

New Hampshire AI Education Collaborative (NHAIEC)

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# New Hampshire AI Education Collaborative (NHAIEC)

The New Hampshire Al Education Collaborative (NHAIEC) is a coalition of educational organizations and educators that has dedicated the past year

to developing a framework to guide schools and educators in effectively integrating artificial intelligence (AI) into teaching and learning. This *NH Generative AI Framework* provides practical strategies and ethical guidance on critical topics such as access, data privacy, academic integrity, and leveraging AI to enhance personalized learning and instructional innovation.

In addition to creating the framework, the Collaborative has established a process for its ongoing improvement, ensuring it remains relevant and adaptable as AI technologies and educational practices evolve. By drawing on the latest advancements and insights from educators, researchers, and practitioners in the field, the NHAIEC aims to empower New Hampshire schools to lead in innovative, learner-centered education.

Through its year-long effort, the Collaborative has built a foundation for continuous growth and shared learning, ensuring that the framework serves as a dynamic resource to support educators and meet the ever-changing and diverse needs of learners.

#### **NHAIEC Team**

- Bedford School District
- Pinkerton Academy
- New Hampshire School Administrators Association (NHSAA)
- New Hampshire Association of School Principals (NHASP)
- New Hampshire Supporting Tech-using Educators (NHSTE)
- New Hampshire Association of Special Education Administrators (NHASEA)
- New Hampshire School Boards Association (NHSBA)
- New Hampshire Learning Initiative (NHLI)

**Acknowledgment**: While this framework benefited from the insights and organizational support provided by GenAI, it was primarily crafted by human intelligence and collaboration.

#### Introduction

# A. Purpose of the Document

#### New Hampshire PreK-12 Generative AI Framework

This framework serves as a clear and practical roadmap to guide New Hampshire district and school leaders, as well as policymakers, on the ethical, effective, and responsible use of Generative AI (GenAI) in K-12 education. It explores how GenAI can enhance learning, teaching, administration, and communication across schools while offering strategies to embrace this emerging technology in meaningful ways.

#### **Potential Applications of GenAl**

The framework highlights ways GenAl can be applied in education to:

- Improve academic outcomes, accessibility, and inclusion for all learners, including those with disabilities.
- Provide learners with timely, personalized feedback and guidance as they learn.
- Match learning resources to each learner's unique strengths and needs.
- Streamline and improve educator planning, freeing up more time for direct learner interaction.
- Help educators use proven teaching strategies in their lesson plans.
- Enhance educator professional learning.
- Increase efficiency in school operations.
- Empower learners and educators to explore new ways of demonstrating understanding, verifying information, and refining questioning skills.

"Incorporating generative AI into K-12 education isn't just about embracing new technology—it's about preparing learners for a world where creativity, problem-solving, and digital literacy are essential. By thoughtfully integrating AI, we can enhance personalized learning, foster critical thinking, creativity, and empower learners to use these tools ethically and responsibly, ensuring they are not only consumers of technology but also creators in an increasingly complex digital landscape."

— **Dr. Linda Darling-Hammond**, President of the Learning Policy Institute

#### Support for Leaders and Policymakers

The framework is designed to assist district and school leaders, along with policymakers, by providing:

- Clear definitions and explanations of AI and GenAI to ensure all stakeholders have a common understanding.
- Standards for the responsible, inclusive, and ethical use of AI in classrooms and school operations.
- Procedures for protecting learner data and ensuring privacy and security.
- Strategies for embedding Al literacy into both the curriculum and professional learning.
- Guidance on fostering collaboration among educators, administrators, learners, families, and other stakeholders to ensure equitable and inclusive AI implementation.

#### **Commitment to Continuous Improvement**

Recognizing the rapid pace of AI advancements, the framework emphasizes the need for regular review and updates to ensure its guidance remains relevant and effective.

This document provides a foundation for using GenAl responsibly and innovatively, ensuring it supports learners, educators, and schools in creating a more inclusive and efficient learning environment.

A GenAI image (DALL-E)

Prompt "a realistic image of New Hampshire Mountains in autumn foliage"



#### **B.** Statement of Need

#### The Need for Clear Guidelines on Generative AI in Education

The rapid growth and adoption of Generative AI (GenAI) in education highlight the urgent need for clear and practical guidelines to ensure its responsible and ethical use in teaching, learning, and school operations. To make the most of this powerful technology, educators and policymakers must address several key considerations:

#### **Key Considerations**

- Rapid Evolution of AI: GenAI is advancing quickly, making it essential to regularly review and update policies and practices to keep up with new developments.
- Transformative Potential: All has the power to improve education in many ways, but its benefits depend on thoughtful planning and responsible implementation.
- Need for Al Literacy: Educators, learners, and families need basic knowledge and skills to use Al ethically and effectively. This includes integrating Al literacy into school curricula and professional learning programs.

"As Generative AI reshapes the educational landscape, it's essential for K-12 leaders to develop thoughtful, proactive plans for its integration. By fostering digital literacy and ethical understanding from an early age, we prepare learners not only to use these tools but to shape the future responsibly."

— Dr. Karen Cator, former Director of the Office of Educational Technology, U.S.

Department of Education

- Al-Literate Workforce: As Al becomes a common part of many industries, learners must be prepared with the skills to confidently and responsibly use Al tools in their future careers.
- Human-Centered Approach: Al should support and enhance human decision-making and interactions, not replace the essential role of educators and school staff in guiding and engaging learners.

#### **Critical Areas for Planning**

- 1. **Learners' Critical Thinking and Problem-Solving Skills**: Al should be used as a tool to encourage deeper understanding and creativity, helping learners develop skills they can apply in real-world situations.
- 2. **Academic Integrity**: Clear guidelines are needed to ensure learners use AI responsibly and that their work reflects their own learning and effort.
- 3. **Data Privacy and Security**: Schools must prioritize protecting learners' personal information and be transparent about how AI tools handle data.
- 4. **Access**: All learners, regardless of background or resources, should have equal opportunities to benefit from Al technologies.

#### Harnessing Al's Potential

With thoughtful guidelines and responsible practices, schools can use GenAl to create more engaging, personalized, and effective learning experiences. By addressing challenges like data privacy, access, and ethical use, educators can help learners and schools safely navigate a future where Al plays a central role in education and beyond.



A GenAI image (DALL-E)

Prompt "a classroom scene in New Hampshire featuring AI technology"

# C. Target Audience

# The New Hampshire PreK-12 Generative Al Framework

This framework is designed to help school and district leadership teams, as well as policymakers, effectively prepare for and plan the integration of Generative AI (GenAI) in schools. It provides a clear, step-by-step approach to ensure thoughtful and responsible use of AI in education. The framework emphasizes the importance of collaboration with key stakeholders—educators, learners, parents, and school boards—to create a shared vision for how AI can support and improve PreK-12 education. By working together, schools can develop a strategic plan that aligns with their educational goals and addresses the needs of their communities.

"Planning for the integration of Generative AI in K-12 schools must involve all stakeholders — educators, learners, administrators, and parents—to ensure that the technology is used in ways that truly support learning and equity. By working together, we can harness the potential of AI responsibly and build an educational environment that prepares learners for the future without compromising core values."

— **Dr. Becky Pringle**,
President, National Education
Association



A royalty free image with an AI filter

# D. Understanding Artificial Intelligence (AI)

#### **Understanding Generative Artificial Intelligence and Related Concepts**

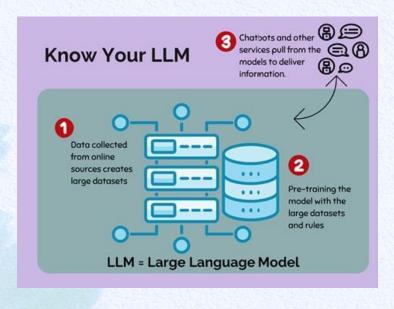
Generative artificial intelligence (AI) is a type of AI that creates **new content**, such as text, audio, video, images, or code, using machine learning models. Unlike traditional AI, which focuses on recognizing patterns or classifying data, generative AI produces outputs that mimic human-created content.

#### What Is Artificial Intelligence (AI)?

Artificial intelligence is a branch of computer science focused on building machines and software capable of performing tasks that usually require human intelligence. These tasks include learning, reasoning, solving problems, understanding language, and interpreting sensory inputs. Al systems use algorithms and models to analyze data, identify patterns, and make decisions or predictions with minimal human input.

#### What Are Large Language Models (LLMs)?

A large language model (LLM) is a specific type of AI designed to understand and generate human-like text. These models are trained on massive amounts of text data and use neural networks with billions or even trillions of parameters. This training allows them to recognize complex linguistic patterns and produce coherent responses. LLMs can answer questions, translate languages, write creatively, and perform other language-based tasks.



#### Human Intelligence vs. Al

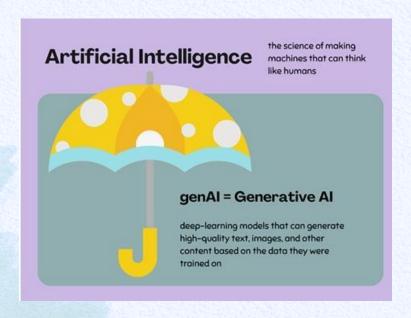
Human intelligence refers to the natural ability to think, learn, solve problems, and adapt to new situations. It involves cognitive functions such as memory, attention, language comprehension, and abstract thinking. Human intelligence also includes creativity, emotional understanding, and social interaction, which make it distinct from AI. While AI can analyze large amounts of data and perform specific tasks efficiently, it lacks the emotional and social dimensions of human intelligence.

#### **Enhancing Understanding of Generative Al**

Generative AI has immense potential but also comes with challenges:

- Applications: It can be used in education to create personalized learning materials, automate administrative tasks, and provide real-time feedback to learners.
- Ethical Concerns: Responsible use is essential to address issues like bias, misinformation, and copyright infringement.
- Accessibility: Generative AI can make content more accessible, such as generating captions or translations for videos.
- Collaboration with Humans: Al should be seen as a tool to enhance human capabilities, not replace them.

