PowerSchool

Are We AI Ready?

Evaluating AI Applications and Ensuring Organizational Readiness for Classrooms, Schools, & Districts

Introductions

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Education Strategy & Learning Innovation

PowerSchool

Personalized Education for Every Journey

PowerSchool

The leading provider of cloud-based software for K-12 education in North America

Over 15,000 school organizations

7 out of 10 top charter management organizations

50 million students*

90 out of 100 top US districts

90+ countries & territories

TECH & LEARNING AWARDS OF EXCELLENCE 2022 BACK TO SCHOOL SECONDARY EDUCATION WINNER

THE STEVIES

//CODiE// 2022 SIIA CODiE WINNER

G2

Honoree 2019 Inc. 5000 2019 Honoree

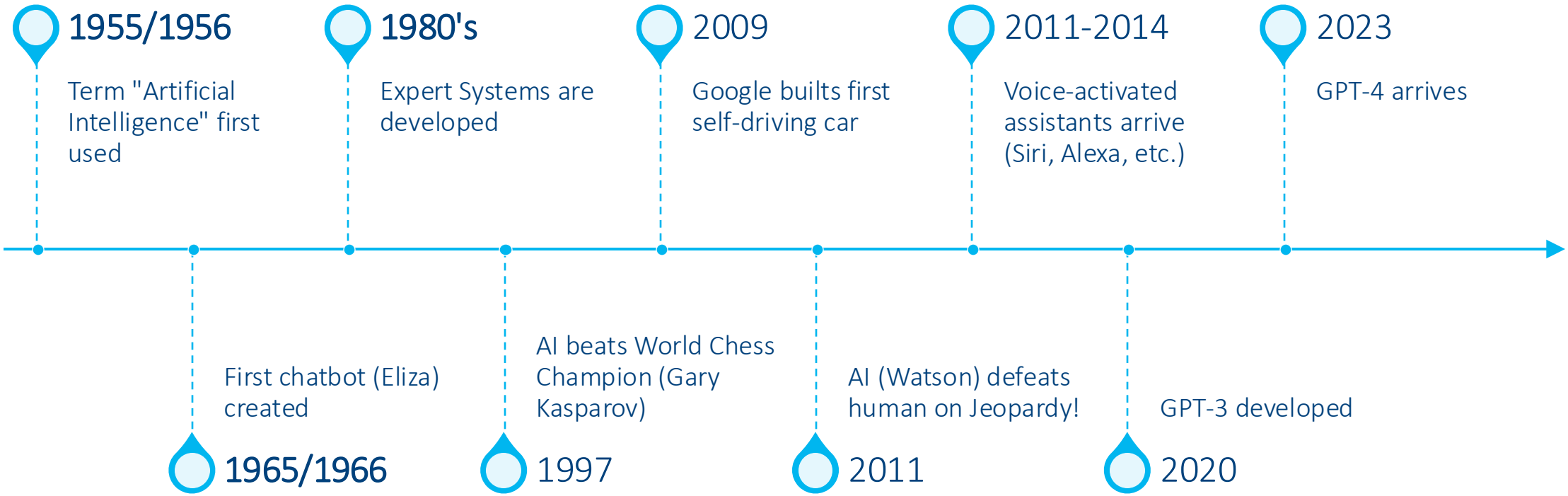
EDTECH BREAKTHROUGH AWARD 2022

EXCELLENCE IN CUSTOMER SERVICE AWARD 20 22

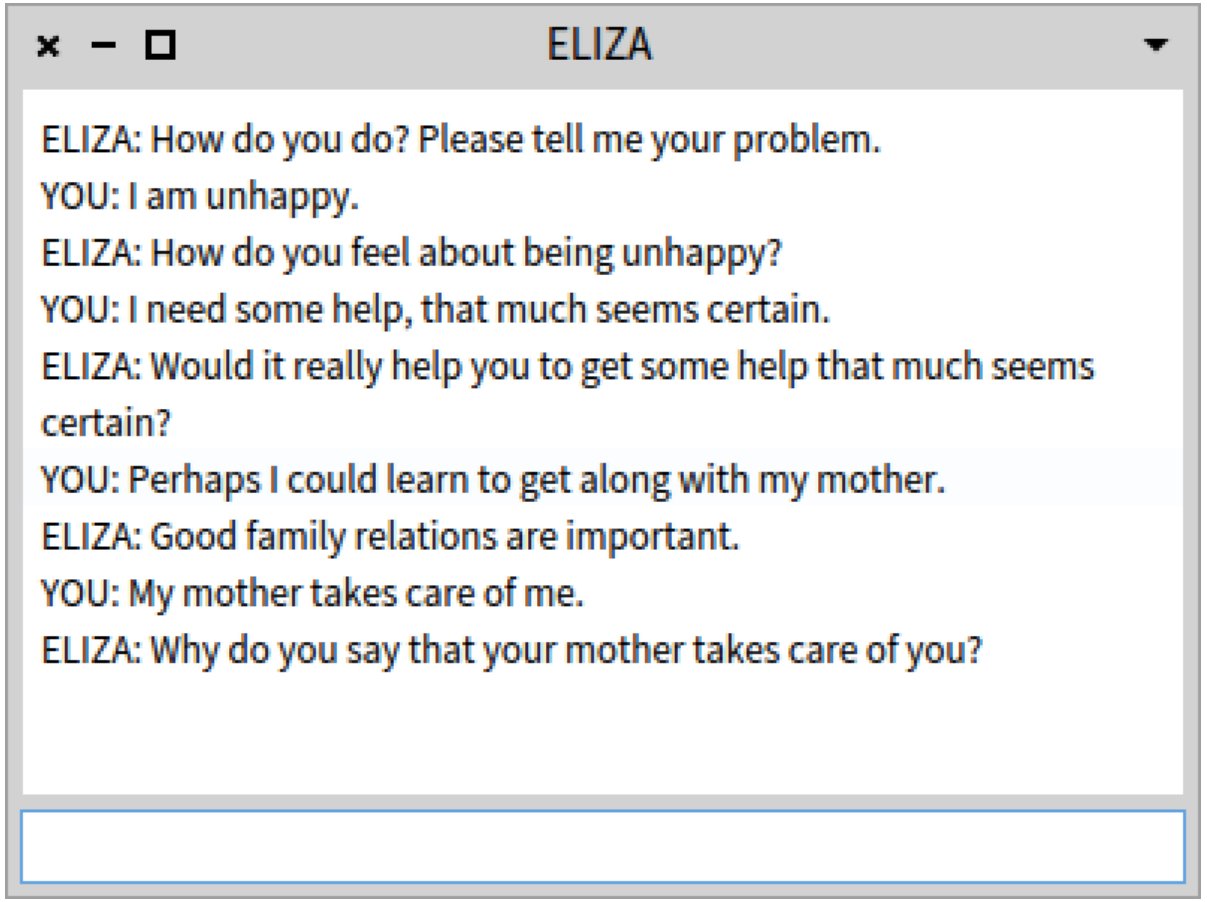
THE EDTECH AWARDS COOL TOOL FINALIST 2022

* A total annual enrollment served calculation representing the sum of students support across all PowerSchool customers who use at least one PowerSchool product. This amount is valid for 2021

