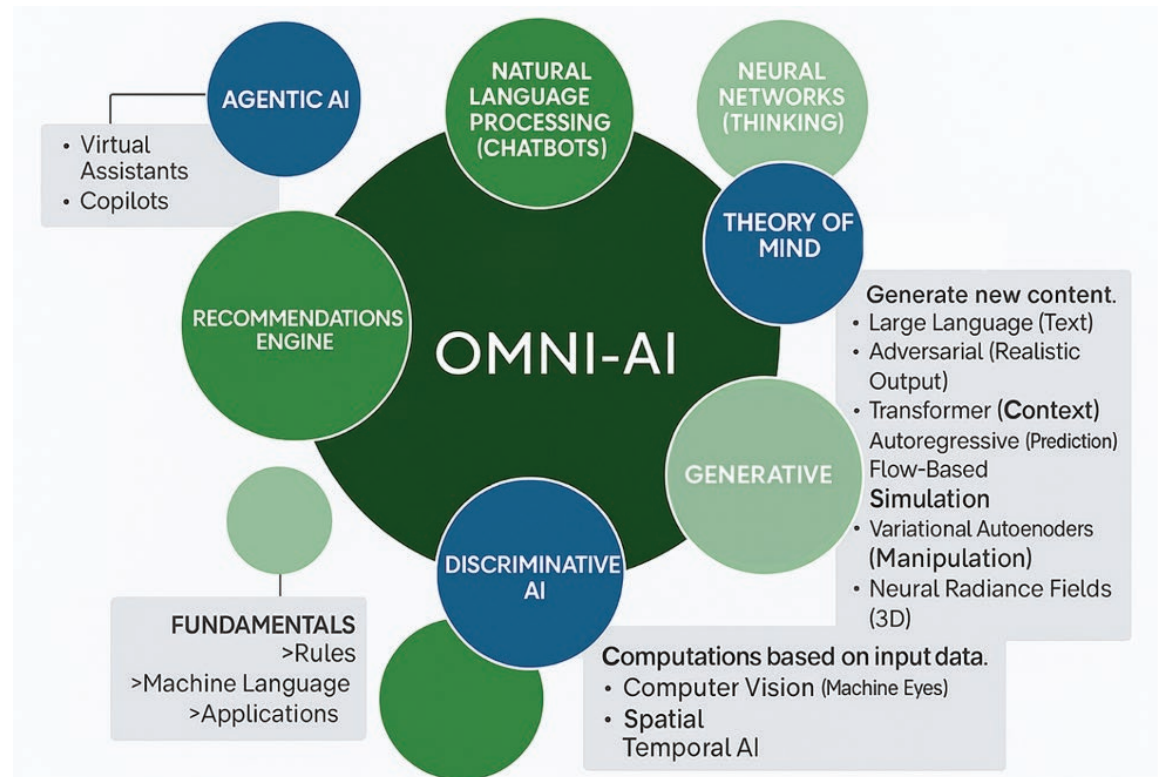
¹Artificial intelligence (AI) governance refers to the processes, standards and guardrails that help ensure AI systems and tools are safe and ethical. AI governance frameworks direct AI research, development and application to help ensure safety, fairness and respect for human rights. <https://www.ibm.com/think/topics/ai-governance>

What is Omni-AI?

Omni-AI is not the commercial chatbot embodiment known by schools already. It's the **enterprise level**.

Omni-AI by definition combines **multiple types of AI**—like generative AI, recommendation engines AI, time-based intelligence, machine learning, and agentic AI into *one* co-working operation. An Omni-AI is called a “plasmic core,” a nifty way to say a querying of connected systems, code that structures new meaningful formats and builds specialized pattern-recognition frameworks on-the-fly, orchestrates workflow and timing, and distills all of that to outcomes that are text, table or visual instantly.

Think of Omni-AI as **the “mind” of your schooling enterprise**, providing feedback and doing some of the actual work of managing everything. Omni-AI is not a siloed single app or system or a data warehouse, it is the “thing between the things” you probably already have in your edtech stack, utilizing them “in-place.” These include student information and learning management systems, human resources and financial systems, various curriculum libraries and courseware apps, assessment and communications tools, networks and



hardware, master scheduling software, even your facilities and busing management.

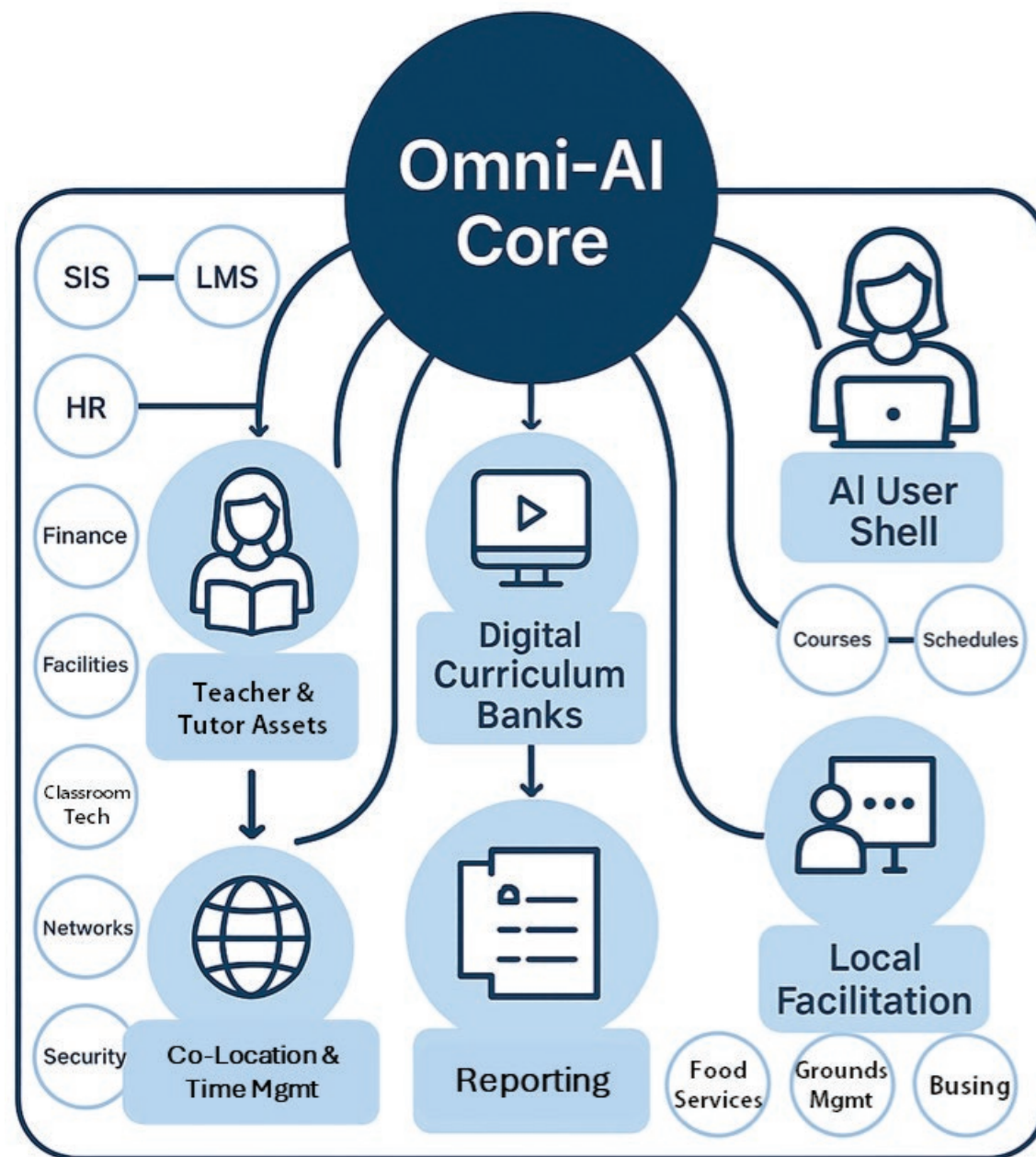
Any AI is simply a set of algorithms designed to process data and produce outcomes. Different AIs differ in the algorithms they rely on and the kinds of results they generate. The Omni-AI Alliance will aid your understanding of what these do in plain language in order to help leaders govern how they use AI.