By understanding these concepts, educators, policymakers, and the general public can better navigate the opportunities and challenges of generative AI, ensuring its responsible and effective integration into society.



#### E. The Importance of Family Engagement in Al use in Schools

#### The Importance of Family Engagement in Al Use in Schools

As artificial intelligence (AI) becomes an increasingly integrated part of teaching and learning, schools have a critical responsibility to engage families in conversations about how these tools are being used. Transparent, inclusive communication ensures that AI supports—not replaces—the relationships at the heart of student learning.

#### Why Family Engagement Matters

#### 1. Builds Trust and Transparency

Clear communication about AI tools, their educational purpose, and data privacy protections helps build trust between schools and families. When families understand how AI is being used—and what it is not used for—they are more likely to support its thoughtful implementation.

#### 2. Supports Shared Responsibility

Families are essential partners in reinforcing ethical use, academic integrity, and digital citizenship. When students understand that their families are informed and involved, they are more likely to reflect on their own technology use and learning behaviors.

#### 3. Promotes Access and Inclusion

Engaging families ensures that all voices—including those from marginalized or underrepresented communities—are part of the conversation. This helps prevent unintentional bias in AI use and ensures that practices are responsive to diverse needs and values.

#### 4. Addresses Concerns Proactively

Al is a rapidly evolving field, and it's natural for families to have questions or concerns. Schools that communicate openly and proactively can help families navigate the complexities of new technologies and make informed decisions about their child's learning.

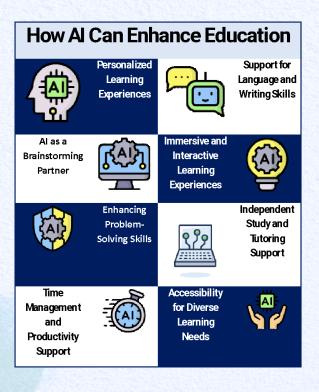
#### **Best Practices for School Communication**

- **Notify families** before introducing new AI tools, including their purpose and how student data will (or will not) be used.
- Provide opt-out options when possible and reasonable, particularly for non-instructional tools.
- Use plain language to explain AI concepts and avoid jargon.
- Offer learning sessions for parents and caregivers on how Al supports instruction.
- Share student reflections on AI use as a way to involve families in learning conversations at home.

#### F. The Role of Generative AI in Education

# Generative AI in Education: Enhancing Learning and Empowering Educators and Learners

Generative AI is a transformative tool that can complement traditional teaching methods by fostering creativity, critical thinking, and problem-solving skills. Rather than replacing human intelligence, it extends the abilities of educators and learners, creating richer, more personalized educational experiences. A key to maximizing its potential is crafting clear prompts, enabling users to achieve meaningful and efficient outcomes. As AI continues to shape the future of education, mastering the art of effective prompt writing becomes essential for productive interactions between humans and machines.



#### How Generative Al Can Enhance Education

#### 1. Personalized Learning Experiences

Generative AI tailors lessons to meet the unique needs of individual learners. For example, adaptive learning platforms can analyze a learner's strengths and weaknesses, then generate customized practice questions, explanations, or content reviews at their pace and skill level. This personalized approach supports competency-based education by helping learners achieve mastery, while educators guide and contextualize the learning process.

#### 2. Al as a Brainstorming Partner

Generative AI serves as an idea generator, sparking creativity for projects, essays, and research topics. By responding to prompts and open-ended questions, AI can offer multiple perspectives, outlines, or suggestions. This partnership encourages learners to critically evaluate and refine their ideas, while educators use AI-generated content as discussion starters to deepen understanding.

#### 3. Enhancing Problem-Solving Skills

Generative AI can simulate real-world scenarios or complex systems, particularly in STEM education. These interactive exercises challenge learners to analyze data, hypothesize solutions, and predict outcomes. By fostering hands-on learning, AI helps learners develop critical thinking skills, with educators guiding discussions about strategies and reasoning.

#### 4. Support for Language and Writing Skills

Generative AI tools provide real-time feedback on grammar, style, and coherence, helping learners improve writing skills and learn languages more effectively. For essays or creative projects, AI can assist in drafting and exploring different styles or tones. However, educators remain essential in assessing originality, depth, and clarity, ensuring that AI is a support, not a substitute, for human evaluation.

#### 5. Independent Study and Tutoring Support

Generative AI offers instant, round-the-clock support, answering questions and explaining challenging concepts. AI-powered tutoring platforms can provide examples, simulate quizzes, and guide self-assessment. This empowers learners to learn independently, with educators addressing more complex or nuanced topics in the classroom.

#### 6. Immersive and Interactive Learning Experiences

Al-powered tools create immersive learning opportunities, such as virtual labs, simulations, and interactive models. In subjects like history or science, Al can help learners visualize concepts, explore historical events, or experiment in virtual environments. Educators guide these experiences, helping learners connect them to broader learning goals and real-world applications.

#### 7. Time Management and Productivity Support

Generative AI can act as a personal assistant, helping learners manage their schedules and stay organized. AI tools can create to-do lists, break large projects into smaller tasks, and set reminders. These features are especially useful for learners juggling multiple responsibilities, helping them develop strong time-management skills.

#### 8. Accessibility for Diverse Learning Needs

Generative AI makes learning more inclusive by creating resources tailored to diverse needs. For example, AI can generate simplified text, visual aids, audio descriptions, or captions for videos. It can also convert written content into sign language or assist learners with disabilities in accessing educational materials, ensuring equal opportunities for all learners.

#### Generative AI as an Educational Ally

Generative AI is a powerful ally in education, enhancing rather than replacing human intelligence. It fosters critical thinking, creativity, and personalized learning by tailoring lessons, supporting writing and language development, and sparking ideas. Interactive scenarios help learners build problem-solving skills, while educators guide deeper understanding.

Additionally, Al improves organization, accessibility, and independent study, making education more inclusive and manageable.

By supplementing educator-led instruction, generative AI empowers learners to explore actively, learn effectively, and develop essential skills for the future. With thoughtful integration, it has the potential to transform education into a more engaging, accessible, and learner-centered experience.

# G. Developmentally Appropriate Use of AI in Early Learning (Pre-K-Grade 2)

As artificial intelligence (AI) enters classrooms, its integration must be thoughtfully designed—especially for our youngest learners. Children in preschool through second grade are in a foundational stage of growth.

Their development hinges on direct interactions, sensory-rich environments, and exploratory play. Al tools, when used, must support—not supplant—these essential experiences.

#### The Central Role of Play

Decades of research affirm that **play is the work of young children**. Through imaginative play,

"Children learn best in environments where they can explore, play, and interact with caring adults."

— National Association for the Education of Young Children (NAEYC)

block building, dramatic storytelling, and problem-solving with peers, children develop language, executive function, collaboration, empathy, and creativity.

"Play is essential to development because it contributes to the cognitive, physical, social, and emotional well-being of children."

— American Academy of Pediatrics, 2018

Al tools should never disrupt unstructured play or replace open-ended exploration. Instead, their use must be limited to activities that enhance—rather than direct or structure—children's learning through guided play-based experiences.

#### Why Developmentally Appropriate Use Matters

#### 1. Learning Through Relationships

Young children learn best through nurturing relationships and responsive interactions. Human connection—not technology—builds foundational communication, trust, and social-emotional skills. Al should never replace the educator's role in modeling language, emotion, and attention.

#### 2. Limited and Purposeful Screen Time

The American Academy of Pediatrics (AAP) recommends that

children aged 2–5 have no more than 1 hour of high-quality screen time per day, co-viewed and discussed with an adult. Al tools, when introduced, must align with these recommendations and be used in short, intentional bursts—not as stand-alone experiences.

#### 3. Support for Language and Early Literacy

Al can support oral language development by modeling pronunciation or providing interactive story experiences. But these tools must be culturally and linguistically responsive, age-appropriate, and always used under adult guidance. Research shows that language growth is most powerful through rich, back-and-forth dialogue with adults—something Al is not yet capable of replicating authentically.

#### 4. Simple, Safe Interfaces

Al applications for young children must avoid advertisements, overstimulation, and complex navigation. They should not collect any personal data from children (as protected by COPPA) and must be part of a vetted, district-approved toolset.

#### 5. Modeling Digital Citizenship

Introducing AI in early grades offers a powerful opportunity to teach healthy technology habits: asking permission, being kind online, and asking questions about digital content. Adults must model curiosity, critical thinking, and digital safety from the very start.

Artificial intelligence should never drive instruction for our youngest learners. When used in early education, it must be:

- Playful (not performance-driven)
- Guided by educators (not unsupervised)
- Focused on learning through interaction (not passive consumption)

Children thrive when technology supports their imagination—not replaces it.

#### H. The Role of Generative AI in Supporting Educators

#### Generative AI: Empowering Educators to Focus on What Matters Most

Generative AI has the potential to transform education by supporting educators in key areas such as lesson planning, content creation, learner assessment, and personalized instruction. Far from replacing educators, AI enhances their expertise by handling routine tasks and providing tools to make their work more efficient. This allows educators to focus on the human-centered aspects of teaching, such as building relationships, mentoring, and providing individualized support to learners. Below are some of the primary ways generative AI can assist educators.

#### 1. Efficient Lesson Planning and Material Creation

Generative AI can save educators valuable time by helping to create lesson plans and instructional materials. It can generate outlines, worksheets, quizzes, presentations, and even interactive activities. These resources serve as a foundation that educators can customize to suit the needs of their learners, ensuring lessons align with the curriculum and their teaching style. This efficiency enables educators to dedicate more time to engaging with learners and refining their instructional approach.

#### 2. Complementing the Feedback Process

Al can help by quickly assessing objective assignments like multiple-choice quizzes or short-answer questions. For written work, Al tools can provide preliminary feedback on grammar, structure, or clarity, which educators can refine to offer more detailed and personalized guidance. Additionally, Al can analyze patterns in learner responses, highlighting common misconceptions or learning gaps, helping educators address areas where learners may be struggling.