Timeline: Brief history of AI



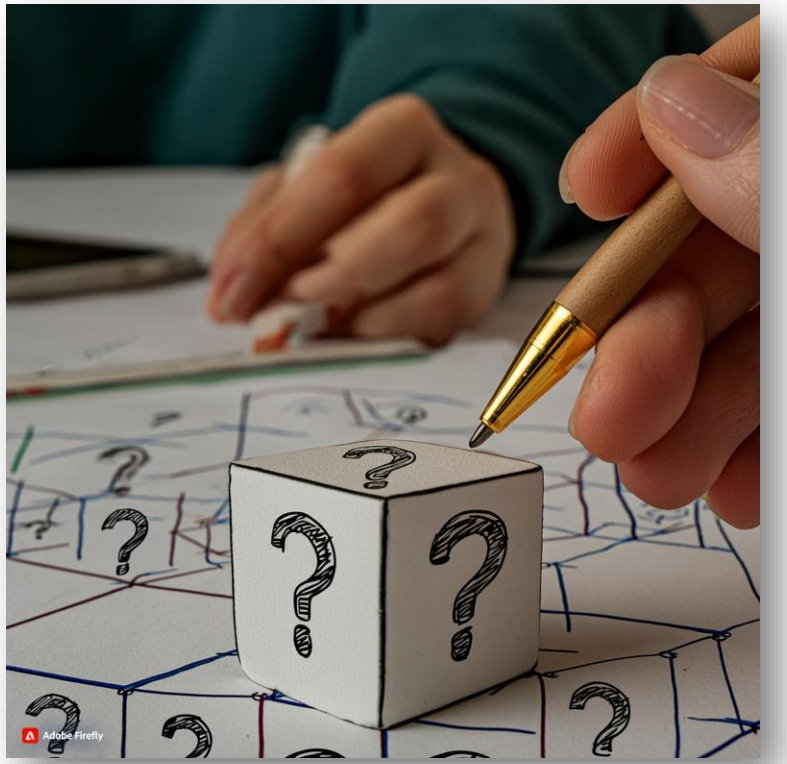
The First Chatbot, Eliza



Key elements needed for effective AI

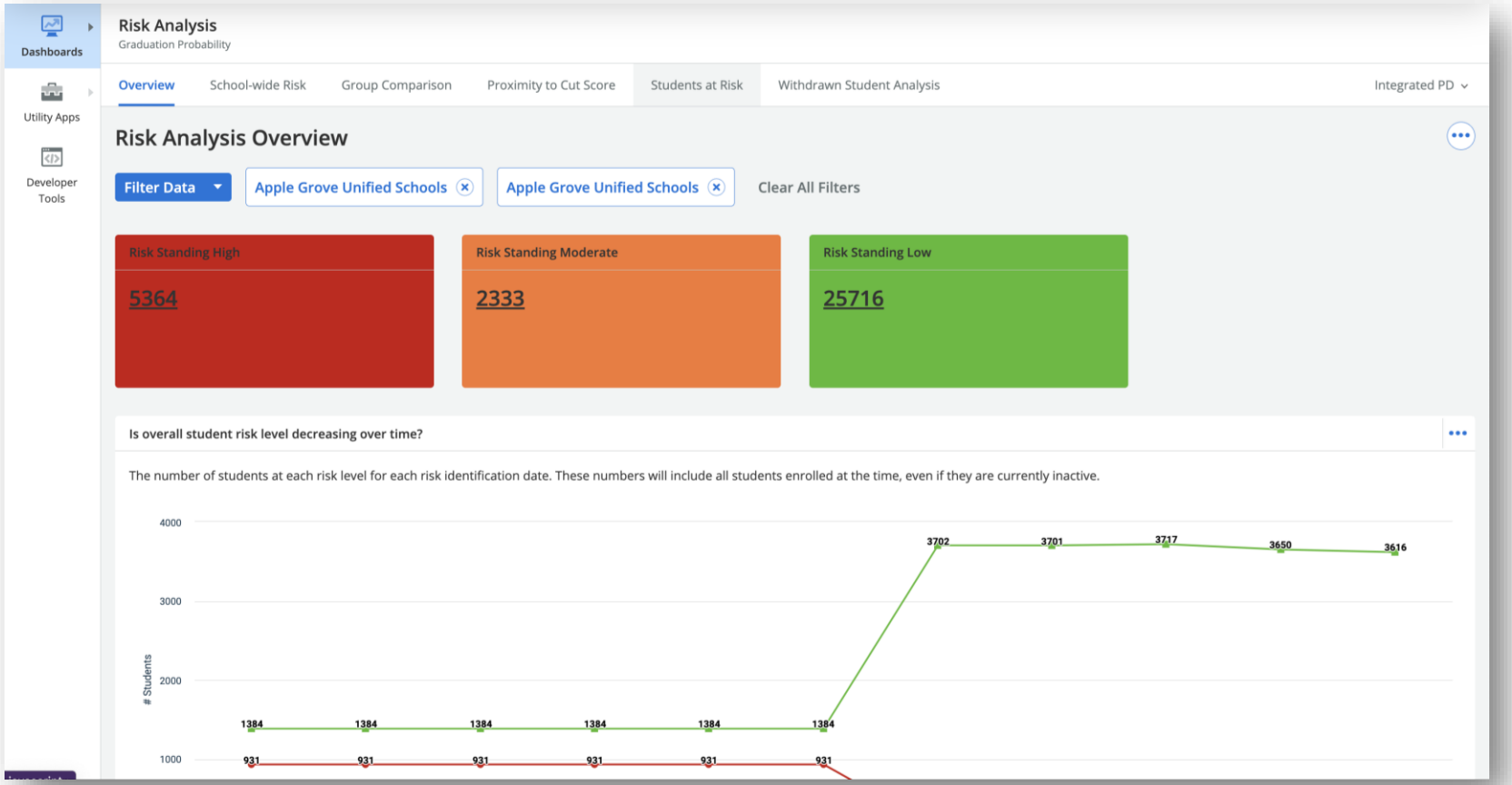
Large data sets/information

Context



One type of AI in Education: Machine Learning

Machine Learning for analyzing and identifying situations



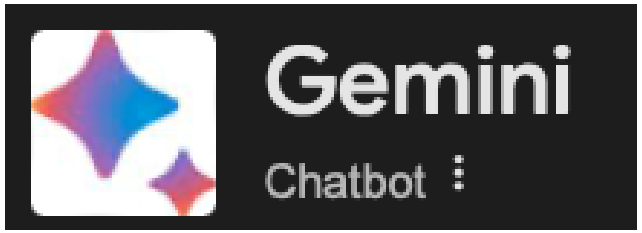
Another type of AI in Education: Generative AI

ChatGPT

Microsoft Copilot

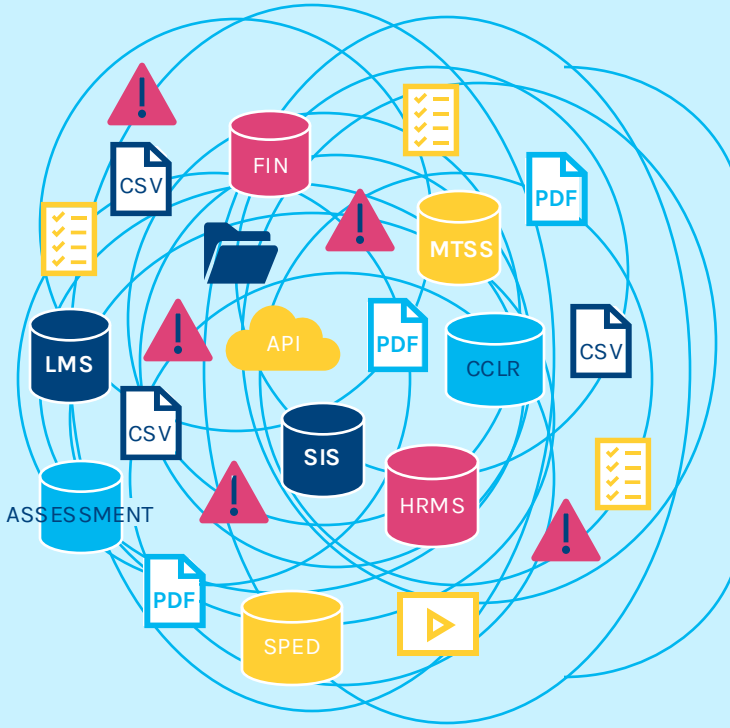
IIElevenLabs

Craiyon



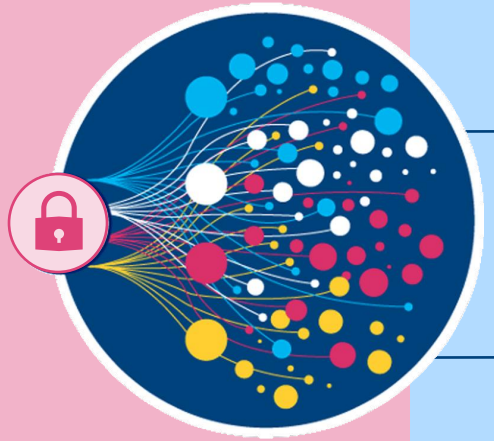
Adobe Firefly

Data Foundation for Modernization



Secure Data Consolidation

- Attendance
- Behavior
- Transcripts
- Enrollment
- Screening Results
- Interventions
- IEPs
- Social Emotional
- Benchmark Scores
- State Assessments
- Skills Progress
- Career Interests
- Budget / Spending
- Recruiting / Hiring
- Staff Retention
- Performance Reviews

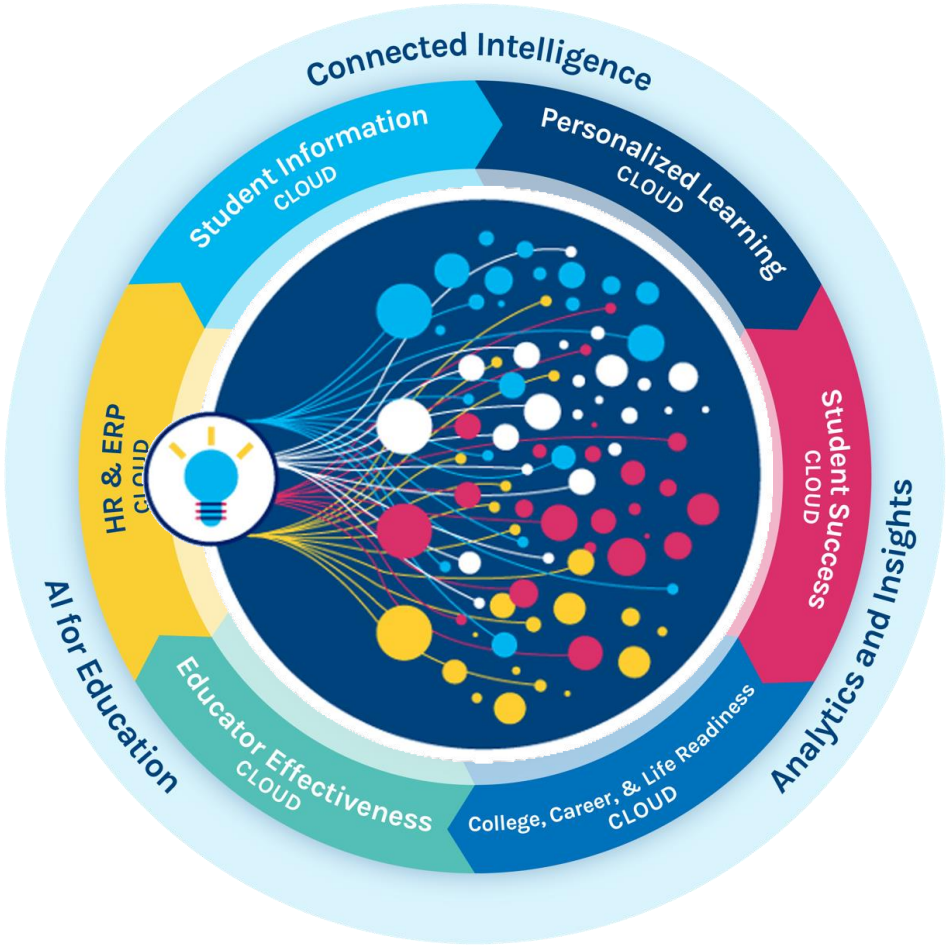


CONNECTED INTELLIGENCE

Making an Impact with AI

- AI Assistant
- AI Agents
- Cross-Product Workflows
- Cross-Product Analytics
- AI Assisted Data Integrations