The vision of Omni-AI is the evolution of schooling systems who will use AI as the mind of the enterprise, not just at the teaching and learning level.

An enterprise, or private, Omni-AI is called a “Core,” a technical system that creates a connective framework that links and coordinates software systems, platforms, and data streams. This allows institutions to manage and direct how information flows and interacts, both within their own systems and across external ones, in real time. Instead of “system interoperability,” schools move to a dynamic infrastructure that enables distributed, collaborative and adaptive intelligence across many domains.

In the bigger picture of AI evolution, Omni-AI represents the next stage beyond narrow AI which schools are using now from commercial providers. It is the way to control and govern AI exactly to your specifications.

Omni-AI means you can now transform your schooling operation in multiple ways using AI safely and effectively.



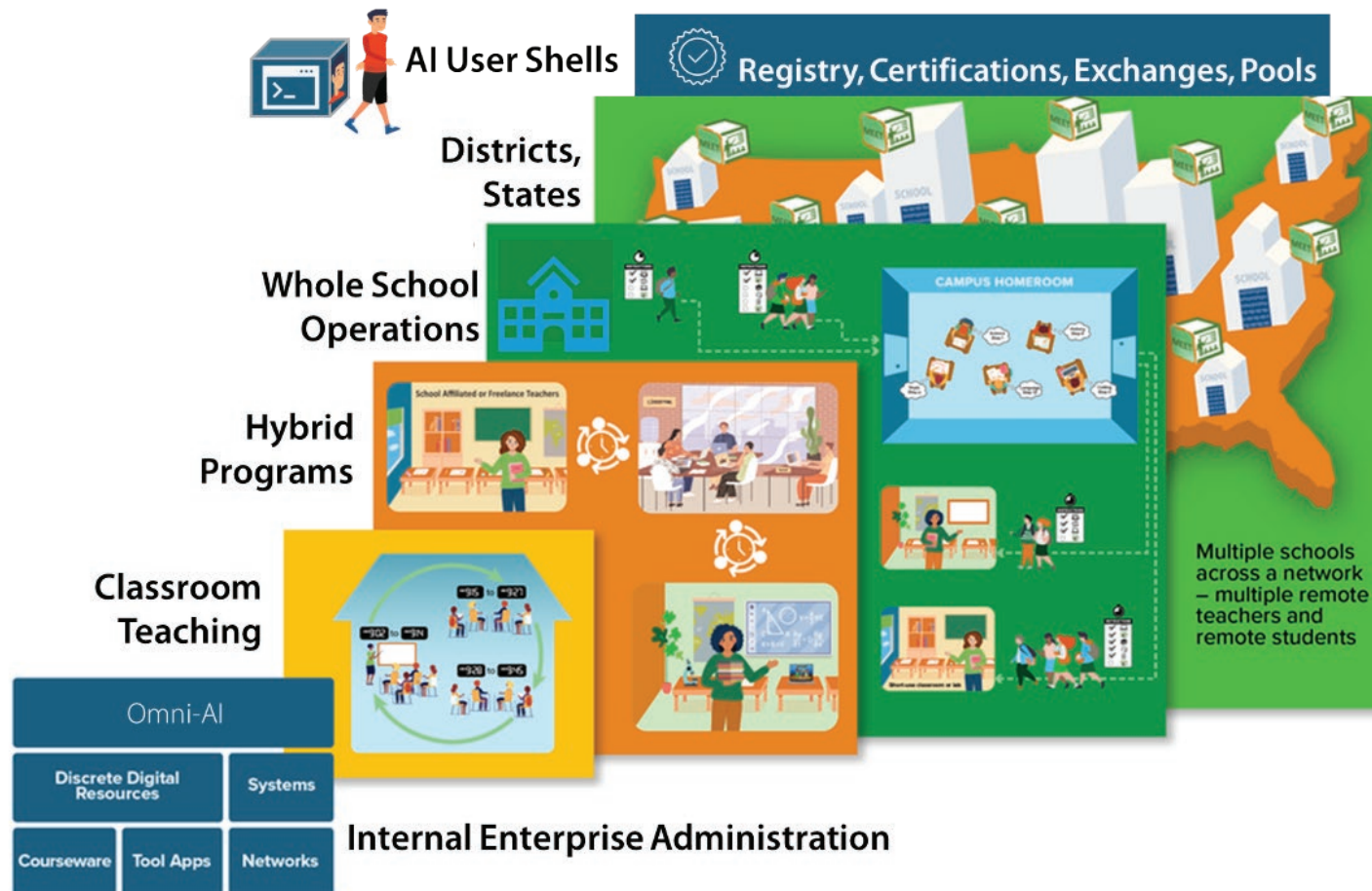
Towards Education's AI Ecosystem

Today schools use one-off AI tools and AI-infused apps and systems alongside a lot of other apps and systems.

What's next is **specialized AI agents across an enterprise**. These agents will offer real operational governance.

The institution's schooling model and omni-AI core architecture will co-determine their outcomes and adaptability.

The ecosystem stage will enable safety and shared basics in the AI Age. Interoperability will shift to a Large Learning System (LLS) with a persistent AI user shell, federated connections, multi-agent orchestration, time and logistics integration, all auditable with a governance and trust model.



Why the Alliance Exists

American education today is caught in a cycle of entropy, which is also carrying down the edtech industry. Schools remain tethered to factory models, held in place by the inertia of administrative decision-making: slow procurement processes, risk-averse leadership, and incremental reforms that never escape the gravity of tradition. The result is a system that consumes ever more energy and money just to maintain itself, while public trust continues to collapse—only 28% of Americans now express confidence in public schools (Gallup Poll, 2025.)