#### 3. Personalizing Resources for Diverse Learners

Every classroom includes learners with varying learning needs, and generative AI can help educators meet these needs more effectively. AI can adapt reading materials to different skill levels, provide alternative explanations for challenging concepts, or create additional examples

tailored to individual learners. By offering diverse resources and instructional methods, Al supports competency-based education by ensuring all learners have the tools they need to achieve mastery at their own pace.

#### 4. Supporting Educator Professional Learning

Generative AI can enhance educators' professional growth by recommending resources on teaching strategies, subject knowledge, and classroom management. AI can suggest articles, research studies, or tips tailored to an educator's interests or goals. It can also provide access to the latest innovations in education, helping educators stay informed and incorporate cutting-edge practices into their classrooms.

#### 5. Fostering an Inclusive Classroom Environment

Inclusivity is a cornerstone of effective education, and AI can play a role in ensuring all learners feel valued and supported. Generative AI can create content in multiple languages, provide alternative formats like audio or simplified text, and develop tools for learners with special needs. These features help educators create a learning environment where all learners can participate and thrive, regardless of their backgrounds or abilities.

#### 6. Developing Interactive and Engaging Activities

Engaging learners is critical to effective learning, and AI can help educators design dynamic activities that capture their interest. AI tools can create personalized learning games, virtual simulations, and real-world scenarios that make lessons more engaging and relatable. By encouraging active participation, these resources help learners stay curious and motivated throughout their learning journey.

#### Al as a Partner in Education

Generative AI serves as a powerful complement to educators' roles by streamlining routine tasks, providing valuable insights, and offering customizable resources to meet diverse learning needs. By freeing up time and providing innovative tools, AI enables educators to focus on the aspects of their work that require empathy, creativity, and deep

understanding of their learners. With AI as a partner, educators are better equipped to deliver meaningful, personalized, and inclusive learning experiences that empower learners to succeed.

# I. The Role of Generative AI in Enhancing Competency-Based Education

Competency-based education (CBE), as defined by the New Hampshire State Board of Education, is an approach where learners progress based on their ability to demonstrate proficiency in clearly defined competencies. Core principles of CBE include:

- 1. Competencies are explicitly stated and measured.
- 2. Assessment practices are varied, authentic, transferable, and meaningful.
- 3. Learners advance to new learning opportunities upon demonstrating proficiency.
- 4. Timely interventions are offered in response to learner needs.
- 5. Attention is given to work-study practices.

Generative AI is well-suited to support these principles, offering tools that enable self-paced learning, real-time feedback, and personalized resources. Below are key ways generative AI enhances CBE and helps both learners and educators.

#### 1. Personalized Learning Paths

Generative AI can create tailored learning pathways for each learner, aligning with their individual competencies. By analyzing a learner's current understanding, AI suggests targeted activities, resources, and assessments to address specific gaps. This personalized approach ensures learners master each concept before advancing, embodying a central tenet of CBE.

#### 2. Real-Time Feedback and Assessment

Timely feedback is critical in CBE, allowing learners to refine their skills and focus on areas for growth. Generative AI provides instant feedback on assignments, projects, or practice exercises, highlighting strengths and areas needing improvement. This continuous feedback loop helps learners adjust their learning strategies and achieve competency more efficiently than traditional grading methods.

#### 3. Skill-Based Assessments

Generative AI can create assessments that align with specific competencies. These assessments might include simulations, scenario-based questions, or real-world problem-solving tasks, ensuring that learners are tested on practical, meaningful skills. Additionally, AI can adapt assessments to different proficiency levels, challenging learners appropriately and supporting their development.

#### 4. Support for Self-Paced Learning

A cornerstone of CBE is allowing learners to progress at their own pace. Generative AI tools provide on-demand access to resources, practice questions, and review materials, enabling learners to revisit topics as needed and advance when they're ready. This flexibility promotes independence and confidence in their learning journey.

#### 5. Enhancing Learner Motivation and Engagement

Generative AI can make learning more engaging by incorporating interactive elements like personalized learning games, virtual labs, and simulations tied to specific competencies. These experiences not only make learning enjoyable but also demonstrate real-world applications of skills, motivating learners to actively participate. Visual progress tracking and motivational feedback from AI further encourage learners to stay engaged and recognize their achievements over time.

#### 6. Data-Driven Insights for Educators

Accurately tracking progress is essential in CBE, and generative AI excels at analyzing and organizing data on learner performance. Educators can use these insights to identify patterns, detect areas where learners may need extra help, and refine their instructional strategies. AI-powered analytics empower educators to make informed decisions and provide targeted interventions, ensuring that each learner achieves competency.

#### 7. Resources for Skill Development Across Competency Levels

Al can generate a wide range of resources tailored to various competency levels, from foundational explanations to advanced problem-solving

exercises. This allows learners to progressively deepen their understanding of a topic and transition from basic knowledge to mastery at their own pace. Educators can use these resources to provide differentiated instruction that meets learners where they are.

#### Al Enhances the Flexibility and Effectiveness of CBE

Generative AI is a powerful tool for advancing the goals of competency-based education. It personalizes learning, provides real-time feedback, and aligns resources with individual skill levels, enabling learners to take control of their learning and advance based on demonstrated mastery. For educators, AI offers valuable data-driven insights and flexible tools to support learners effectively.

By integrating generative AI thoughtfully, CBE becomes more flexible, engaging, and efficient, empowering learners to achieve meaningful mastery and prepare for success in both education and life.



A GenAI image (DALL-E)

Prompt "a silhouette of students celebrating at a New Hampshire school"

## J. Considerations for Using Generative AI in Education

Generative AI offers exciting opportunities in education, but its integration also comes with challenges that educators and institutions need to address thoughtfully. By understanding and addressing these concerns, schools can harness the benefits of generative AI while ensuring it is used responsibly and equitably. Below are some key considerations when incorporating generative AI in educational settings.

#### 1. Ensuring Accuracy and Reliability

Generative AI systems can sometimes produce incorrect or misleading information, known as "hallucinations." If learners rely on AI-generated content without critical evaluation, they risk developing misconceptions about important topics. Educators can mitigate this by teaching learners how to assess the reliability of AI outputs, cross-check information, and approach content critically, fostering digital literacy skills.

#### 2. Maintaining Critical Thinking Skills

There is a risk that overreliance on generative AI could undermine learners' and educators' critical thinking and problem-solving abilities. When learners use AI to generate answers or complete assignments, they may miss opportunities to deeply engage with the material. Educators should encourage active learning by using AI as a support tool rather than a replacement for independent thought and analysis.

#### 3. Promoting Access to Technology

Not all learners have equal access to AI tools, which can widen existing educational inequalities. Schools and policymakers must prioritize access to technology by ensuring all learners, regardless of socioeconomic background, can benefit from generative AI. This includes providing devices, internet access, and training to under-resourced communities.

#### 4. Protecting Data Privacy and Security

Generative AI often requires access to learner data to personalize learning experiences, raising concerns about data privacy and security. Schools must ensure compliance with regulations like FERPA and maintain transparency about

how data is collected, used, and stored. Implementing strict data protection measures and educating staff and learners about privacy safeguards is essential.

#### 5. Addressing Bias in Al Outputs

Generative AI can unintentionally reflect biases present in its training data, potentially producing content that is inappropriate, stereotypical, or biased. Educators and developers must monitor AI-generated outputs carefully and use tools designed to reduce bias. Additionally, teaching learners to recognize and question biased content fosters critical awareness and promotes fair learning experiences.

#### 6. Balancing Technology and Human Interaction

As AI takes on tasks like grading and content creation, there is a concern about the diminishing role of educators in the classroom. While AI can enhance efficiency, it cannot replace the mentorship, emotional support, and social skill development that educators provide. Maintaining the human element in education is crucial for fostering well-rounded, empathetic, and socially adept learners.

#### 7. Upholding Academic Integrity

The ease of using generative AI to create essays, projects, or creative content raises concerns about plagiarism and academic dishonesty. Schools must establish clear policies and guidelines on the ethical use of AI and educate learners about the importance of originality and integrity in their work. Educators should not rely on any AI-detection tools.

#### **Balancing Opportunities and Challenges**

Generative AI has the potential to transform education by personalizing learning, enhancing efficiency, and fostering engagement. However, its successful integration requires proactive efforts to address challenges like accuracy, access, privacy, and integrity.

By establishing clear guidelines, promoting ethical use, and maintaining the central role of educators, schools can create an environment where generative AI complements human teaching. This balanced approach

ensures that AI serves as a powerful ally, supporting learners and educators while safeguarding the values and principles of education.

## K. Implementing AI: District and School Considerations

#### **Guiding Principles for AI in Education**

The rapid advancement of artificial intelligence (AI) is reshaping the landscape of education. While this technological revolution offers immense potential for personalized learning, innovative teaching methods, and streamlined administration, it also introduces complexities and ethical considerations.

To harness the power of AI responsibly and effectively, we must establish a strong foundation of guiding principles. These principles will ensure that AI is used to enhance, not replace, human interaction and critical thinking. By carefully considering the following key factors, we can navigate this transformative era and create a future where AI empowers learners and educators alike.

#### **Core Principles**

- Human-Centered Design: Al should augment human capabilities, with educators at the heart of the learning process. It should be designed to enhance, not replace, human interaction and pedagogical principles.
- Access and Inclusion: Al should promote access and reduce bias, ensuring all learners benefit from its use. It should be used to bridge the digital divide and support the needs of all learners.
- Privacy and Security: Learner data must be protected and used responsibly, adhering to strict privacy regulations. Educational institutions should not share personally identifiable information with consumer-based AI systems.
- Transparency and Accountability: All systems should be transparent, with understandable decision-making processes. Stakeholders, including educators, learners, families, and the public, should understand how All is being used in schools.
- Ethical Use: Al should be used ethically, avoiding harmful or discriminatory applications. Learners and educators should use Al

responsibly and ethically, giving credit to sources and presenting original work.