AI could have tremendous impact across all personas



STUDENT
Personalized Support

72%

of students learning gaps

addressed with personalized help on assignments, learning and homework

EDUCATOR
Personalized Teaching

7-12 hours

time savings a week

searching for and creating instructional resources

PARENTS
Personalized Information

60-80%

reduction in time spent

For parents to navigate 3-6 different systems they have to navigate today

SCHOOL ADMINISTRATION
Personalized Data

86%

of school leaders

agree technology helps personalize student learning so they can focus on supporting individual needs and meet learning goals

STATE OFFICIALS
Workforce planning

20%

access to CCLR counseling

1 in 5 students doesn't have access to counselors today,

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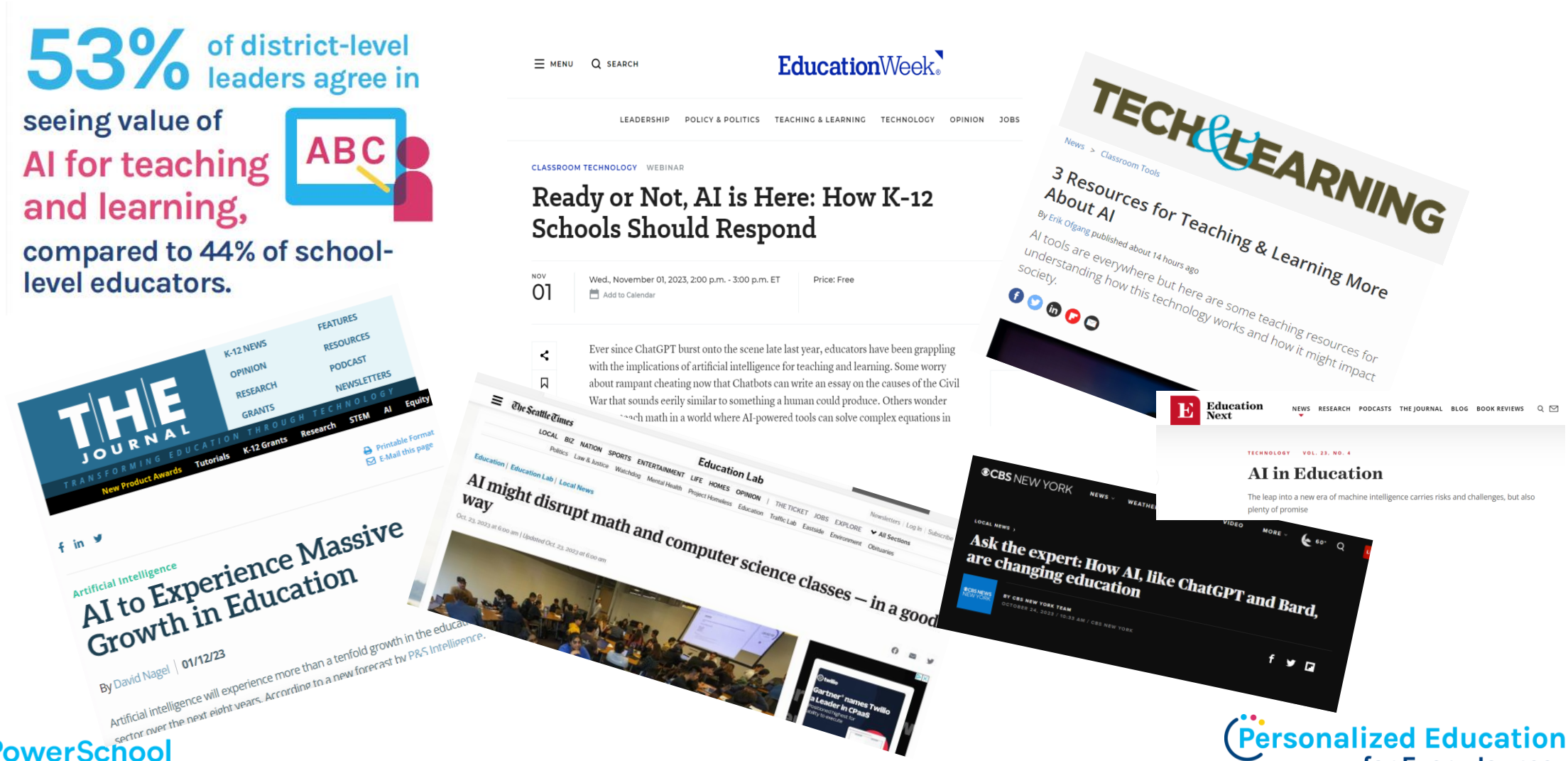
The State of AI in Education

New Innovations in Generative AI Spark Discussion about Change and What's Possible



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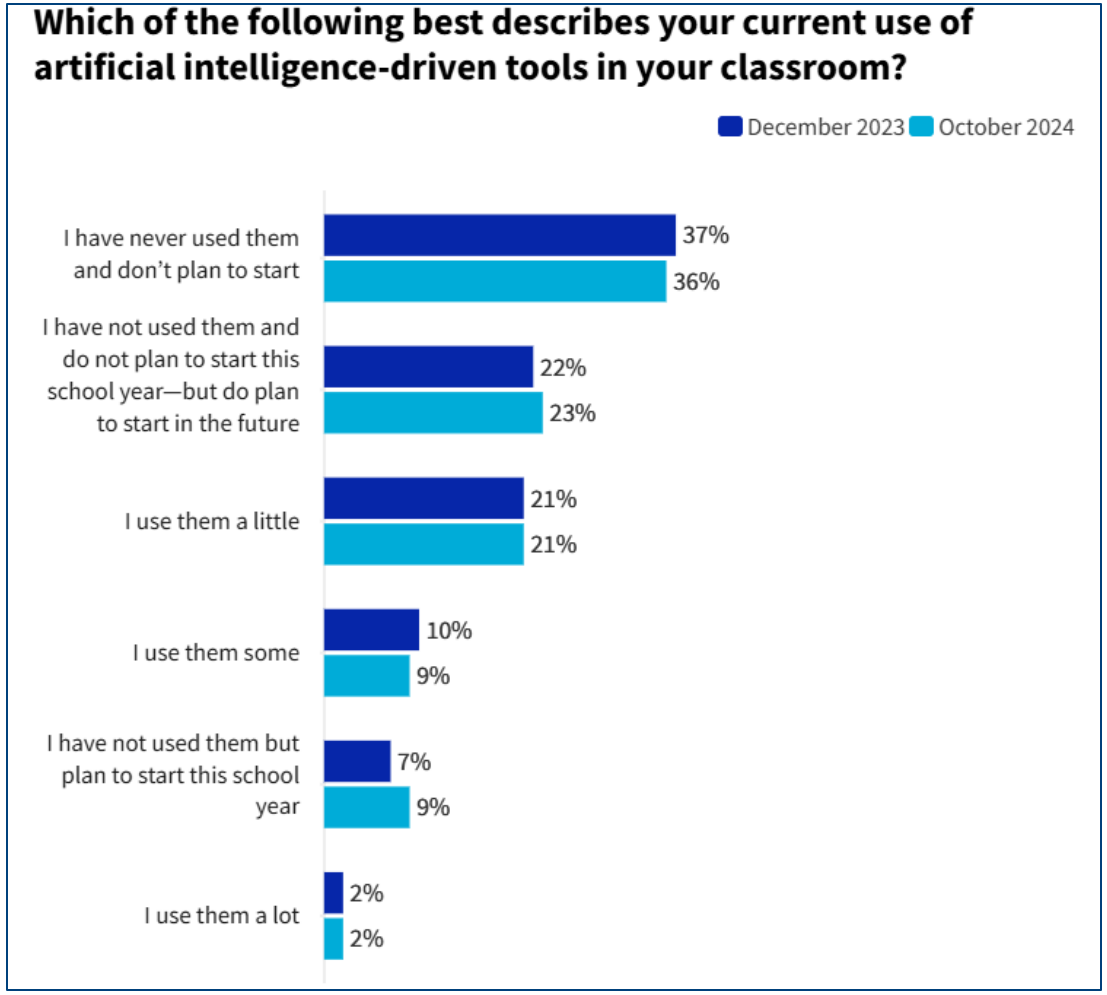
Personalized Education for Every Journey

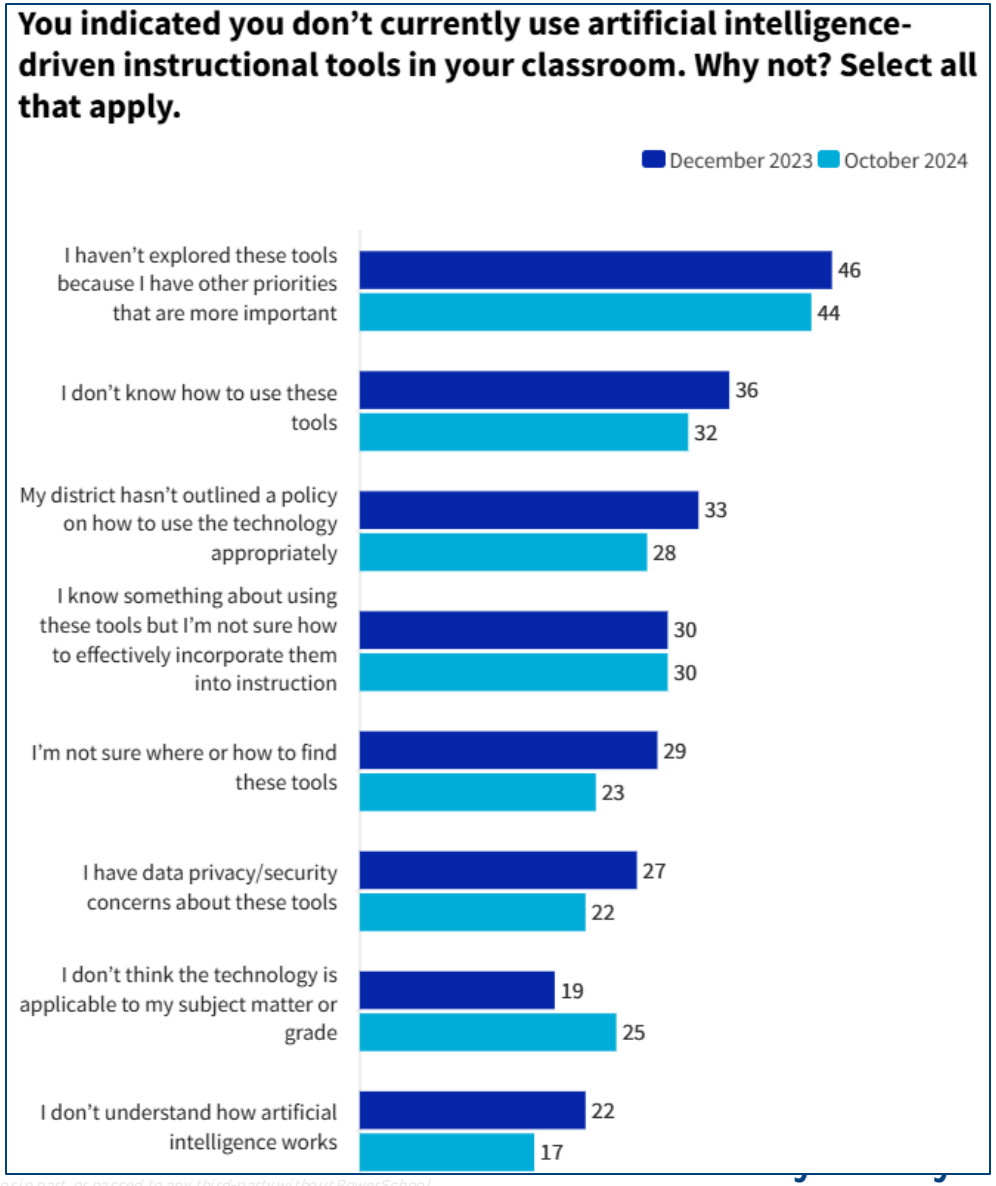
Trends: Supporting the Responsible Use of AI in K-12 Education