The edtech sector has mirrored this entropy rather than solving it. For decades, schools have been asked to assemble their own ecosystems from an extremely fragmented marketplace:

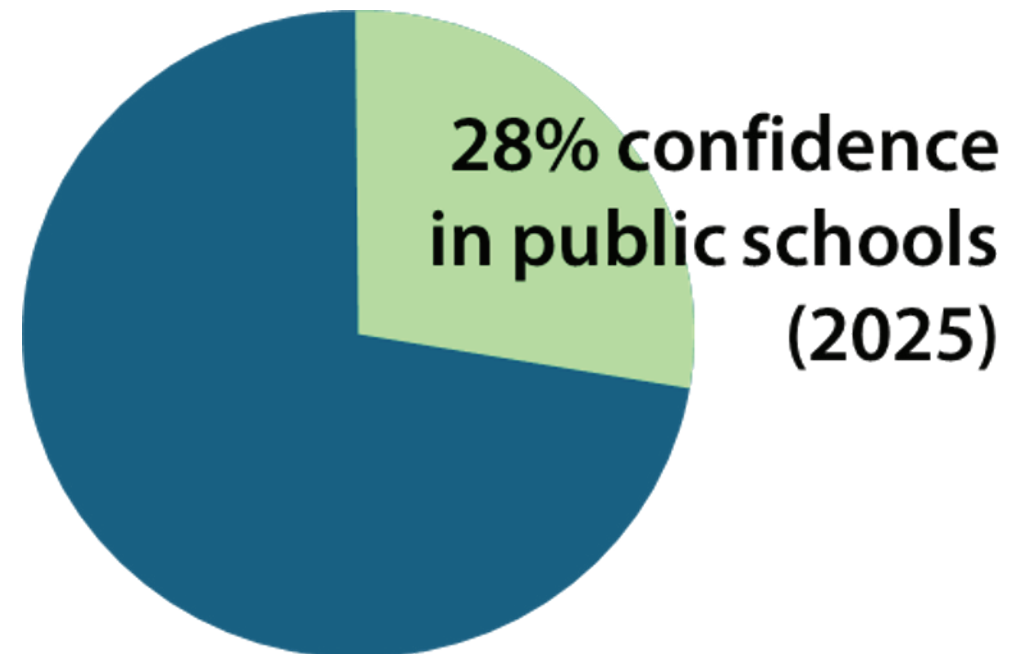
- Thousands of content platforms tied to a single subject or curriculum standard and digital libraries with millions of discrete digital objects to be used to create courses – redundant lesson building by teachers nationwide.
- Assessment systems detached from instruction.
- Hardware, building security technologies and network infrastructures siloed from learning itself due to a lack of consideration of learning workflow precision.

This is the edtech bazaar—a vast, inefficient market where

each product offers a puzzle piece, but no one addresses the system itself *as a system*. A system that could be reconfigured holistically. The burden falls on schools to stitch these silos together at great cost of time, money, and human energy *for every institution*.

U.S. EdTech Companies—2025 vs. 2035 Projections

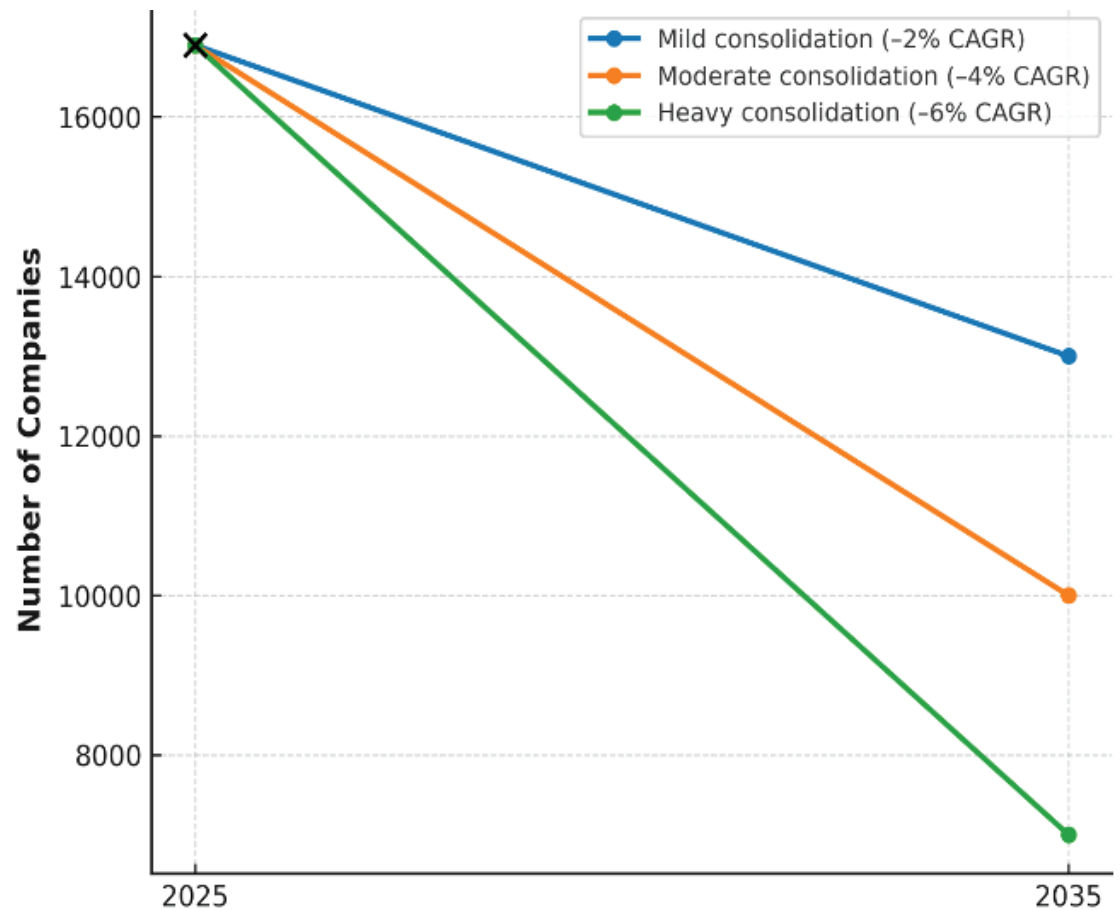
In 2025, the U.S. hosts nearly 17,000 education technology companies, reflecting the sheer size and fragmentation of the market. Under consolidation pressures—spurred by funding downturns, the AI incursion and M&A activity—this number could shrink significantly by 2035. The heaviest scenario has the U.S. losing 10,000 companies, shrinking down to 7,000.



The pattern is clear: fragmentation and consolidation without structural change only deepen the entropy. Adding more tools, or rolling them into bigger platforms, does not resolve the misalignment between schooling's outdated form and society's present demands.

This is why the Omni-AI Alliance exists. AI cannot only be added to as another tool in the stack. It must be applied in an intentional growth pattern towards systemic redesign of how education itself flows using the elements of time, space, resources, personalization, human decision points and governance. The opportunity is to replace fragmentation with coherence, and to rebuild schools as unified, intelligent ecosystems that use AI to orchestrate an entire schooling operation at scale.