#### **Specific Guidelines Considerations**

- Educational Purpose: Al should directly support and enhance teaching and learning, aligning with educational goals. It should be used to improve student learning, educator effectiveness, and school operations.
- Educator Professional Learning: Educators should be trained to effectively integrate AI into their classrooms, including how to discuss the potential impact of AI on learners' future careers and the importance of academic honesty and integrity.
- Data Privacy and Security: Robust data privacy and security measures must be implemented.
- Human Oversight: Human oversight is essential in all stages of Al implementation. Humans must navigate Al use, ensuring alignment with educational goals and retaining agency in decision-making.
- Accessibility: Al tools should be accessible to all learners, including those with disabilities.
- **Continuous Evaluation**: The effectiveness and impact of AI tools should be continuously evaluated and refined.
- Collaboration and Stakeholder Engagement: Educators, learners, parents, and policymakers should be involved in Al development and implementation.
- Al Literacy: All stakeholders should be equipped with the knowledge and skills to use Al effectively and ethically. This includes understanding how the rise of Al may affect their chosen pathways after graduation and how to prepare for these changes.
- Academic Honesty and Integrity: Al tools should be used to support learning, not to circumvent academic integrity. Learners and educators

must be mindful of the ethical implications of using AI, and institutions should provide clear guidelines on its appropriate use.

As we navigate this exciting new era of GenAl education, it's crucial to balance innovation with responsibility. By following these guidelines, we can ensure that Al is used to enhance, not replace, the human touch in education. Let's work together to create a future where Al empowers our learners, inspiring them to become critical thinkers, creative problem-solvers, and ethical leaders.

## Al Implementation Considerations

#### A Step-by-Step Plan for Al Integration in Schools

#### Phase 1: Research and Planning

- Form an Al Task Force: Assemble a diverse team of educators, administrators, and technology specialists to lead the initiative.
- Conduct a Needs Assessment: Identify specific areas where AI could enhance teaching and learning, such as personalized learning, administrative tasks, or learner support services.
- Develop a Vision and Mission: Clearly articulate the district's vision for Al
  integration and establish specific goals and objectives aligned with the
  core principles of human-centered design, access, privacy, transparency,
  and ethical use.
- Create an Implementation Plan: Outline a detailed plan, including timelines, resource allocation, and evaluation metrics.

#### Phase 2: Policy Development and Governance

- Develop Al Policies and Guidelines: Create clear policies and guidelines for the ethical and responsible use of Al in the district, addressing issues like data privacy, intellectual property, algorithmic bias, and academic integrity.
- Establish Governance Structures: Set up a governance structure to oversee AI implementation, including decision-making processes, accountability, and resource allocation.

- Collaborate with Stakeholders: Involve parents, learners, educators, and community members in the policy development process to ensure buy-in and address concerns.
- Create a protocol: Create a protocol for reviewing policies with stakeholders and educators to adapt to the advancements in technology.

## Phase 3: Professional Learning

- Needs Assessment: Identify the specific training needs of educators, administrators, and support staff.
- Develop a Professional Learning Plan: Create a comprehensive plan that covers a range of topics, including Al literacy, ethical considerations, pedagogical strategies, and data privacy.
- **Provide Ongoing Professional Learning:** Offer a variety of professional learning opportunities, such as workshops, online courses, and coaching.
- Foster a Learning Community: Encourage collaboration among educators to share best practices and support one another.

#### Phase 4: Pilot Implementation and Scaling

- Select Pilot Programs: Choose specific schools or departments to pilot Al-powered initiatives, such as personalized learning platforms or Al-assisted tutoring.
- Monitor and Evaluate: Collect data on the effectiveness of the pilot programs, including learner outcomes, educator satisfaction, and technical challenges.
- Gather Feedback: Conduct surveys and interviews with educators, learners, and parents to gather feedback on the pilot programs.
- Expand Implementation: Gradually expand the use of AI-powered initiatives across the district, prioritizing areas with the greatest potential for impact.

#### Phase 5: Evaluation and Refinement

- Monitor and Evaluate: Regularly assess the impact of AI on student learning, educator effectiveness, and school operations.
- Collect Data: Gather quantitative and qualitative data to measure the effectiveness of Al initiatives.
- Refine and Adapt: Use evaluation findings to refine AI strategies, addressing any challenges or shortcomings.
- Stay Informed: Keep up to date with the latest advancements in Al and adjust the district's approach accordingly.

By following these steps and continuously adapting to the evolving landscape of AI, districts can harness the power of technology to improve learner outcomes and prepare learners for the future.

# A Step-by-Step Plan for Al Integration in Schools Progression

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Research and Planning	Policy Development and Governance	Professional Development	Pilot Implementation and Scaling	Evaluation and Refinement
Form an Al Task Force:     Assemble a diverse team of educators, administrators, and technology specialists to lead the initiative.	Develop Al Policies and Guidelines: Create clear policies and guidelines for the ethical and responsible use of Al in the district, addressing issues like data privacy, intellectual property, algorithmic bias, and academic integrity.	Needs Assessment: Identify the specific training needs of educators, administrators, and support staff.	Select Pilot Programs:     Choose specific schools or     departments to pilot     Al-powered initiatives, such     as personalized learning     platforms or Al-assisted     tutoring.	Monitor and Evaluate:     Regularly assess the impact     of AI on student learning,     educator effectiveness, and     school operations.
Conduct a Needs     Assessment: Identify specific areas where Al could enhance teaching and learning, such as personalized learning, administrative tasks, or learner support services.	Establish Governance     Structures: Set up a     governance structure to     oversee Al implementation,     including decision-making     processes, accountability,     and resource allocation.	Develop a Professional Learning Plan: Create a comprehensive plan that covers a range of topics, including Al literacy, ethical considerations, pedagogical strategies, and data privacy.	<ul> <li>Monitor and Evaluate: Collect data on the effectiveness of the pilot programs, including learner outcomes, educator satisfaction, and technical challenges.</li> </ul>	Collect Data: Gather quantitative and qualitative data to measure the effectiveness of AI initiatives.
Develop a Vision and Mission: Clearly articulate the district's vision for AI integration and establish specific goals and objectives aligned with the core principles of human-centered design, access, privacy, transparency, and ethical use.	Collaborate with Stakeholders: Involve parents, learners, educators, and community members in the policy development process to ensure buy-in and address concerns.	Provide Ongoing     Professional Learning: Offer     a variety of professional     learning opportunities, such     as workshops, online     courses, and coaching	Gather Feedback: Conduct surveys and interviews with educators, learners, and parents to gather feedback on the pilot programs.	Refine and Adapt: Use evaluation findings to refine Al strategies, addressing any challenges or shortcomings.
<ul> <li>Create an Implementation Plan: Outline a detailed plan, including timelines, resource allocation, and evaluation metrics.</li> </ul>	<ul> <li>Create a protocol for reviewing policies with stakeholders and educators to adapt to the advancements in technology.</li> </ul>	Foster a Learning Community: Encourage collaboration among educators to share best	Expand Implementation:     Gradually expand the use of     Al-powered initiatives across     the district, prioritizing areas	<ul> <li>Stay Informed: Keep up-to-date with the latest advancements in AI and adjust the district's approach accordingly.</li> </ul>

practices and support one another.

with the greatest potential for impact.

#### Integrating AI in the Classroom

#### Integrating AI in the Classroom: Opportunities and Considerations

Educators spend less than half of their workweek directly interacting with learners, with the remaining time devoted to preparation, grading, professional learning, and administrative tasks. Generative Artificial Intelligence (AI) offers opportunities to streamline these processes, enhancing classroom practices while maintaining alignment with curriculum goals and ethical standards. When guided by educators, AI can enrich learning experiences, address diverse learner needs, create dynamic environments, and prepare learners for a future shaped by AI.

# A Human-Centered Approach

#### As the Office of Educational Technology (2023) states:

"Exercising judgment and control in the use of AI systems and tools is essential to providing the best opportunity to learn for all learners—especially when educational decisions carry consequences. AI does not have the broad qualities of contextual judgment that people do."

Educators remain the core decision-makers in education, and AI is most effective when used as a supportive tool. Educators critically evaluate AI outputs, ensuring they align with educational objectives and meet the unique needs of their learners.

A GenAI image (DALL-E)

Prompt "a realistic aerial view of New Hampshire lakes"



## **Using AI for Classroom Preparation**

Task	How Al Supports		
Streamlining Lesson Plans	Organizing and structuring lessons efficiently.		
Brainstorming	Generating ideas for assignments, projects, labs, and activities.		
Personalizing Content	Creating customized materials tailored to learner needs, such as levelized content and individualized pathways.		
Creating Lesson Content	Developing presentations, graphics, games, writing prompts, rubrics, and datasets.		
Gaining Background Knowledge	Quickly accessing relevant information for lesson preparation.		
II Jrailling Correshondence	Assisting in writing or editing emails, newsletters, and other professional communications.		
Finding Instructional Materials	Locating multimedia resources like videos, text, audio, and images.		
Personalizing and Differentiating Learning	Generating resources for individualized learning pathways, interventions, and diverse learning styles.		

Using AI for these tasks allows educators to save time and focus on higher-order activities like collaboration, problem-solving, and building connections with learners. However, educators must review and refine AI-generated materials to ensure they align with curriculum goals.

#### Al for Learner Assessment

The evaluation of learner work remains a critical task for educators, and while AI can assist, it must be used thoughtfully.

#### **Questions to Consider Before Using AI**

What personal identified information (PII) does the tool collect?

Does the learner work contain PII?

Are learners comfortable with their work being submitted to the tool?

Is the tool's output consistent and reliable?

Will the tool provide meaningful insights into learner understanding?

Al can support grading and feedback by analyzing patterns or providing preliminary feedback, but human judgment is essential to ensure fairness, accuracy, and ethical use.



A GenAI image (DALL-E)

Prompt "a cool, tech-inspired futuristic question mark"

## Al as a Subject of Study

Integrating AI education prepares learners for a future shaped by technology. Suggested approaches by grade level:

Grade Level	Focus	Examples	
Early Elementary (K-2)	Basic technology concepts, pattern recognition, and coding through interactive activities.	Sorting objects, programmable robots, coding apps, if-then stories.	
Upper Elementary (3-5)	Introduction to AI concepts, applications, and ethics.	Al-driven image creation, block coding, interacting with chatbots.	
SCHOOL IN-XI	Hands-on exploration of Al fundamentals, terminology, and practical applications.	Developing small AI projects, understanding ethical considerations, and analyzing AI impacts.	
High School	In-depth AI studies including history, types, ethical use, and societal impacts.	Practical training on generative AI tools, discussing AI limitations, and exploring career impacts.	