Data Points from Recent Reseach			Considerations
Students **Students Using AI**	**51%**	Of students (aged 14-22) reported using GenAI tools (e.g. ChatGPT) [1]	**What is in place to support student use of AI?**
Teachers **Teachers Using AI**	**58%**	of teachers reported having no PD on AI[2]	**How can we better support educators in their use of AI?**
AI Policies **Guardrails for AI Use**	**8/10**	Teachers report that their districts don't have clear AI policies in place [2]	**In what ways can we provide guidance around responsible use of AI?**
Data Inefficiency **Siloed data sets & barriers to access**	**#1**	challenge for districts is connecting data across systems [3]	**How can we remove data siloes across systems to support responsible AI?**
Data Privacy **Student data at risk**	**80%**	of K12 districts have been the victims of ransomware attacks [4]	**How can we bolster data systems to protect against cybersecurity attacks?**

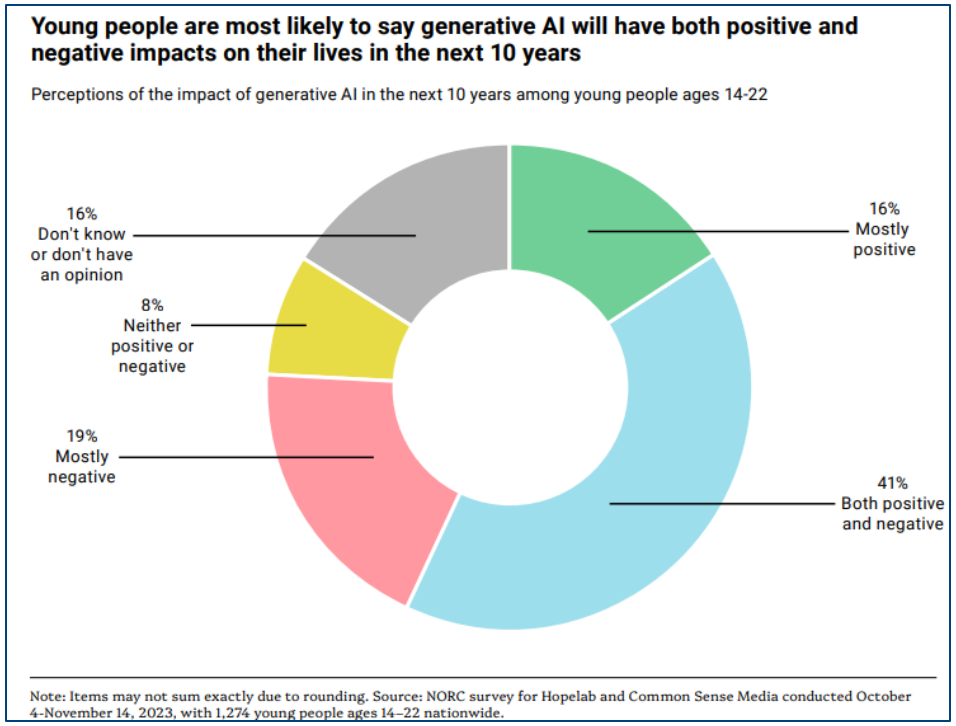
1) Source: Report – Off Task: EdTech Threats to Student Privacy and Equity in the Age of AI, September 2023
2) Source: EdWeek Research Center, January 2024
3) Source: PowerSchool 2023 Education Focus Report.
4) Source: The State of Ransomware in Education, April 2023.

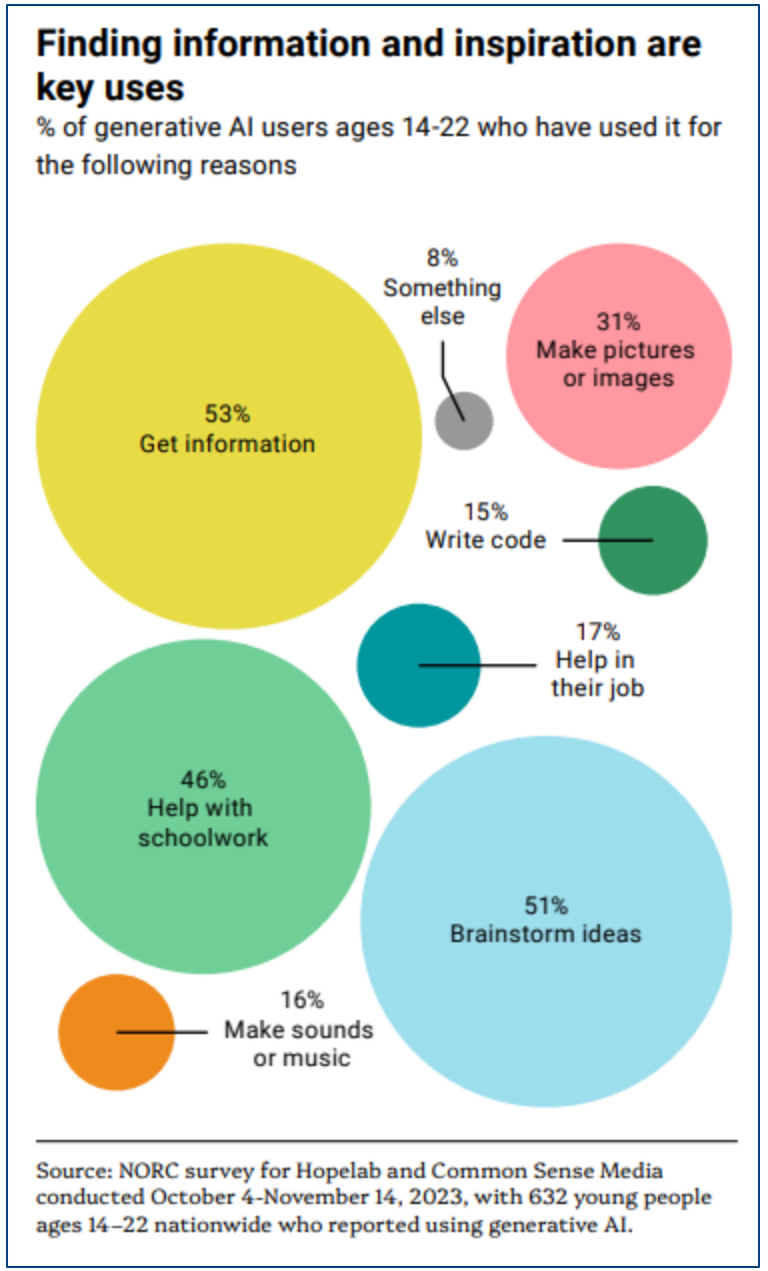
Trends: Teacher use (or non-use) of AI in the Classroom