Without this decisive shift, the entropy of schools and the inefficiency of edtech will continue to exhaust educators, waste resources, and drive public trust even lower. With it, we can move beyond the bazaar while yet retaining most of its players and allowing for unique edtech mixes to transform education into a system that is both future-ready and human-centered.

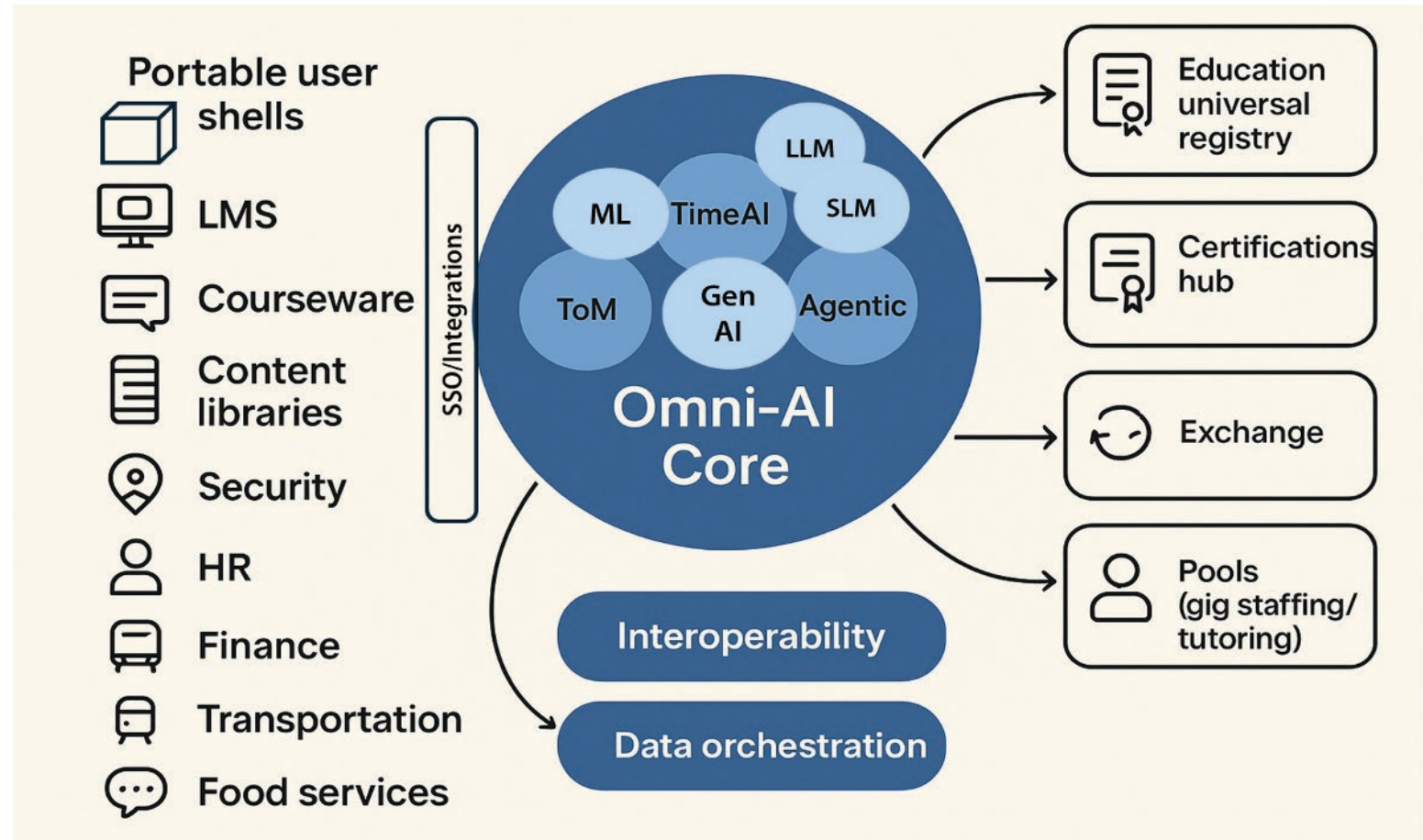


Sources: Tracxn (2025 baseline ~16.9k U.S. EdTech companies). Projections are scenarios, not forecasts.

Omni-AI Core Sketch

An Omni-AI Core—a plasmic AI mind, is a new kind of overlaid operating system for a school or district enterprise or whole State. It is the idea of capping all other systems with AI, and multiple types of AI at that, to orchestrate dynamic outcomes. It is more than a simple integration or data warehouse. It is probably more than one AI-infused platform. It is typically a walled garden SLM or LLM instance that is allowed to interact partially with other systems and possibly other

Cores and individual student-user co-pilots (user shells or individual AI bubbles.) All of its parts and types of AI already exist in the education field. Most schools already use a Single Sign-On solution and have built interfaces to render dashboards from multiple systems even now. An Omni-AI Core would establish intelligent *agency* and *management*



between core operational platforms—Learning Management Systems (LMS), Student Information Systems (SIS), Human Resources, Finance, and Master Scheduling—while simultaneously interfacing with a vast and evolving ecosystem of AI-augmented applications and curriculum resources. Think of an Omni-AI Core as a “thing of all the things.”

The goal: a dynamic, living digital infrastructure capable of real-time digital actions, personalized learning orchestration, staff optimization, security awareness, and seamless coordination across all systems.

The Function of the Omni-AI Core

The Omni-AI Core is envisioned as a dynamic, interconnected platform with the following key capabilities:

- **Agency & Action-Taking:** AI agents mediate actions across systems, from course planning to student pacing.
- **Interoperability:** Acts as a middleware layer between SIS, LMS, financial, HR, scheduling, and API-based integrations.
- **Live Cohorting:** Dynamically groups students based on real-time performance and readiness using Time AI.
- **Data Orchestration:** Synthesizes data from assessments, behavior, performance, and teacher input to generate actionable intelligence.
- **Workflow Automation:** Streamlines administrative and

instructional tasks.

- **Security & Infrastructure Intelligence:** Integrates AI-enhanced surveillance and safety protocols.

Toward a Unified Intelligence Layer

The Omni-AI Hub, imagined as a plasmic mind, does not replace the existing ecosystem—it amplifies it, connects it, and choreographs it.

Through intelligent agents, real-time data synthesis, dynamic master scheduling, and cross-system harmonization, an Omni-AI Core enables a new model of schooling and a growth to an ecosystem—fluid, student-paced, teacher-empowered, and deeply personalized.

This vision is part of the work of the Omni-AI Alliance and is expected to mutate and develop more sophistication on the group's journey.

Data Ownership

In at least one new AI schooling model, schools will be adding platforms infused with AI. They will often then need very strict contracts in place to try to protect the data they put into those outside subscription-based services. The vision of school Omni-AI Cores is cloud-hosted intelligence with its own separate governed data lake; it pulls structured inputs from all major systems that themselves may be AI infused; it interacts with user shells as portable co-pilots for identity & consent. Depending on the intelligence service, a school or district will be able to have a lot more governance than commercial models.