A GenAI image (DALL-E)

Prompt "AI as a field of study"



## **Promoting Academic Integrity**

To maintain academic integrity in the age of AI, learners need clear guidelines on its ethical use. Educators can foster responsible practices by modeling appropriate AI usage and designing "AI-resistant" assignments that require critical thinking, personal input, and reflection.

#### Suggestions to Promote Academic Integrity:

- Review district academic honesty policies with learners.
- Clearly communicate acceptable and unacceptable uses of AI in assignments.
- Teach learners how to reference Al in their work.
- Create assignments that focus on process, verbal components, reflections, and higher-order thinking.

It is important to note that reliable tools to detect Al-generated work are currently unavailable, making clear communication and ethical instruction even more critical.



A GenAI image (DALL-E)
Prompt "an image representing academic integrity"

## L. Protecting Learner Data Privacy

New Hampshire's **FERPA** guidelines and **RSA 189:66 and RSA 189:68-a** ensure schools protect learner data by requiring:

RSA 189:66 - Data Inventories and Policies	RSA 189:68-a - Learner Online Personal Information Protection <sup>5</sup>
<ul> <li>Purpose: Establish requirements to create and maintain a data inventory and data governance plan.</li> <li>School districts must maintain an up-to-date inventory of student personally identifiable information (PII) it collects.</li> <li>Each district must adopt a data governance plan that outlines policies and procedures to ensure data privacy and security.</li> <li>Staff in each district must be trained on data privacy and security policies.</li> <li>The data and governance plan should be publicly available.</li> <li>The data and governance plan must be reviewed annually.</li> <li>Any breaches of student data need to be reported to the NH Department of Education.</li> </ul>	<ul> <li>Purpose: To protect the online personal information of students.</li> <li>Vendors may not use student information for targeted advertising.</li> <li>Student data cannot be used to create profiles for non-educational purposes.</li> <li>Vendors may not sell student information. They must maintain security measures to protect unauthorized access to learner data.</li> <li>If there is a breach of student data, that vendor must notify the school districts.</li> <li>Parents have the right to review their student's information as maintained by the district or vendor.</li> </ul>

These measures protect learners while ensuring transparency and accountability in AI integration.

Generative AI holds great potential to enhance education, from streamlining educator tasks to empowering learners with personalized learning experiences. However, its integration must be thoughtful, ethical, and guided by educators who critically evaluate its outputs.

## Protecting Student Data Privacy: Guidance for School Districts from Classroom to State Testing

In a world where technology is woven into nearly every aspect of education, safeguarding student data privacy is not just a compliance issue—it's a commitment to building trust, safety, and accessibility in learning environments. From everyday classroom tools to large-scale assessments, districts must take a proactive and comprehensive approach to protecting student information at every level.

#### 1. Build a Culture of Privacy Awareness

- Make data privacy a shared responsibility. Train all staff—teachers, administrators, IT, and support personnel—on what student data is, how it can be misused, and how to handle it responsibly.
- Empower students and families with transparent information about how data is collected, stored, and used in both classroom tools and testing environments.

#### 2. Strengthen Classroom-Level Protections

- Vet all digital tools before use. Ensure they comply with state and federal privacy laws (FERPA, COPPA, PPRA) and are approved by the district.
- Avoid using personal teacher accounts for educational platforms—require district-managed logins to ensure secure access and audit control.
- Limit data collection to what is necessary for learning. Avoid collecting sensitive information unless required and approved.

## 3. Ensure Safe Practices in Digital Instruction

- Teach students digital citizenship, including how to protect their own information and understand consent in digital spaces.
- Regularly review access permissions on educational platforms—teachers should not retain access to student data beyond the course duration.

#### 4. Implement District-Level Safeguards

- Maintain a clear data governance policy that defines roles, responsibilities, and protocols for data access, sharing, and breaches.
- Require vendors to sign student data privacy agreements (SDPAs)
  that clearly outline permitted uses and prohibit resale or repurposing
  of student data.
- Use secure data storage systems with encryption, access logs, and multi-factor authentication.

#### 5. Protect Privacy in State Assessments

- Work closely with state agencies to ensure data shared for assessments is anonymized where possible and handled through secure channels.
- Clearly communicate to families how assessment data will be used, who will have access, and how long it will be stored.
- Monitor third-party testing vendors to ensure compliance with privacy standards and ensure there is a response protocol in the event of a data breach.

#### 6. Review and Audit Regularly

- Conduct annual audits of data practices across schools, tools, and partnerships.
- Create a feedback loop with educators, students, and families to continuously improve data privacy practices.

Student data privacy isn't just about avoiding risk—it's about upholding the dignity and trust of every learner. With thoughtful guidance, practical policies, and transparent communication, districts can foster digital learning environments that are both innovative and secure.

## M. Environmental Considerations When Using AI in Education

As artificial intelligence (AI) becomes more widely adopted across educational settings, it is essential to consider not only its instructional benefits but also its environmental impact. While AI offers exciting opportunities to personalize learning, automate routine tasks, and support student growth, it also brings with it energy and resource challenges that must be understood and managed responsibly.

This overview is designed to help educators, school leaders, and district technology teams make informed decisions about how to use AI tools in ways that align with both educational values and environmental responsibility. It will provide insights into the environmental footprint of AI, practical tips for minimizing impact, and questions to consider when adopting AI technologies in the classroom.

#### **Key Topics Covered**

#### **Understanding Al's Environmental Footprint**

- Overview of energy use in training and running AI models
- Data center energy consumption and carbon emissions
- Hardware production and the environmental cost of device turnover

As the adoption of artificial intelligence accelerates, it's important to understand the environmental impact behind the technology. Training large Al models—such as those used for language processing or image generation—requires substantial computing power, which in turn consumes vast amounts of energy. Data centers powering these models are often energy-intensive, contributing significantly to carbon emissions unless powered by renewable sources. Beyond electricity use, the lifecycle of hardware—from mining rare-earth elements to manufacturing, shipping, and disposal—carries a heavy environmental toll. Frequent turnover of devices in schools or organizations adds to electronic waste, making it crucial to think critically about when and how Al tools are deployed.

#### **Evaluating AI Tools with Sustainability in Mind**

- Questions to ask vendors about energy efficiency and carbon neutrality
- Choosing cloud-based solutions that use green energy
- Selecting lightweight AI models when possible

When choosing AI tools, sustainability should be part of the decision-making process. Educators and administrators can ask vendors key questions about energy efficiency, carbon offset programs, and whether their data centers use renewable energy. Choosing cloud-based solutions hosted by providers that prioritize green energy—like Google Cloud, AWS Clean Energy, or Microsoft Azure's sustainability commitments—can help reduce an institution's environmental footprint. Additionally, when possible, selecting lightweight AI models that perform tasks without the overhead of large-scale processing can offer a more energy-efficient alternative, particularly for routine tasks in classrooms

#### **Empowering Responsible Use in Schools**

- Encouraging mindful use of AI: quality over quantity
- Scheduling Al-based tools during off-peak energy hours (when feasible)
- Sharing devices and limiting redundant hardware

Schools can take proactive steps to use AI responsibly while minimizing environmental impact. One practical approach is encouraging quality over quantity—using AI only when it enhances learning, rather than as a default tool. Scheduling AI-heavy tasks (like data processing or batch operations) during off-peak energy hours can reduce strain on the grid and align with broader energy-saving efforts. Sharing devices or using communal resources rather than issuing redundant hardware helps reduce waste and conserves energy. Teaching students to power down devices and maintain digital hygiene also reinforces responsible and eco-friendly tech habits.

#### Digital Citizenship and Environmental Literacy

 Helping students understand the environmental impact of the tools they use

- Connecting AI use with sustainability education and climate action goals
- Encouraging student-led inquiry into ethical tech use and environmental stewardship

Environmental literacy in the digital age must include an understanding of the environmental consequences of technology use. As students interact with AI tools in learning environments, educators have an opportunity to connect these experiences to broader conversations about sustainability and climate action. By helping students consider the energy use, materials, and waste behind their favorite apps or AI features, we deepen their awareness of ethical and responsible tech use. Encouraging student-led projects or inquiry into eco-conscious innovation—such as designing a low-carbon classroom tech plan—can promote agency and foster a generation of environmentally responsible digital citizens.

#### **Partnering with Tech Providers**

- Seeking companies that demonstrate commitment to environmental sustainability
- Advocating for transparency in AI model training and usage practices
- Supporting open-source and community-driven Al solutions

Schools and districts can strengthen their sustainability efforts by partnering with technology companies that prioritize the environment. Asking vendors to provide transparency around how their AI models are trained, what energy sources power their services, and how they mitigate environmental impact is essential. Supporting companies with a proven commitment to sustainability, such as those using open-source AI solutions or community-powered models, can align educational purchasing decisions with environmental values. By advocating for responsible AI development and forming alliances with green tech leaders, educators can help shift the tech industry toward greater accountability and sustainability.

Al has the potential to enhance learning and expand student access to knowledge, but it must be integrated into education in ways that are environmentally conscious. This document offers guidance to help schools embrace innovation without compromising sustainability, ensuring that technology use in education supports a healthy future for students—and the planet.



# Balancing Innovation and Humanity: Al's Role in the Future of Learning

As artificial intelligence (AI) continues to evolve, its influence in education is growing rapidly offering tools that personalize instruction, streamline workflows, and support diverse learners. But amid this momentum, we're called to confront an essential question: How do we harness the power of AI while protecting the uniquely human connections that define great teaching—and what is the environmental cost of an increasingly digital learning ecosystem?

#### Learning Is a Human Act

Education is, at its heart, about human relationships. The bonds between students and teachers, the sense of safety and belonging in a classroom, and the shared journey of discovery cannot be replicated by algorithms. While AI can offer support—suggesting lesson adaptations, automating routine tasks, or identifying patterns in student performance—it lacks the capacity for empathy, mentorship, and the nuanced understanding that educators bring to the learning experience.