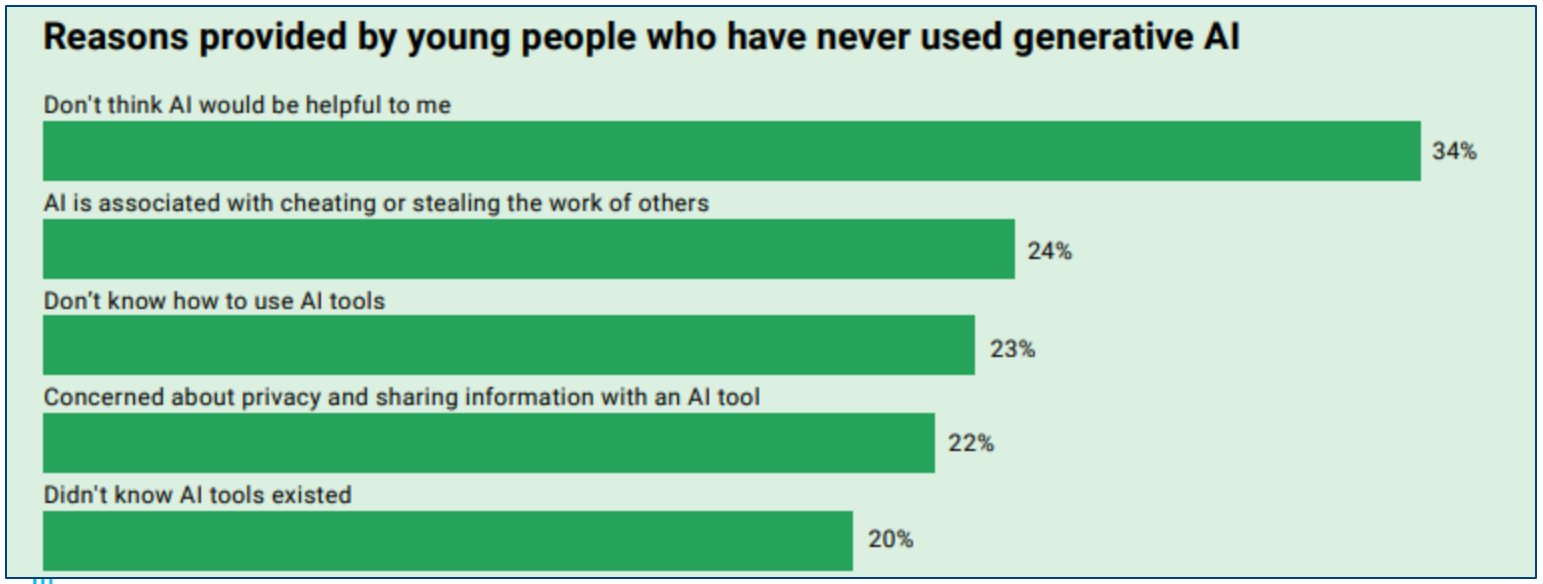




Trends: Student use (or non-use) of AI







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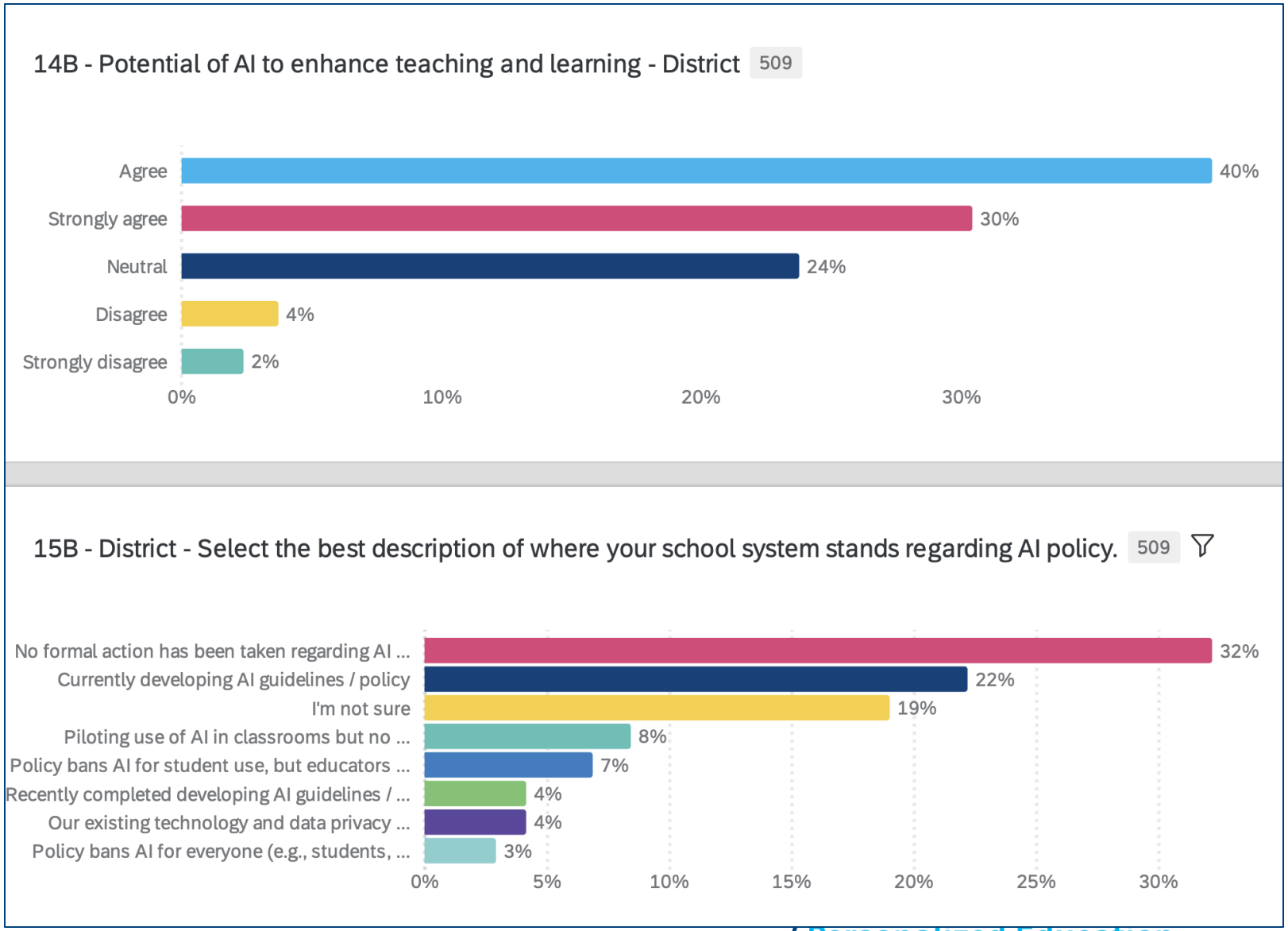
Trends: Leadership Perspectives about AI

- **70% of district leaders agree/strongly agree in potential of ai to enhance T&L, up from 53% in 2023.**
  - 65% of school level educators feel the same, up from 44% in 2023

- **Only 1 out of 5 leaders are actively developing AI policy/guidance**
  - 8% piloting use of AI in classrooms but no formal policy
  - 7% banned AI for students
  - 4% completed AI guidance

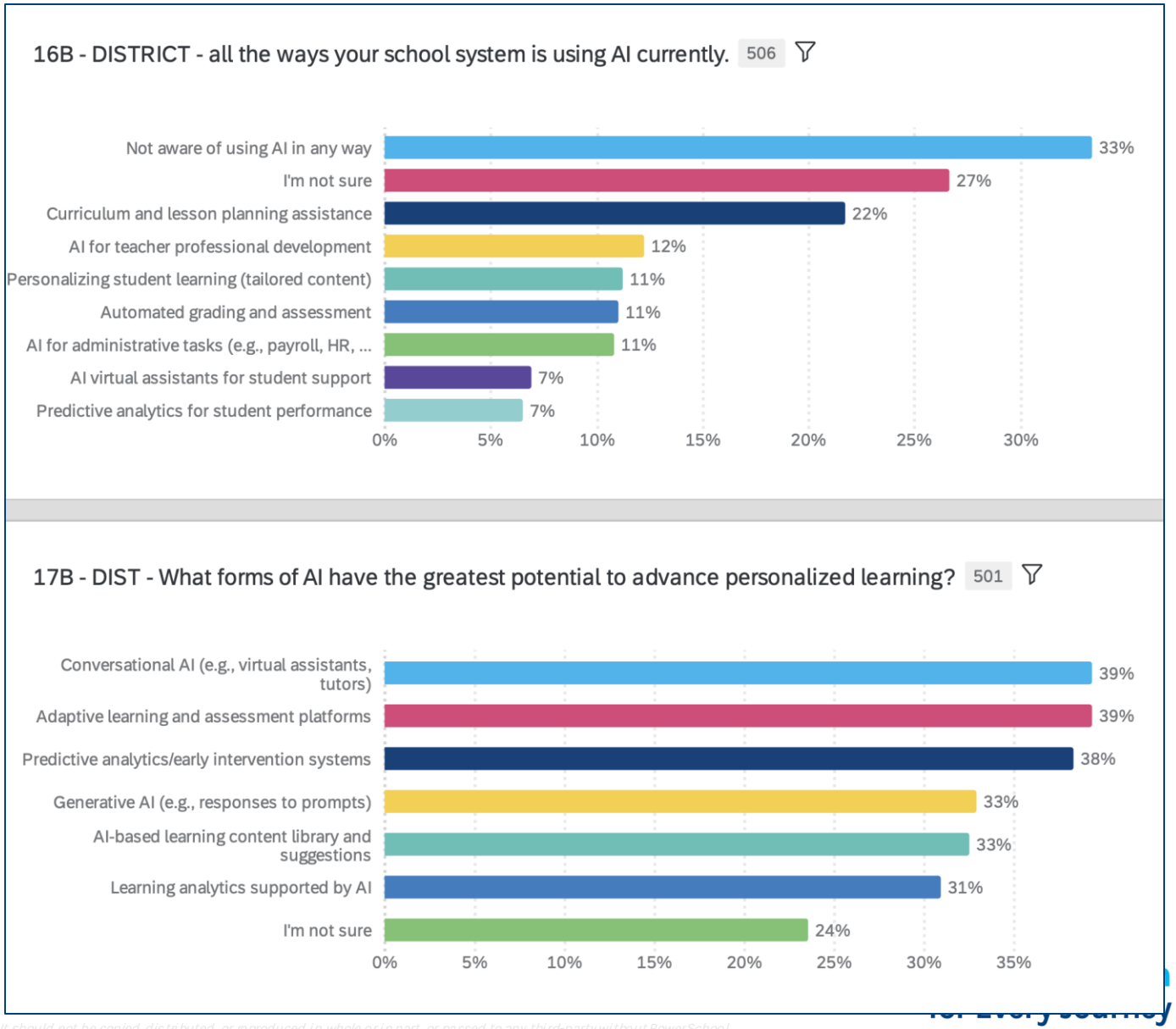


Trends: Leadership Perspectives about Classroom Use of AI

Use of AI

- 1 out of 3 district leaders are not aware of using AI in any way
- 1 out of 5 using AI for curriculum / lesson planning
- 1 in 10 using for PD / tailored student content / grading / admin

- **Highest potential AI**
  - Conversational AI (39%)
  - Adaptive learning (39%)
  - Predictive analytics (38%)
  - Gen AI (33%)