The following architecture works for schools who want to control the ownership of their data as well as govern AI and all the systems they own and subscriptions to libraries and courseware.

- **Data Sovereignty:** Institutions don't lose data to vendors — an Omni-AI Core owns its lake.
- **Interoperability:** Courseware, LMS, SIS provide API look-ins, not just siloed dashboards.
- **User Control:** Learners and educators retain their AI interaction histories inside their portable AI shells.

- **Policy Enforcement:** The Super Omni-AI Trust is the standards + certification authority.

Omni-AI Core Data & Identity Structure

1. Omni-AI Core (Cloud-Based Hub)

- **Composition:** Not just an LLM, but an ensemble (LLM + Time AI + ToM AI + Recommender AI + Computer Vision AI + Policy Engines + any other new *A* and other systems and apps the Core can query).
- **Hosting:** Cloud-deployed but isolated under institution or Trust governance (not a vendor black box).
- **Core Role:** central orchestrator of intelligence, houses proprietary institutional data lake on top of the base AI models, applies fine-tuning / RAG only within boundaries of the governed data layer.

2. Data Ownership & Integration Layer

- Data Ingestion: All streams (SIS, LMS, HR, Finance, Courseware, Assessments, Facilities, IoT sensors, etc.) feed into a governed integration bus, applying tech standards and the *new Omni-AI data API* (AI Look-In Standard, ALIS.) The data lake is built for AI consumption with versioned, lineage-aware, policy-tagged datasets so that schools can meet any legal requirements for records retention.
- “Ownership”: Omni-AI Core and the Trust enforces that only this institution is the controller; AI only processes under those rules.

3. User Shells (Portable Identity & AI Interaction)

- Nature: Personal AI “bubbles” or co-pilots tethered to individuals.
- Data Scope: Hold identity credentials (VC/DID), retain interaction logs of what the user shared with AIs, provide consent control. The user for their user shell decides what gets passed into institutional Omni-AI Core or tethered to commercial LLMs.
- Trading/Tethering: A shell may federate with an enterprise Omni-AI Core (school, district). It may also

link to commercial LLMs (OpenAI, Anthropic, etc.) but only with scope-limited, tokenized identity. The Super Omni-AI (Trust level) certifies policy intersections (what a learner’s shell may/may not expose across systems).

4. Enterprise Data + AI Flow

1. Institutional Systems-to-Integration Layer (SIS, LMS, courseware, etc. push structured “awareness” data—but the raw data remains in place.)
2. Integration Layer-to-Omni-AI Core Data Lakehouse has data tagged with ownership, consent, lineage.
3. Omni-AI Core-to-AI Models in operation select relevant subsets for LLMs, ToM reasoning, Recommender optimization, TimeAI, Diffusion AI, etc.
4. User Shells-to-Omni-AI Core, the shells authenticate via universal ID, share minimal slices of data (like OAuth scopes), and receive personalized insights back.
5. Super Omni-AI (Trust Hub) acts like ICANN for AI education: issues universal IDs, certifies connectors, enforces interoperability, and manages policy arbitration across institutions and vendors.

Pioneering AI Schooling Models

Today's era is a digitally distributed, AI-powered, choice-rich world demanding flexibility, creativity, and individual agency.

In this landscape, education can no longer be confined to rigid classrooms or standardized pace. Increasingly the factory model of schooling is failing, misunderstood as a problem internally but nevertheless a structural deficiency. That fact is clearly indicated in the losses schools are having as well as what has happened to how outside industries have been restructured. Uber reimaged their industry and took nearly the entire share of market in just six years through a restructure of logistics to align with immediacy in the tech Age.

Teacher use of consumer commercial AI has exploded just since late 2023 to over 60 percent currently using it in some capacity. Leaders in education need to think beyond AI-as-a-tool to AI-as-Infrastructure. That distinction allows new AI-driven schooling models that rethink how we use time, space, and how we intersect human teachers with learners and the right curriculum at the right level and interest for each one. AI can leave grade-banding by age, linear time use, and a whole lot of other ancient premises behind.

We also need a new education *industry* model. With the right governance as envisioned by the Omni-AI Alliance, AI is going to allow for a mesh network of sharing both digital things and *people*, an ecosystem growing into more and

more utility and efficiency, content and distributed locations. Schools are already using massive virtual and live tutoring services with human teachers on demand. Imagine a world of unlimited shared specialization and generalists, much like the medical profession.

Nevertheless, we need to start from where we are now. A new generation of school models is emerging—not as tweaks or themes, but as full redesigns—to match the reality of learners' lives, minds, and futures. In the background will be the Omni-AI Alliance, crafting the future direction of the industry as a whole so that the inequitable inertia of some institutions can be circumvented by learners.

There are limited AI schools today, and those are in isolated instances and partial deployments of the full vision of Omni-AI. Most traditional schools, districts, States and higher education institutions will not see just a Generative AI system for teaching and learning to transform.

The vision of application of AI to schooling is to address these dimensions:

- Integrate AI as partner
- Reimagine time and space
- Respect personal pace and all domains of human intelligence
- Restore human connection in reconfigured ways

Basics of some of the new emergent models:

Emergent Model	Core Feature/ Primary AI	Key Benefits	Structure	Why Now	Time/Cost Savings
Small Savings, Remain Traditional Factory Model but increase time savings and appeals					
AI-Infused Traditional Schooling <i>Add-on platforms</i>	Generative AI, Agentic AI in soloed systems, eventually usable by an Omni-AI Core, may be data and safety risks	Immediate start with available edtech, no change to anything, but compromises on non-grade-banded personalization and time flexibility for students	Remains whole group live teaching with traditional schedules, still campus attendance oriented full time	Easiest path to use some AI in a slightly safer manner, but not nearly as safe as an Omni-AI Core or as much utility	No real cost savings, individuals get some time savings in their existing work
Co-Pilot Schooling <i>AI co-teaching, enabled master-teacher & apprentice</i>	Built-in co-pilot AI, maybe using portable AI user shells, maybe adding Theory-of-Mind AI (soc-emotional)	Student co-pilots of learning increase personalization within class/course context, embedding AI at the micro-level of experience	Same, may be hybrid and enable remote learning, master-teacher/ apprentice methods enabled	Driving need to manage more meaningful personalization which teachers don't have time to do	Small cost savings, individuals get some time savings in their existing work, but higher achievement probable, could cause better retention
Matrix Fractional + Traditional Schooling <i>Pooled resources, Partial enrollments</i>	Modular, disaggregated education services with teacher pools + Generative/ Diffusion AI-infused resources, Time AI	Improved choice, & scalability through shared teaching specialization communitization, gains through partial enrollments	Same, still campus attendance oriented, distance enabled for remote learners and homeschoolers	Use gig teachers/tutors, cater to homeschoolers for some services, remote plus roving live teaching is less expensive	Better cost savings through breadth of offerings, sharing resources, partial enrollments, individuals get time savings