To sustain the human-centered nature of learning:

- Educators must lead the learning process, using AI as a supportive tool rather than a substitute for professional judgment.
- Students need opportunities for both digital and personal interaction, so they can develop social-emotional competencies alongside technical fluency.
- Schools should create spaces for dialogue about responsible tech use, helping students reflect on how their digital decisions impact both themselves and others.

#### Fostering Digital Empathy and Responsibility

Bringing AI into classrooms opens new doors for teaching digital citizenship, critical thinking, and emotional intelligence. When used intentionally, AI-enhanced learning can promote deeper collaboration, ethical reasoning, and student reflection. To guide students in navigating this terrain, educators can focus on helping them:

- Discern when to use AI and when human insight is essential.
- Communicate with empathy and clarity in online environments.
- Approach Al-generated content with critical awareness, recognizing its limitations and potential biases.

#### Considering the Ecological Cost of Al

What's often left out of conversations about AI is its environmental footprint. The infrastructure required to power AI—data centers, servers, and cloud systems—consumes large amounts of electricity and water, contributing significantly to global carbon emissions.

To promote environmental awareness:

- Districts can prioritize partnerships with companies committed to sustainable practices, such as renewable energy and eco-efficient computing.
- Educators can integrate environmental education, encouraging students to explore how their digital behaviors affect the planet.
- Learners can be invited to weigh the trade-offs of tech convenience, reflecting on how to make more sustainable digital choices.

#### Toward a More Thoughtful Future

Integrating AI into education isn't about replacing people—it's about enhancing the learning experience while preserving what matters most. The goal is not just smarter learning, but more compassionate, responsible, and sustainable learning.

By combining human-centered teaching with the thoughtful use of data, we can prepare students for a future where innovation and empathy go hand in hand. In doing so, we create classrooms that are not only efficient and connected—but deeply meaningful, ethically grounded, and environmentally aware.

## N. Policy Development

This guidance is intended to be a starting point and should not be considered official or legally binding. The field of AI is constantly changing, and therefore, guidance and recommendations are subject to change as well. It is suggested that the provided information be used to facilitate discussions about AI and to gain a better understanding of how to responsibly implement it. You are encouraged to further research the development of policies that address the specific requirements of different educational settings.

#### Policy Development Guidance for AI in Education

#### 1. Responsible Use Policies

- Purpose: To define acceptable and inappropriate Al use by learners and staff, promoting responsible, ethical, and safe practices while aligning with the district's educational goals.
- Key Elements:
  - Definition of Al Tools: Clearly define the scope of "Al tools" covered by the policy. This might include generative Al tools (e.g., ChatGPT, DALL-E), Al-powered learning platforms, or other applications that use Al.
  - o **Empowering Permitted Uses by Learners**: Specify how learners can use Al tools to support their learning. Examples include:
    - Researching topics and gathering information
    - Brainstorming ideas and outlining projects
    - Getting feedback on their writing or problem-solving strategies
    - Using Al-powered accessibility tools (e.g., text-to-speech, translation)
    - Participating in educator-approved Al-based learning activities
  - o **Empowering Permitted Uses by Staff**: Outline how staff can use Al tools to enhance their teaching and administrative tasks. Examples include:
    - Creating differentiated learning materials

- Developing assessments and analyzing learner data
- Communicating with parents and learners in different languages
- Automating routine tasks to free up time for instruction and learner support
- o **Define Prohibited Uses**: Clearly define inappropriate uses of AI tools that could compromise academic integrity, learner privacy, or safety. Examples include:
  - Plagiarism (ensure your definition of plagiarism is up to date and modernized to take generative AI into consideration): Submitting AI-generated work as one's own
  - Cheating: Using AI to complete assessments without permission
  - Sharing personally identifiable information (PII) with AI tools
  - Creating or spreading harmful or misleading content
  - Using AI to harass, bully, or discriminate against others
- o **Transparency and Disclosure**: Require learners and staff to disclose when they have used AI tools to complete assignments or tasks, unless otherwise directed by the educator.
- o **Citation Guidelines**: Establish clear guidelines for citing Al-generated content in learner work, acknowledging the Al tool as a source.
- Accountability: Specify the ramifications for violating the acceptable use policy, aligning them with the district's existing disciplinary procedures.
- Parental Consent: Obtain informed consent from parents or guardians before collecting, using, or disclosing any learner data in connection with AI tools, especially for students under 13.

#### 2. Data Privacy and Security

 Purpose: To establish protocols for protecting learner data when using AI tools, ensuring compliance with all applicable laws and regulations.

#### Key Elements:

- o Legal Compliance: Explicitly state that all use of AI must comply with relevant laws, including:
  - FERPA (Family Educational Rights and Privacy Act)
  - COPPA (Children's Online Privacy Protection Act)
  - CIPA (Children's Internet Protection Act)
  - State-specific learner data privacy laws
- Data Minimization: Collect only the student data necessary for the specific educational purpose of using the AI tool. Avoid collecting unnecessary or sensitive information.
- o Vendor Vetting: Establish a rigorous process for evaluating Al vendors' data privacy and security practices. Before adopting any Al tool, review:
  - Privacy policies: Ensure they are clear, comprehensive, and compliant with regulations.
  - Data security measures: Verify they have strong protections in place to prevent unauthorized access, use, disclosure, or destruction of student data.
  - Data storage and transfer: Determine where and how learner data is stored and transmitted and if it aligns with the district's requirements.
  - Data retention and deletion: Specify how long learner data is kept and ensure there are procedures for securely deleting data when it is no longer needed.
- o **Transparency**: Provide clear and accessible information to parents, learners, and staff about how learner data is collected, used, protected, and shared when using AI tools.
- Data Breach Protocol: Develop and implement a comprehensive data breach response plan that outlines steps to be taken in the event of unauthorized access to or disclosure of student data.
- Training: Provide training to staff on data privacy and security best practices related to AI, including recognizing and reporting potential breaches.

#### 3. Availability and Access

 Purpose: To ensure that all learners have access to AI tools and resources and that AI is used in a way that promotes fairness and does not exacerbate existing obstacles.

## • Key Elements:

o **Access**: Strive to provide all learners with access to the technology and support needed to use AI tools effectively, regardless of their socioeconomic background, disability status, or geographic location.

#### o Consider:

- Device and internet access
- Assistive technologies
- Language support
- Training and support
- o **Bias Mitigation**: Acknowledge that AI systems can reflect and amplify existing biases. Implement procedures for:
  - Evaluating AI tools for bias
  - Monitoring for bias
  - Educator awareness
- Culturally Responsive Pedagogy: Encourage the use of AI in a way that is culturally responsive and relevant to the diverse needs and experiences of all learners.

#### 4. Curriculum Alignment

- **Purpose**: To ensure that the use of AI is intentionally integrated into the curriculum and aligned with state and local learning standards.
- Key Elements:
  - o **Alignment with Standards**: When selecting or implementing Al tools, consider how they can be used to support the achievement of specific learning objectives outlined in state and local curriculum standards.
  - o **Emphasis on Higher-Order Thinking Skills**: Prioritize the use of Al tools that promote critical thinking, problem-solving, creativity, communication, and collaboration. Avoid using Al in ways that could simply automate tasks without deepening learners' understanding.
  - o **Digital Literacy**: Integrate the use of AI tools into digital literacy instruction, helping learners develop the skills to evaluate information critically, use technology responsibly, and understand the ethical implications of AI.
  - o **Cross-Curricular Integration**: Explore ways to use AI tools across different subject areas to enhance learning experiences and connect concepts in meaningful ways.

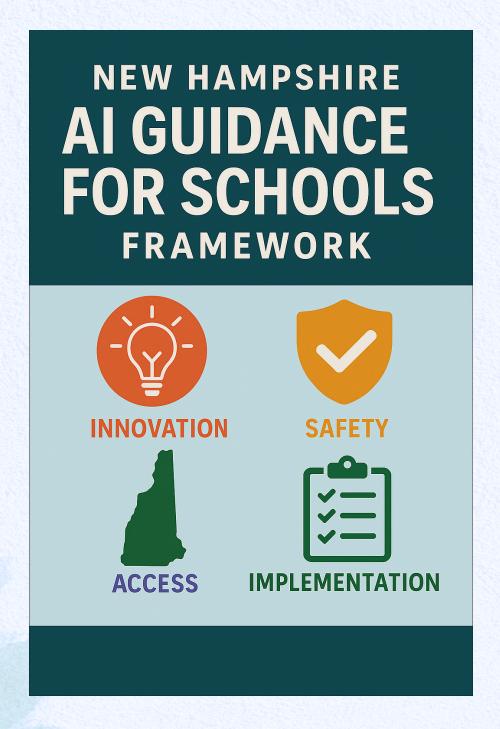
o **Al Literacy**: Incorporate Al literacy concepts into the curriculum, teaching learners about the basics of Al, its potential benefits and risks, and its impact on society.

#### 5. Professional Learning

- Purpose: To equip educators and staff with the knowledge, skills, and resources to use AI effectively, ethically, and responsibly in their professional practice.
- Key Elements:
  - o **Comprehensive Training**: Offer a range of professional Learning opportunities on AI in education, including:
    - Introductory workshops
    - Deep dives
    - Ethical considerations
    - Hands-on practice
    - Peer-to-peer learning
  - o **Ongoing Support**: Offer ongoing support to educators as they integrate AI into their practice, such as:
    - Coaching and mentoring
    - Resource libraries
    - Online communities
  - Leadership Training: Provide specific training for school leaders on:
    - Developing and implementing Al policies
    - Supporting educators in their use of Al
    - Communicating with stakeholders about Al initiatives

By developing comprehensive policies in these areas, districts can create a framework for the responsible and equitable integration of AI into their educational systems. This will require ongoing review, adaptation, and collaboration among all stakeholders to ensure AI is used to benefit all learners.

By leveraging AI to complement human expertise, schools can create dynamic, inclusive, and future-ready learning environments while maintaining academic integrity and protecting learner data. Thoughtful implementation ensures that AI becomes an ally, not a replacement, in education.