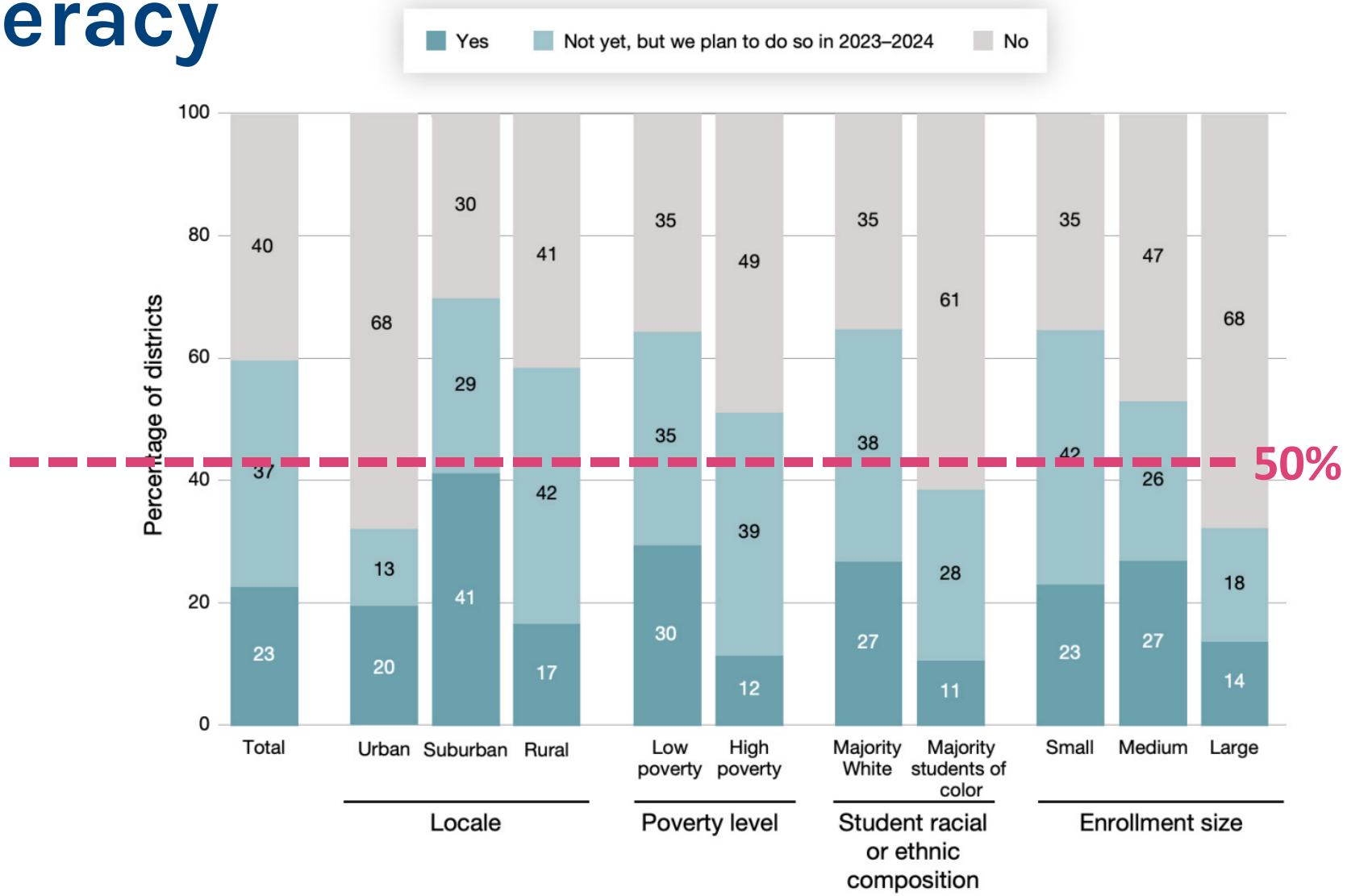


Trends: AI Literacy

Percentage of Districts That Have Provided Training (or Plan to Provide Training) to Teachers About AI Use

How many of your teachers have:

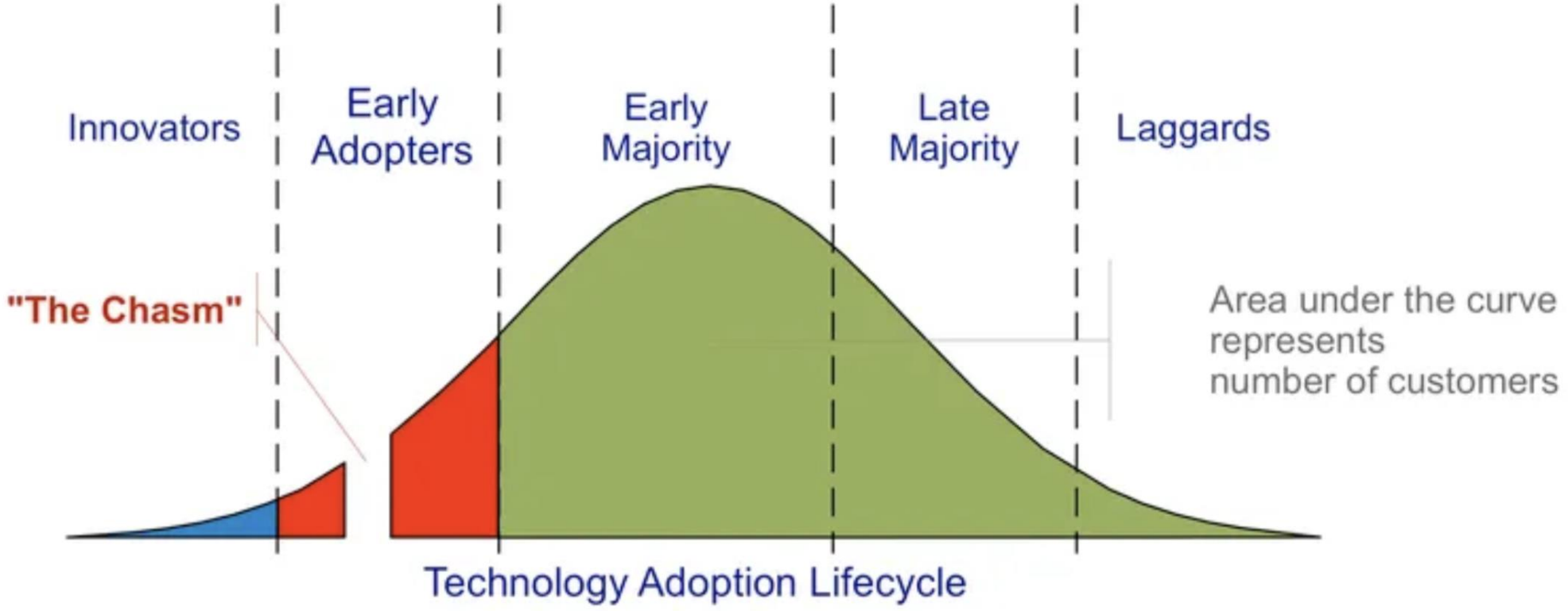
a) Tinkered with AI for work?
b) Gotten formal training?



From RAND, *Using Artificial Intelligence Tools in K-12 Classrooms* (2024).

AI Adoption Curve

Where does your district fall on the curve?



Technology Adoption Lifecycle (Image: Craig Chelius, creative commons, CC-BY-3.0).

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How can schools and districts evaluate AI applications more thoroughly for responsibility, safety and effectiveness?

AI Use Cases – Prioritizing Impact

Democratization of data – Centralized repository of educational data with natural language queries. Opens data exploration, analysis and visualization to all. Early warning suggestions.

Personalization of Learning - AI efficiently generates instructional and assessment resources based on specific topic areas, grade, subject, standard alignment.

Assessing Student Learning - AI assesses a broader, holistic range of learner's knowledge, skills, abilities, and talents. Insights are timely, explainable, fair, and bias-free.

Autonomy and personalization - Increase student engagement. AI systems increase the level of control learners have over their learning and development.

Increase Community Engagement - AI opens new doors to increase family and community engagement.

Administrative Efficiency- AI should increase the capacity of organizations while prioritizing human decision-making (keeping humans in the loop).