Emergent Model	Core Feature/ Primary AI	Key Benefits	Structure	Why Now	Time/Cost Savings
Medium & Major Cost Savings, Rearranged Spaces, Master Schedules become Bi-Level					
Lounge/ Satellite Schooling <i>Retains neighborhood schools</i>	Generative AI- infused resources, Time AI geo-distant cohorting for live teaching & tutoring, Co-pilot AI, Agentic AI	Student autonomy with adult supervision, personalized, homeschool-like, visiting-on-rotation live teaching	Supervised independent study with pathway planning, little live teaching unless distance or teacher-touring	School choice vouchers provide purchase of resources & disaggregated services, keep underenrolled schools	Medium savings through breadth of offerings with fewer or redirected FTEs & retaining minor tenant status in walkable schools, individuals get time savings
PathFlex Schooling <i>Pace-based, PBL, AI cohorted classes</i>	Time AI-set class intersections for small cohorts of same ability level with teachers, rearranged non- factory schedules and spaces, enables satellite schools	True non-grade-based learning, unburdened teachers, student agency means absenteeism a non- issue, no enroll-by date needed on courses	Small group in shorter, smaller class meetings vs. independent study steps – frees up teachers for more roaming and specialization	Can't get teachers - solved with time logistics, dramatically improves equity & teacher job satisfaction	Major cost and time savings, through fewer or redirected FTEs and use of gig specialists, higher achievement, higher appeals via total customization
Major Savings After Omni-AI per institution & Omni-AI Registries/Certifications					
A La Carte Limitless Schooling <i>District or State, public/private & homeschooling</i>	Combines all of the above models into true Omni-AI including recommendations engines	Total flexibility, free association amongst institutions and retail learning at the level of course, project, sports, field trip, content membership, etc.	Whole group <i>and</i> Time-AI cohorted small groups, independent & all- online study, with or without live teaching	Omni-AI creates eco- system potentials that would use portable user shells and a certification exchange	Huge time and cost savings through fewer FTEs and use of gig specialists, higher achievement, higher appeals

Why These Models Matter—Because AI is forcing the issue of changing the historically inequitable schooling delivery model

As AI takes over tasks, schools must grow human strengths: empathy, originality, problem-solving. These initial AI models are specifically envisioned for that.

Industrial Model

Whole-group, age-based

Produce compliant workers

Standardized, rigid, universal curricula

Teacher as controller & classroom foreman

Knowledge delivery

Seat-time measurement

Obedience and order

Design of learning flattened to averages

Seat time (Carnegie Units)

Human-Centered Omni-AI Models

Individualized, interest-based pacing

Cultivate adaptable, critical thinkers

Modular, adaptive, interest-driven “liquid” curriculum

Teacher as coach, guide, mentor and diagnostician

Knowledge construction and collaboration

Mastery and cross-curricular PBL with portfolio demonstration

Autonomy and agency

Design of learning for all IQ domains and spectrum

Mastery, projects, real-world evidence

Outcomes for Your Enterprise

The Omni-AI Alliance envisions a school environment where intelligent agents weave seamlessly through every layer of the learning and operational experience, transforming inefficiencies into precision and unlocking human capacity for deeper teaching, creativity, and care. Omni-AI is a modular framework, akin to interoperability but not dependent on data. It “thinks.” The following outlines the core categories of AI agents—and the transformative outcomes they are expected to generate. These agents are far from the *only* types that may come to fruition with Omni-AI Cores.

Learning & Instruction

1. Instructional Agents

Adapt pace, content, and modality in real time. Co-teach with educators, reformulate curriculum, and personalize learning trajectories for every student. Omni-AI will adapt pace, content, and style in real time, working alongside teachers to co-teach and reformulate curriculum for every individual learner. Lessons will be responsive, instantly reconfigured to match student comprehension, ensuring no learner is left behind while advanced learners are propelled forward. This reduces achievement gaps and increases engagement.

2. Assessment Agents

Instantly score work, provide detailed feedback, and record results across systems. Enable transparent, formative assessment loops.

3. Teaching Prep Agents

Hold pre-lesson dialogues with teachers, recommend methods and materials, and follow up on live instruction with notes, reminders, and nudges.

4. Translation Agents

Provide real-time multilingual support across classrooms, communications, and meetings. Ensure inclusive access for families and learners.

5. Learning Time Orchestration Agents

Bi-level master schedules change how time is scheduled so that everyone, teachers and learners, have schedules, but can bracket open time for dynamic meetings to drop into. Class meeting AI can manage auto-cohorting and availabilities even for groups and teachers geo-distant from each other. These extra orchestrations are available depending on the type of Omni-AI integrations.

- Instead of class blocks, the teaching moment becomes fractional: only students at the same point engage live,

while others meet asynchronously or later the same day. A teacher's day may look randomized, but is AI managed.

- AI enables teacher roaming across cohorts, guiding individuals at their level when not booked.
- Students are placed in the right course at the right time, with AI managing flow, prep, and pacing.
- Time is no longer linear—it's adaptive, fluid, and learner-centered.

Operations & Logistics

6. Scheduling Agents

Orchestrate master schedules, pacing guides and dynamic “liquid” curriculum, and facility usage. This helps manage substitute deployment, gig staffing, and geo-distant sharing of human resources to reduce costs.

7. Transportation Agents

Monitor bus routes, detect delays, and correlate attendance anomalies. Recommend route adjustments or alternative solutions for affected students.

8. Facilities Agents

Manage environmental controls, space allocation, and maintenance forecasting. Dynamically reserve rooms and detect anomalies before they escalate.

Omni-AI Agent Ecosystem



Administration & Governance

9. Staffing Agents

Forecast HR needs, track burnout signals, and auto-deploy substitutes or specialists. Recommend PD based on instructional trends.

10. Finance & Budget Agents

Model budget scenarios, flag anomalies, and simulate fiscal impacts of operational changes. Optimize resource allocation across departments.

11. Compliance Agents

Monitor for policy breaches, legal risks, and behavioral flags in real time. Ensure proactive, ethical oversight across systems.

12. Communications Agents

Automate alerts, translations, and escalations across channels. Ensure timely, targeted messaging to staff, families, and stakeholders.

13. Observation Agents

Correlate data across SIS, LMS, HR, facilities, and transportation. Surface invisible patterns, propose interventions, and support equity.

14. Forecasting Agents

Predict enrollment shifts, program demand, and staffing needs. Recommend strategic adjustments based on community and system trends.

The Result

This constellation of agents forms a **synthetic administrative mind**—not just automating tasks, but reasoning across time, systems, and human contexts. It transforms schools into **responsive, equitable, and future-ready ecosystems**, where every learner is seen, every resource is optimized, and every decision is informed.

What to Lead

What you will need to lead is **a new technical architecture**. First, however, it is important to understand what model your institution is driving to achieve. Those two things are co-determinants of the outcomes you can gain.

By starting a journey towards a new model and an *enterprise mind* for your school, you are working on building an Omni-AI Core. There are numerous commercial solutions for this, but your technical staff will want to investigate pricing models as well as the raw data used in commercial AI. You will want to consider with them what data you already have and where it lies currently. This might be a simple few integrations or a major adoption of multiple technology elements, but what you are aiming for is *intelligent agency* and *management* between core operational platforms. Your Omni-AI will eventually be simultaneously interfacing with your modular and ever-evolving ecosystem of AI-augmented applications and curriculum resources—plus your other major and minor operations systems.