Implementation of AI in the Classroom Progress for Educators						
A TOTAL SECTION OF THE SECTION OF TH	Awareness	Exploration	Application	Sustainability		
Step 1: Al Awareness & Exploration Objective: Build foundational knowledge of Al and its potential impact on teaching and learning	Learn the basics of AI, including what it is, how it works, and ethical considerations in education.	Identify AI tools and platforms to enhance instruction, assessment, and learner engagement.	Experiment with Al-driven resources (e.g., chatbots, adaptive learning platforms, Al-assisted writing tools) in low-risk, supplemental ways.	Reflect on initial experiences and share insights with colleagues to foster collaborative learning and best practices		
Step 2: Al-Assisted Teaching & Personalization Objective: Use Al to personalize learning and support differentiated instruction.	Understand how AI can help tailor instruction to meet individual learner needs.	Experiment with Al-powered differentiation tools such as adaptive learning platforms.	Integrate AI to assist in scaffolding, providing instant feedback, and generating personalized learning paths for learners.	Develop strategies to evaluate AI tools for access, accessibility, and alignment with instructional goals.		
Step 3: Al for Inquiry, Creativity & Learner Agency Objective: Empower learners to use Al as a co-pilot in problem-solving, creativity, and inquiry-based learning.	Introduce learners to AI tools that enhance research, creativity, and critical thinking.	Guide learners in using Al for brainstorming, generating ideas, and exploring solutions (e.g., Al-generated writing prompts, design tools, coding platforms).	Design projects where learners collaborate with Al to create presentations, digital storytelling, or innovative problem-solving solutions.	Encourage ethical Al usage, prompting learners to evaluate Al outputs, challenge biases, and refine their critical thinking skills.		
Step 4: Al in Assessment & Feedback Objective: Use Al to streamline assessment and provide meaningful, data-driven feedback.	Learn about Al-powered assessment tools that support formative and summative evaluation.	Test AI tools that generate automated feedback analyze learner work, or provide real-time performance insights.	Use AI for formative assessments (e.g., quizzes, rubrics, real-time analytics) while maintaining educator oversight.	Develop strategies to balance Al-driven insights with human judgment, ensuring feedback remains learner-centered and personalized.		

## Recommended Al Integration by Grade Band

#### Elementary (PreK-5):

- Focus: Foster curiosity, foundational digital literacy, and safe exploration of technology.
- **Example Tools:** Curipod (young learner mode), Book Creator AI, WriteReader, Microsoft Immersive Reader, Canva for Education.

#### Sample Uses:

- Use AI to generate story starters or illustrations to support creative writing.
- o Conduct a "robot or human?" activity to identify what AI can and can't do.
- o Engage students in giving commands to simple AI tools (e.g., voice assistants like Alexa or Google).
- Use Al-generated visual prompts for vocabulary development or SEL reflection.

#### Middle School (6-8):

- Focus: Develop ethical awareness, critical thinking, and Al-supported inquiry.
- Example Tools: MagicSchool.ai, Canva Magic Write, Eduaide.ai, Scratch (advanced), ChatGPT (moderated use), Class Companion.

#### Sample Uses:

- Use AI to create research outlines or suggest writing improvements.
- Facilitate classroom debates on AI in society (e.g., "Should AI grade student work?").
- o Analyze tone, audience, and structure using Al tools in ELA.
- o Create science hypotheses or compare simulated experiments.

#### High School (9–12):

- Focus: Deepen content understanding, encourage responsible creation, and explore career-aligned AI applications.
- **Example Tools:** Khanmigo, PerplexityAI, Grammarly, Adobe Firefly, NotebookLM, Microsoft Copilot.

#### Sample Uses:

- o Use AI for comparative historical analysis or primary source evaluation.
- o Generate multimedia presentations with Al visuals and text.
- o Incorporate AI into design thinking or entrepreneurial projects.
- o Teach students how to evaluate the credibility of Al-generated content.

#### Before You Use AI: Educator Checklist

- ☑ Is there a clear and intentional purpose for using AI in this lesson?
- ☑ Has the AI tool been vetted for age-appropriate use and compliance with privacy laws (e.g., FERPA/COPPA)?
- ✓ Have students been taught about ethical use and when to disclose Al support?
- ✓ Have I demonstrated how to use the tool before assigning it to students?
- ✓ Are there opportunities for students to critically assess or revise Al output?
- ✓ Do I have an alternate activity if the AI tool fails or isn't accessible?
- ☑ Is the use of AI aligned with specific learning objectives and standards?
- ✓ Have I modeled how to cite or disclose AI use appropriately?

# Appendix 3 Sample Student Al Use Agreement – example

- embed into current Responsible Use Policies

#### Student Generative AI Use Agreement

I understand that AI tools can help me learn and create, but they must be used responsibly. By signing this agreement, I promise:

- To use Al only when allowed or assigned by my teacher.
- To always think for myself and not rely on AI to do my work.
- To be honest and tell when I've used AI to help me with ideas or writing.
- Not to use AI to cheat, lie, or copy work from others.
- To ask questions if I don't understand what's okay or not okay with AI.
- To respect the privacy and safety of myself and others when using AI tools.

Student Name: _		
Date:		

## Example Al Applications by Subject – example

#### - embed into course disclosures

#### **English Language Arts (ELA):**

- Generate writing prompts based on theme or genre.
- Use AI to rewrite, summarize, or improve tone in student writing.
- Create simulated interviews with literary characters.
- Draft collaborative poems or essays using Al starters.

#### **Mathematics:**

- Use AI tools (e.g., Khanmigo) to explain complex problems step-by-step.
- Generate custom practice problems and error analysis.
- Visualize real-world data using Al-powered graphs.
- Explore number patterns or logic puzzles generated by Al.

#### Science:

- Summarize lab data or simulate experiments with variables.
- Use AI to predict outcomes or suggest research questions.
- Investigate real-world problems using AI models (e.g., climate simulations).
- Compare how AI interprets scientific findings with peer-reviewed sources.

#### **Social Studies:**

- Create Al-generated debate roles from historical or current perspectives.
- Use AI to build timelines or maps of historical events.
- Ask AI to compare different policy positions or social movements.
- Practice analyzing AI bias when researching controversial topics.

#### Art & Design:

- Use AI (e.g., Adobe Firefly) to generate illustrations or logo ideas.
- Create visual art prompts using descriptive text.
- Storyboard a video or animation with AI support.
- Explore styles and movements through AI image recreation.

## Appendix 5

## Family and Community Engagement Strategies

- Host an "Al in Education" family night with student demos and tool explanations.
- Create a simple, visual "What Is Generative AI?" one-page handout for parents.
- Share monthly newsletters or blog updates about how AI is being used in class.

- Invite family and community members to serve on AI review or advisory committees.
- Partner with local businesses or universities to explore real-world Al applications

## Note to Educators on Responsible Use

As you integrate Al into learning, consider the following guiding principles:

- Be purposeful. Align Al use with instructional goals and outcomes—not novelty or convenience.
- Be transparent. Communicate clearly with students and families about when, how, and why AI is being used in the classroom.
- Be critical. Always preview and verify AI outputs for accuracy, bias, and developmental appropriateness.
- Be ethical. Model equitable, respectful, and secure uses of Al tools.
- Be collaborative. Share your strategies, successes, and challenges with colleagues and professional communities.
- Be reflective. Revisit and refine your AI practices as technology and pedagogy evolve.
- Be creative. Embrace AI as a support tool—not a replacement—for teacher expertise and human connection.
- Stay current. Keep up with district guidance, policy shifts, and newly approved Al
  tools.
- Promote access. Ensure all students have access to AI tools and the support needed to use them effectively.

#### Al Use Notification

#### - perhaps include in student handbooks

**Intelligence (AI)** is being leveraged as a thought partner and learning ally in the classroom. As technology continues to evolve, AI is becoming an important part of how we learn, create, and solve problems—not just in schools, but in everyday life and the future workplace.

#### Why AI in Education?

At its best, Al can help students:

- Get personalized support in subjects like math, reading, or writing
- Practice critical thinking by analyzing Al-generated responses
- Explore creativity through tools that help write stories, generate images, or design presentations
- Learn how AI works and how to use it responsibly

All is not replacing teachers or student thinking—it's a **support tool** that can help students better understand and engage with the material, much like a calculator, dictionary, or search engine.

#### What Students Will Learn

As part of our K-12 learning approach, students will:

- Learn what Al is and how it's used in the world around them
- Understand the importance of digital citizenship, honesty, and responsibility when using AI
- Explore age-appropriate tools that support learning (e.g., story generators, virtual tutors, visual design aids)
- Discuss the ethical considerations of AI, such as fairness, privacy, and when it's okay to use AI help

We will **introduce Al slowly and carefully**, ensuring that any tools used are developmentally appropriate, reviewed for safety and privacy, and aligned with learning goals.

#### **Our Commitment**

Your child's safety, privacy, and learning experience are our top priorities. We will:

- Only use tools that comply with privacy and security standards (such as FERPA/COPPA)
- Be transparent about when and how AI tools are used in class
- Teach students how to responsibly use AI and how to disclose AI assistance in their work
- Provide non-Al alternatives for students or families who request them

#### Questions?

We understand that AI is a new and sometimes unfamiliar topic. We're here to support you with information and ongoing conversations. If you have questions or concerns, we invite you to contact us or join us for our upcoming "AI in Education" Family Night (details to come!).

Thank you for your support as we prepare students for a future where curiosity, creativity, and critical thinking go hand-in-hand with powerful new tools.

## Al Use Notification by Grade Band

#### - perhaps include in student handbooks

**Intelligence (AI)** is being leveraged as a thought partner and learning ally in the classroom. All is all around us—in our phones, home assistants, and even in learning games. As part of helping students grow as responsible digital citizens, we will be introducing AI concepts in ways that are fun, safe, and developmentally appropriate.

#### What Will Students Be Learning?

At the elementary level, students will:

- Learn what AI is through books, videos, and simple classroom activities
- Practice giving commands to voice assistants (e.g., "Ask the robot a question")
- Use AI tools to help tell stories, create art, or generate ideas
- Talk about what it means to use technology responsibly

Our main goals are to spark curiosity, build foundational digital literacy, and help children understand that technology should support learning and creativity—not replace it.