PowerSchool AI Guiding Principles

Our Commitment to Serving Students, Parents, and Teachers Responsibly

Human-Centered

Built with Fairness & Bias Resistance

Stringent data governance, privacy, and security

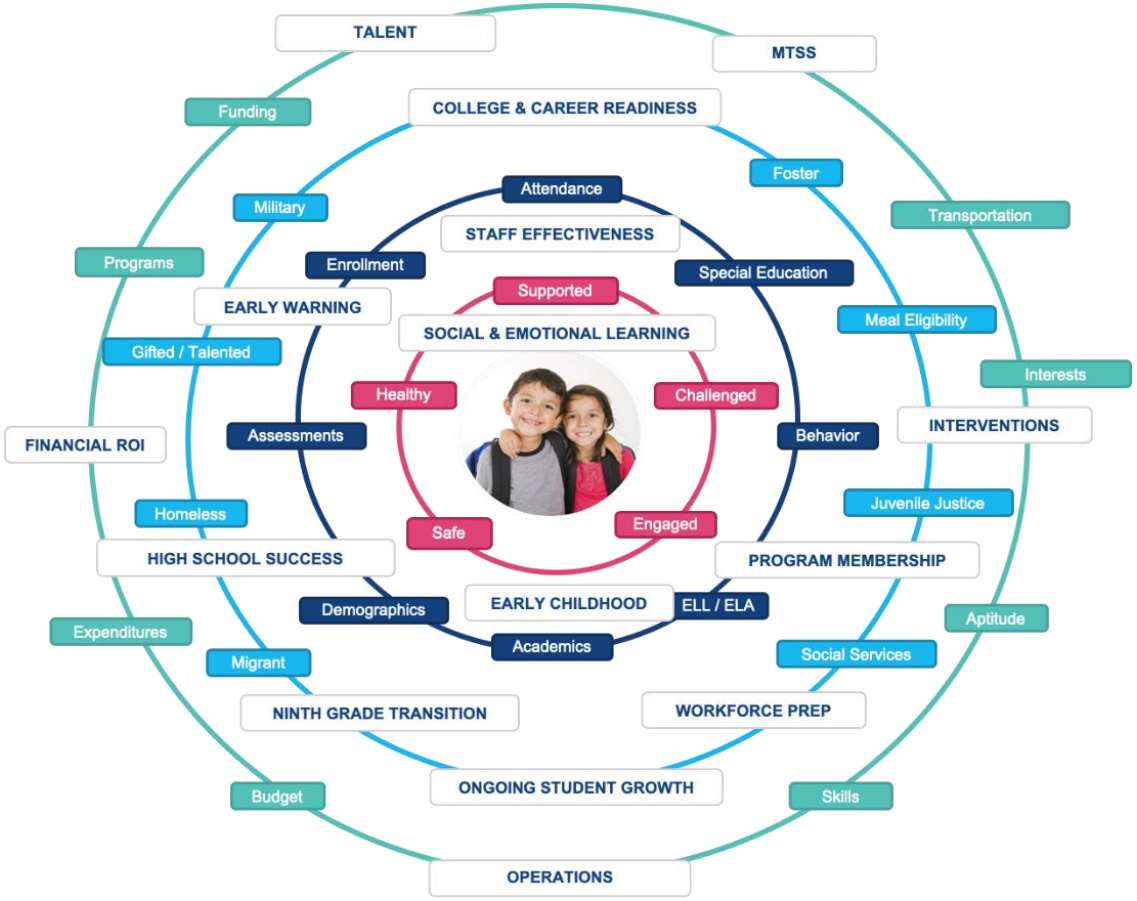
Transparency and User Control

Digital Equity and Accessibility

Ethical Use

Some questions to ask when evaluating AI solutions

- What is the quality of output? – is it accurate, is it reliable, and does it meet your standards
- How secure is the data? – security, privacy, data governance
- How easy is the learning curve? - is AI integrated into everyday workflows
- Does the system have 360-data context? - to enable true AI personalization
- Is it system agnostic? - it works with any systems you may have, from different vendors
- Has it worked at proven scale? - performance, quality of response, reliability



PowerSchool's Responsible AI Rubric for AI Application Evaluation

Want access to our **checklist and interview guide** on evaluating AI applications?

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Responsible AI Checklist

1 Data Privacy and Security

- How is the student's data **collected, stored, processed and protected**?
- How are **security risks of data movement** between transactional systems, AI models and end-user applications mitigated?
- How is **student and district data used to train** AI models?
- What guardrails are in place to ensure district data is **not exposed across the internet** for model training?

2 Model Performance and Accuracy

- What mechanisms are in place to **detect, address and eliminate model hallucinations** (when false, nonsensical or not real information is generated)?
- How do you ensure models are able to **detect the relevant patterns in unseen data**?
- Describe the **evaluation metrics** used in optimizing model performance.
- How are the generic models made **relevant to the district-specific use cases**?
- How does the application allow users to **provide feedback**?

3 Bias and Fairness

- What mechanisms are in place to **detect, address and eliminate bias**?
- What procedures are used to ensure the **results presented are appropriate** for students, staff and parents?

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Responsible AI Checklist

4 Interpretability and Explainability

- How are **end-users able to understand** what the models are doing?
- What **controls are in place for users to override** the AI tool's recommendations?

5 Scalability and Sustainability

- What mechanisms are in place to ensure **consistent model performance and accuracy levels** with larger data sets, distribution changes, and new information?
- Describe how the application will **support data volume, user traffic and complexity** at scale.
- What mechanisms are in place to **optimize resource usage** at scale?
- Describe the **disaster recovery plan** in case of system failures.
- Describe **model maintenance procedures.**

6 Interoperability and Training

- Describe **integrations** with existing applications, databases, and user workflows.
- How is **seamless end-user experience** achieved?
- How are users **trained on the application** and informed about the correct use of AI?

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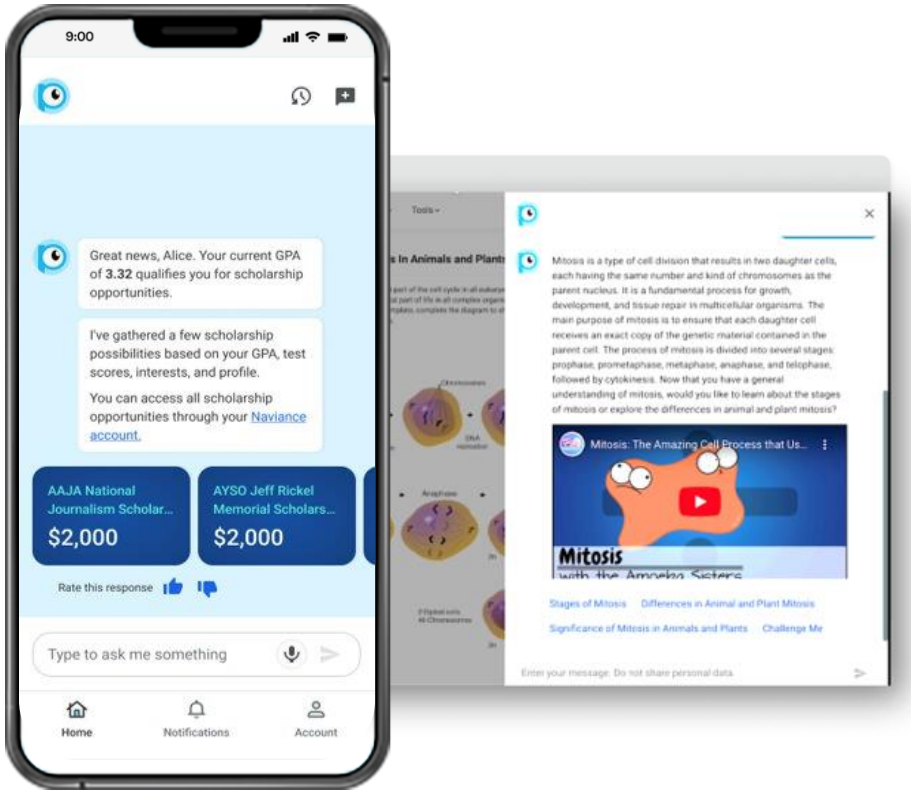
PowerSchool AI

Transforming Education for Every Child

PowerBuddy Responsible AI Platform:

- **Data Security and Sovereignty**
  We ***bring AI to data***: a modern approach to AI in K-12
- **No learning curve**
  with AI integrated into everyday workflows
- **360-data context, Grade appropriate**
  for unparalleled AI personalization
- **System-agnostic, Curriculum aligned**
  to maximize district investments and AI reach
- **Proven scale with Controls for K12**
  with largest K-12 data lake powering AI



Students
Personalized digital tutor

Teachers
Personalized assistant for lesson plans & tests

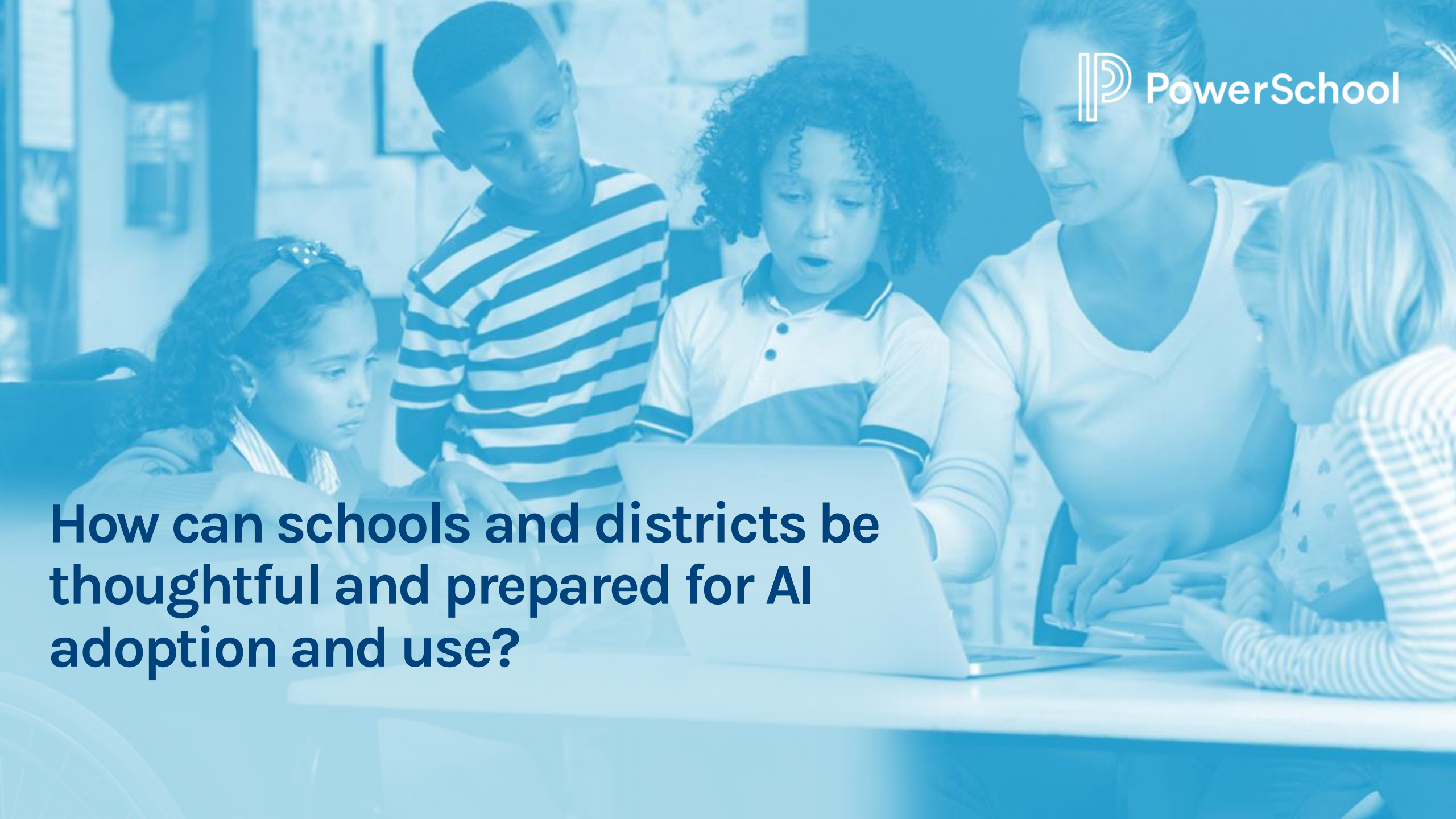
Parents
Personalized resources & updates on child