Think of your Omni-AI Core as an intelligence, not a data warehouse. An intelligence co-piloting the schooling enterprise with you that you can query anytime, and that other staff-members interact with in addition to your other systems.

Another stage of leadership will be to also to have your Omni-AI Core interface with student's portable user shells, also known as “bubbles” or “copilots,” captured AI records of that student that could be plugged into your institution upon enrollment.

The final stage will be consenting limitedly to harvest new knowledge resources from the outside and to also share across anonymized resources through a trusted gateway as is envisioned by the Alliance as the Omni-AI Education Trust.

Leading Your Unified Intelligence Layer

Through intelligent agents, real-time data synthesis, dynamic master scheduling, and cross-system harmonization, an Omni-AI Core enables a new model of schooling and a growth to an ecosystem—fluid, student-paced, teacher-empowered, and deeply personalized.

Get Started > Join the Omni-AI Alliance as a paid member > Get your first working co-member virtual call > Take inventory internally and assess your human resources and challenges > Reconnect about goal setting, funding and using your member allies.

Tech Standards & Certifications

The Omni-AI Alliance is already underway to develop the tech standards and certifications needed for the enterprise-level use of AI in schools. The following tables explain why there will be unique standards and how to differentiate the other two main standards bodies in their work versus the Omni-AI Alliance. Initial adapter specs will be drafted for edtech software companies.

Agents, not just Data Exchange

AI Integration is core: Existing standards mostly handle data exchange; Omni-AI explicitly supports AI agents using *data in place* for unlimited agents.

Real-Time Adaptation

The hard work on tech standards by other standards consortiums are designed to be mostly batch or transactional. With AI on the scene, new standards are needed to support live, AI-driven agents of all kinds.

Certification & Trust

The Omni-AI Alliance intends to create certifications for AI-readiness.

Expanded Metadata & Semantics

The Omni-AI Alliance intends to extend metadata to cover learning objects, prerequisites, cognitive load, pacing, and AI

annotations in ways that allow for a redesign of logistics using AI. These include fractional teacher time, dynamic cohorting, instructional and human resources across regions, additional types of major systems such as HR, Finance, Scheduling, Transportation, Food Services and other operational elements that together will allow an Omni-AI Core to be queried for impacts across systems for changes in enrollment, staffing, unexpected events, and more.

Ethics & Human-First Governance

The Omni-AI Alliance will add ethical standards ensuring AI enhances human teaching and student privacy.

Arenas of Certification Queries:

LLM Design Patterns & Responsibilities

Reviews to discover each/any SLM or LLM backend instance as a capability provider behind a Model Router and Model Registry. This includes General LLM (broad conversational tasks, help-desks, tutoring dialogue), Assessment LLM (generating test items, rubrics, worked solutions, tuning for psychometrics), Explainability LLM (teacher-friendly rationales and stepwise scaffolds), Multimodal LLM (handles images/animation transcripts from/for courseware), Safety/Moderation LLM (filters unsafe content, checks ToM inferences against policies.)

Router & Orchestration layer

Review of router decisions as to which LLM(s) to call based on task intent, cost, latency, and capability. Review of ensemble pattern: for high-stakes outputs (assessments, credentials), call multiple specialized LLMs and run a consensus & calibration step. Check for fallbacks: if a model times out or fails a safety check, fall back to a conservative model or human-in-loop. Check for provenance: every output is labeled with model ID, version, confidence, and token usage.

Layered ToM Stack

Any system modeling probable learner mental states (confusion, confidence, cognitive load, motivation) and using those models to plan intervention reviewed for sensitive or speculative design—is it probabilistic, auditable, and teacher supervised.

Integrated Closed Courseware

Review of what structured events and state captures (telemetry, pointers) derived from the UX, while keeping the UI and animations private.

AI User Shell Audits

Verification of uniqueness of issuance, registry integrity, audit consent/firewall rules inside the user shell, verify portability.

Other Queries

The Omni-AI Alliance anticipates other areas of review regarding the cross of Time AI with LLMs and other types of AI such that orchestrators and AI cohorting remain auditable for all students to equitably progress in learning pathways. Multiple types of audit trails are likely for certification (SOX audit compliance as in the Finance arena), cross-model bias checks, agent interoperability to prevent “black box” multi-agent behavior.

1. Data & AI Standards

Standard	Difference from other standards bodies	Notes / Omni-AI Alliance Intent
AI “Look-In” Standard	No standards body has created a standard to explicitly allow AI agents to access content in real-time for adaptive teaching.	Enables generative/adaptive AI to personalize lessons on-the-fly without copying content. Used by recommendations engine AI, Time AI.
Data Cleanliness Standard	One standards body ensures data integrity but focuses on transactional reporting or interoperability.	Omni-AI adds real-time quality, completeness, and readiness for AI inference.

Time AI Data Standard	No standard exists.	Supports adaptive cohorting, fractional teacher time, and pacing optimization for students.
Assessment & Grading AI Standard	Two standards bodies present tech standards to handle assessments but typically only store results, not AI-generated scoring explanations.	Adds AI explainability and auditability in grading outputs.
AI Recommendations Standard	No standard exists.	Standardizes AI-driven interventions while protecting privacy. Need standard for learning suggestions from recommendations engines, including within adaptive courseware.
Theory of Mind (ToM) AI Guidelines	No standard exists.	Defines limits on cognitive modeling, explicitly excluding emotional/mood inference.

2. Courseware & LMS Standards

Standard	Difference from other standards bodies	Notes / Omni-AI Advantage
Courseware Interoperability Standard	Standards bodies have LTI/xAPI/Caliper; and an additional one focused on student records.	Omni-AI will add AI-queryable content access for adaptive teaching.
LMS AI Integration Standard	Existing standards for data exchange but not active co-teaching by AI.	Standardizes read/write access for AI agents with human override and auditability.
Content Metadata Standard	Learning Resource Metadata (LRMI); and another for limited object tagging.	Omni-AI extends metadata to include skills, prerequisites, pacing, cognitive load, auditability, and AI annotations. These are so that AI can <i>reason about</i> content, not just fetch it or know about it to recommend.
Digital Object Exchange Standard	The xAPI focuses on learning activity statements; Another mostly stores records.	Omni-AI defines a semantic protocol for sharing modular courseware objects usable by AI agents.
Privacy & Compliance Standard	FERPA/GDPR compliance guidance.	Omni-AI adds AI-specific rules, e.g., limiting agent inference to actionable cognitive data only.

3. Certification & Trust Standards

Standard	Difference from other standards bodies	Notes / Omni-AI Alliance Intent
Omni-AI Trust Certification Standard	No standards bodies provide certification for AI-readiness.	Provides seal of approval for AI-capable vendors, courseware, and LMSs.
Data Governance Certification Standard	One standard provides governance focuses on districts and state data policies; another focuses on interoperability.	Omni-AI adds AI-focused governance, ensuring data is ready for adaptive agents.
Courseware AI-Readiness Standard	No standard exists.	Confirm content is directly usable by recommendations engine AI and machine learning for personalized instruction without compromising intellectual property, but including it to enhance content choice for its digital instructional design quality.
Agent Digital Identity & Authentication Standard	OneRoster and another standards body uses SSO and standard auth.	Omni-AI adds agent identities and verifiable credentials for AI access plus an AI portability standard for user shells.
Computer Vision & Robotics Interaction	No standard exists.	Omni-AI adds motion/gesture capture, multi-modal fusion, and robotic task orchestration tied to outcomes.

4. Interoperability & Governance Standards

Standard	Difference from other standards bodies	Notes / Omni-AI Advantage
Centralized Data Exchange Standard	One standard body relies on state data pipelines.	Omni-AI defines trust-managed, anonymized educational data exchange for a federated AI ecosystem that is auditable.
AI Agent Communication Protocol	No equivalent.	Standardizes multi-agent communication for voice recognition AI, co-teaching, collaboration, and shared interventions.
Trust Governance Framework	One standard has governance for API access; another has consortium oversight.	Omni-AI adds centralized AI trust governance, dispute resolution, and certification enforcement. May include a Technical Policy Intersection Layer for user-level permissions.
Pricing & Licensing Standard	No standard exists.	Provides a transparent monetization model for AI-readiness certifications.
Ethical & Human-First Standard	No standards exist.	Codifies human-first education principles, ensuring AI augments rather than replaces teachers.

5. Identity & AI User Shell Standards

Standard	Difference from other standards bodies	Notes / Omni-AI Advantage
AI User Shell Issuance Standard	No standards for unique, portable AI user identities. One for handling roster/student ID interoperability.	Omni-AI defines a unique, globally recognized issuance system for AI user shells (students, teachers, administrators). Like ICANN domain names, each shell is uniquely addressable and portable across systems.
Portable User Shell Standard	No standard exists.	Defines how a user's AI shell (their "cognitive twin") can move across LMS, SIS, courseware, and Omni-AI Core while maintaining continuity of learning, privacy, and permissions.
AI Shell Identity Registry (Trust-Managed)	No registry equivalent.	Omni-AI maintains a central registry of AI shell issuances (like ICANN root zone), ensuring uniqueness, trust, and revocability.
Delegated Authority Protocol	No standard exists.	Defines how schools, districts, or trusted providers can issue/authorize AI user shells under Omni-AI oversight — like registrars under ICANN.
Consent & Data Exchange Protocol	One standards body handles consent via district policies; another via limited rostering.	Omni-AI adds granular user control: each shell mediates what AI can "see," share, or recommend. User shells act as data firewalls for students and teachers.

Principles of Omni-AI Enterprise Policy Setting

While much of the AI policy conversation centers on consumer-level acceptable use policies—protecting individual students, teachers, and parents—the Alliance is focused upstream, on the Omni-AI Cores that schools have already begun tackling to manage at their enterprises. Without policies to govern these “minds of the enterprise,” education risks falling into disarray, as disconnected AI tools multiply without coherence or oversight.

The Omni-AI Alliance exists to help craft many new levels of policy setting which will be individualized by institutions. These are the **Omni-AI Alliance Principles of Enterprise Policy Setting**:

1. Human-Centered Accountability

By focusing policy on Cores and Exchanges, the Alliance guarantees that administrators remain accountable. Policies insist that every AI-driven decision loop connects back to a human role—educator, counselor, or leader—responsible for the final call.

2. Strategic Coherence

Schools operate with thousands of digital elements—content libraries, LMS systems, scheduling platforms, assessments, teacher time allocation. Responsible

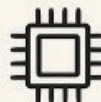
AI in education will be used at various levels and will require technical standards and policies at each



Individual users and their portable shared experience (user shells)



Individual AI-infused Apps and systems sold as instances



Omni-AI Cores (Schools)



Omni-AI Exchanges and Certification Trusts

orchestration of Omni-AI Cores will ensure a functioning whole drives dramatic outcomes schools need.

3. Guardrails for Scale

Unlike a personal AI co-pilot or siloed AI-infused applications, Omni-AI Cores will affect wider populations. A flawed recommendation engine,

biased scheduling routine, or unregulated time-AI allocator could impact thousands of learners at once. Policies provide non-negotiable boundaries on what Cores can and cannot decide.

4. Futureproofing the Institution

Consumer-level AI use will always shift with trends. Omni-AI Cores, however, will form the long-term digital backbone of schools. Policy must ensure these backbones evolve in alignment with educational values, not just technological convenience.

5. Intelligent about Intelligence

It's not enough to know only theoretically what an AI can do, nor is it enough to characterize an AI's bias. Policy setting must be intelligent about the main algorithms and intent of an AI; it's skeletal structure, data intakes and dates-of-intake.

6. Defined Utilities

AI in education will be used at various levels. Individual users and their portable shared experience (user shells) >

individual AI-infused Apps and systems sold as instances to individuals and institutions > Omni-AI Cores > Omni-AI Exchanges and Certification Trusts.

7. Auditability

Private AI including Omni-AI Cores and user shells encompassing educational information should be auditable in a number of dimensions including credentials, AI standards, data custodianship, micro-transactions, namespaces, data trades, adapters, adaptive engine transparency, conceptual mastery signals, real-time interaction logs, policy inheritance, tethering and exports/imports, and persistency.

Closing Thought

We are allies, a working group with a vision. It is not a single technology—it is a potential new educational and societal infrastructure and ecosystem that this Alliance sees as the logical response to the AI incursion. It paves the way for the realization of a better human condition in teaching and learning. It protects and creates jobs and industry.

The work to create the policies, the advocacy around foundational concepts are connected to strengthening efforts to effectively grow human intelligence, to find other schooling models and validate good works will be ongoing.

The shift that the Omni-AI Alliance sees happening with a handful of already envisioned new models reveal the potential for schooling systems to finally align with the diversity of human nature.

Yet, this transformation is not inevitable. It requires intentional leadership and deliberate policy to ensure that the AI that is woven into the fabric of education is a servant to a newly elevated humanity. Join us.



OMNI-AI
Alliance

/coordinated by Learning Counsel News Media,
Research & Innovation Services

Benefits for curriculum, instruction, and leadership professional development:

- Annual Gathering for Members – a working event
- Camaraderie in a movement redefining education's infrastructure
- Bi-Monthly Virtual Meetings
- 22 Field Meetings

AI Fluency

- Synthetic-AI Fluency Framework for instructional leadership
- Competency maps for teachers, curriculum designers, and PD leads

Curriculum & Pedagogy

- Human-AI distinction – Utilize the 5 Characteristic Differences
- Guidance on co-designing and orchestration with AI agents, pacing with Time AI, and adaptive learning
- Support for embedding AI fluency across subjects and grade levels
- Support for PD pathways for teachers to shift from content delivery to orchestration

Community & Collaboration

- Committees to co-design human-centric curriculum and instructional models