Administrators
Personalized data analyst through "talk to your data"

Built with Fairness & Bias Resistance

Digital Equity and Accessibility

Transparency and User Control



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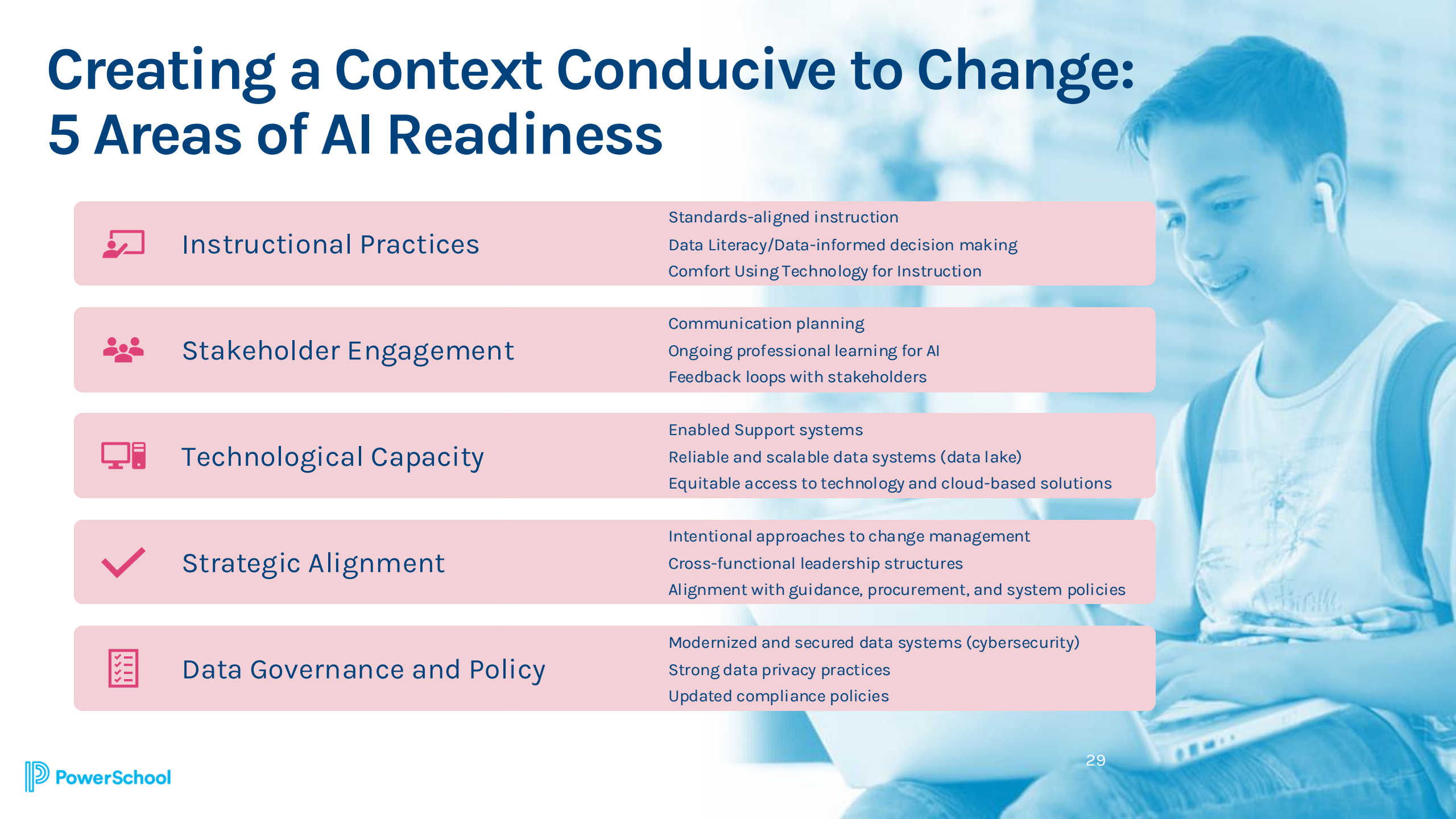
How can schools and districts be thoughtful and prepared for AI adoption and use?

What we know from research: Change Management Matters

- STRATEGY 1: CREATE A CONTEXT CONDUCIVE TO CHANGE
- STRATEGY 2: CREATE A SHARED VISION OF CHANGE (WHEN IDEALLY IMPLEMENTED)
- STRATEGY 3: INVEST IN PROFESSIONAL LEARNING
- STRATEGY 4: PLAN FOR IMPLEMENTATION & ALLOCATE RESOURCES
- STRATEGY 5: MONITOR PROGRESS
- STRATEGY 6: PROVIDE ONGOING SUPPORT

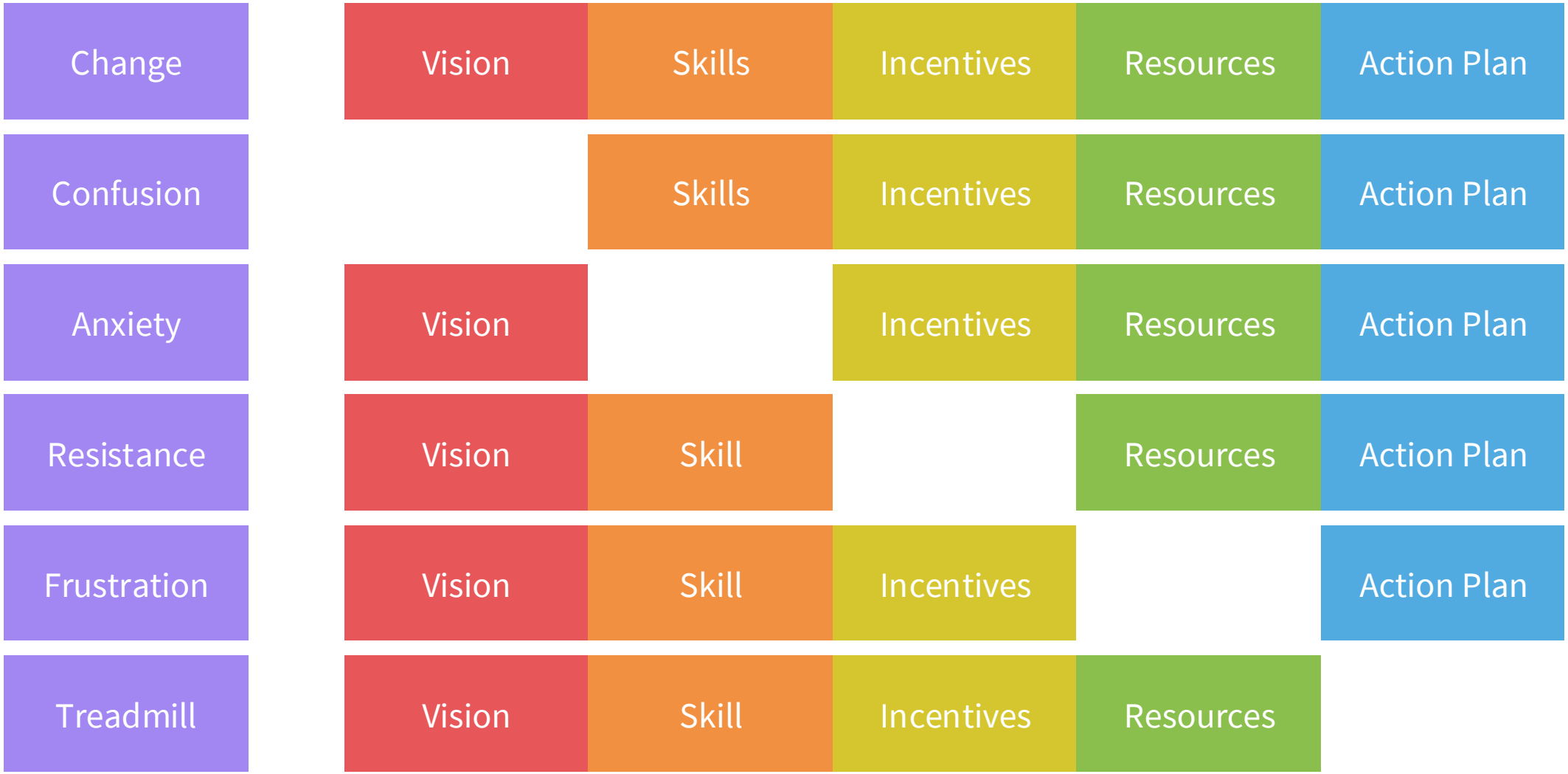
Hall, G.E., & Hord, S. M. (2019) *Implementing change: patterns, potholes, and principles (5th ed).*

Creating a Context Conducive to Change: 5 Areas of AI Readiness



Instructional Practices	Standards-aligned instruction Data Literacy/Data-informed decision making Comfort Using Technology for Instruction
Stakeholder Engagement	Communication planning Ongoing professional learning for AI Feedback loops with stakeholders
Technological Capacity	Enabled Support systems Reliable and scalable data systems (data lake) Equitable access to technology and cloud-based solutions
Strategic Alignment	Intentional approaches to change management Cross-functional leadership structures Alignment with guidance, procurement, and system policies
Data Governance and Policy	Modernized and secured data systems (cybersecurity) Strong data privacy practices Updated compliance policies

Shared Vision of Change



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Q&A