#### How We Will Keep It Safe and Responsible

- All tools used are reviewed for child safety and privacy
- Students are supervised when using technology tools
- We talk with students about honesty, kindness, and safety online

If you have any questions or would like to learn more, we invite you to contact your child's teacher or join us at an upcoming parent night focused on AI and learning.

#### Middle School (Grades 6-8)

**Intelligence (AI)** is being leveraged as a thought partner and learning ally in the classroom. Middle school students are naturally curious about how the world works, and AI offers a powerful opportunity to build digital awareness, creative thinking, and responsible use.

#### What Will Students Be Learning?

At the middle level, students will:

- Learn how AI works and where it shows up in everyday life
- Use AI tools to brainstorm ideas, organize research, or revise writing
- Discuss when it's appropriate to use AI and when it's not
- Explore ethical questions (e.g., Should AI write your essay?)

We emphasize that AI is a support tool, not a substitute for thinking. Our goal is to help students become responsible users who know how to ask good questions, check facts, and use technology to enhance their own voice and ideas.

#### **How We Will Support Students**

- Students are introduced to tools gradually, with guided practice
- We review all tools for safety and student data privacy
- Classroom discussions will focus on academic integrity, honesty, and bias in Al
- Teachers will provide feedback and structure for when and how AI tools can be used

We're excited to partner with families in helping students learn not only how to use AI, but also how to think critically about it. Please reach out if you have questions or would like to preview the tools we are exploring.

#### High School (Grades 9–12)

**Intelligence (AI)** is being leveraged as a thought partner and learning ally in the classroom. This year, your student may encounter AI tools in a variety of classroom settings.

#### What Will Students Be Learning?

In high school, students will:

- Use AI to assist in tasks like brainstorming, organizing ideas, and data analysis
- Examine how AI can support—but not replace—academic thinking
- Learn how to evaluate AI outputs for credibility, bias, and accuracy
- Engage in conversations about the role of AI in society, careers, and ethics

We are helping students develop the skills they need for college, career, and citizenship in a digital world. This includes learning when AI is useful, when it is not, and how to be transparent about its use.

#### Our Approach to Responsible Use

- Teachers will model and guide ethical AI use in academic settings
- Students will be expected to disclose when AI tools are used in their work
- Lessons will explore the real-world implications of AI in research, writing, design, and critical thinking
- We will use only tools that comply with student privacy and security standards

We welcome your partnership as we navigate this exciting and evolving area of education. If you'd like to learn more or preview some of the tools being introduced, please don't hesitate to contact us.

## **Sample District Policy Templates**

#### Model Policy for the Use of Artificial Intelligence in New Hampshire School Districts

**Purpose** This policy establishes guidelines for the responsible, ethical, and educationally appropriate use of Artificial Intelligence (AI) in New Hampshire school districts. AI tools present powerful opportunities to enhance teaching, learning, and operational efficiency. However, their integration must align with core values of access, privacy, academic integrity, and human-centered education.

#### I. Guiding Principles

- 1. **Educational Enhancement**: All is a tool to support—not replace—educators. It should enhance instruction, promote personalized learning, and increase student engagement.
- 2. **Access**: All must be used in ways that promote inclusive and accessible learning environments for all students.
- 3. **Transparency and Accountability**: All stakeholders—students, families, educators—must be informed about how Al is used in instruction, operations, and decision-making.
- 4. **Human Oversight**: Al will support, not substitute, the professional judgment of educators and administrators.
- 5. **Ethical Use**: Al use must align with ethical standards, protect data privacy, and maintain academic integrity.
- 6. **Documentation**: When AI is used to assist decision-making, its use must be documented to ensure transparency.
- 7. **Compliance with Copyright**: Educators must avoid uploading copyrighted or proprietary student/staff work into generative AI systems.
- 8. **Stakeholder Input**: Development and revision of district AI policies should include community voice and be responsive to new information and tools.

#### II. Responsible Uses of Al

Al tools may be used to:

- Support differentiated instruction and adaptive learning pathways.
- Provide real-time feedback on student writing and performance.
- Brainstorm ideas or provide multiple perspectives to support inquiry and creativity.
- Support accessibility through text-to-speech, translation, or other assistive technologies.
- Enhance operational functions such as scheduling, communication, and data analysis.
- Simulate real-world scenarios for problem-solving and critical thinking.
- Provide personalized academic and tutoring support.
  Translate communication for multilingual families.

## III. Roles and Responsibilities

#### A. Students

- Use AI tools ethically and for educational purposes only.
- Cite Al assistance or content when used in academic work.
- Protect personal and peer information when using AI tools.
- Refrain from submitting Al-generated work as their own.
- Report misuse of AI systems to a teacher or school administrator.

#### B. Educators and Staff

Integrate AI tools intentionally and in alignment with instructional goals.

- Receive training on Al applications, risks, and instructional strategies.
- Model ethical and responsible Al use.
- Vet all Al-generated content for accuracy before student use.
- Use only AI tools that are included in the district's Student Data Privacy Agreement Database.
- Report any Al misuse and support student understanding of ethical Al practices.

#### C. Administrators

- Provide ongoing professional development and access to vetted tools.
- Ensure compliance with FERPA, COPPA, and other applicable data privacy laws.
- Lead regular audits of Al usage across the district.
- Maintain oversight of decision-making processes where AI is used.
- Establish clear criteria and review protocols for approving AI tools.

#### IV. Data Privacy and Security

- No student or staff PII (personally identifiable information) may be input into AI tools unless vetted and secured under a district-approved privacy agreement.
- Al vendors must comply with NH state and federal laws, including FERPA, COPPA, and the NH Student Online Personal Information Protection Act (SOPIPA).
- Staff must not share student work, performance data, or private content with public AI tools unless approved.

#### V. Academic Integrity

- Students must acknowledge when AI has assisted with their work.
- Submitting work generated fully or in part by AI without citation is considered academic dishonesty.
- A tiered response may include reteaching, parent engagement, administrative action, and revision opportunities.
- Educators should design assignments that promote originality and critical thinking to mitigate misuse.

#### VI. Reporting and Assessment Practices

- Al should support—not replace—authentic assessments and evidence of learning.
- Teachers may use AI to support feedback, but final evaluations remain the responsibility of educators.
- Student reflection on their use of AI should be encouraged to promote responsible use.
- Competency-based grading systems should ensure that student success skills (e.g., collaboration, self-direction, digital citizenship) are reported separately, using narrative or rubric-based feedback rather than traditional grades.

#### VII. Communication with Families

- Families will be informed of approved AI tools and how they are used in classrooms.
- Parent communications must clarify privacy practices, intended instructional use, and student expectations.
- Families should have opportunities to ask questions or opt-out of specific AI tools when feasible.

#### VIII. Policy Review and Updates

- The policy will be reviewed annually with input from teachers, administrators, students, families, and community stakeholders.
- Updates will reflect evolving technologies, changes in law, and new educational practices.

#### IX. Implementation Timeline

• Phase I: Inventory current AI use, identify unapproved tools, and begin staff training.

• **Phase II**: Publish district-approved tool list, send family communication, and embed guidance in professional development.

• **Phase III**: Implement classroom integration aligned to policy with ongoing monitoring, feedback, and periodic review.

Adopted by: [District Name]

Date: [Insert Date Here]

Review Date: [Insert Future Review Date Here]

#### What Parents Should Know About Al in Schools

#### A Family-Friendly Overview

#### What is Al?

Artificial Intelligence (AI) is technology that can perform tasks typically done by humans—like answering questions, translating language, or helping organize information. It's used in everyday tools like voice assistants, email filters, and even some educational apps.

#### Why are schools using AI?

Teachers and schools are exploring AI to support learning, not to replace teachers. Used thoughtfully, AI can help:

- Personalize learning for students by offering practice at their level.
- Support writing and brainstorming by giving feedback or suggestions.
- Enhance creativity with tools for designing art, videos, or presentations.
- **Build digital literacy** so students understand how these tools work and how to use them responsibly.

#### What students are learning:

We're helping students learn how to use Al thoughtfully and ethically, including:

- Asking good questions and checking the accuracy of AI responses.
- Respecting privacy, copyright, and honesty when using AI tools.
- Knowing when AI helps—and when it's better to think for yourself!

#### Is Al safe for kids?

Yes—with guidance. Like any tool, AI works best when adults and students use it together. Teachers are choosing age-appropriate tools and helping students use AI responsibly.

#### How are teachers using AI?

Educators might use AI to save time on tasks like drafting lesson plans or giving feedback. This frees up more time for what matters most: **connecting with students and supporting learning**.

#### What can parents do?

- Stay curious! Ask your child how they're using Al in school.
- Talk about using technology responsibly at home.

Ask your school or teacher if you have questions or want to learn more.

# Appendix 11

# Why It's Important to Validate Al-Generated Content

### Especially for Learning

Al can be a powerful support tool for educators and students—but it's not perfect. One of the most important things we can teach and model in schools is how to **think** critically about Al-generated information, especially when using tools like rubrics, learning materials, or writing supports.

### Al Can Help, But It Doesn't Know Everything

Artificial Intelligence generates information based on patterns, not understanding. That means:

- It may sound confident, even when it's wrong.
- It can leave out important ideas or miss the nuance needed for good teaching.
- It may create **rubrics or instructional materials that look polished** but don't align well with standards or learning goals.

### Why Validating Al-Generated Rubrics and Tools Matters

Rubrics help students and teachers understand expectations. If a rubric is unclear, biased, or doesn't match the learning target, it can:

- Confuse students
- Undermine feedback and growth
- Create grading inconsistencies

Educators must **review**, **revise**, **and refine** any Al-generated tool before using it in the classroom. That includes:

- Checking for alignment with learning standards
- Ensuring clarity and student-friendly language
- Removing unintended bias or vague scoring criteria
- Confirming the developmental appropriateness of what it asks students to do

#### How Educators Can Model Good Al Use

- Use Al as a starting point—not a final product. Just like a first draft, it's a tool that needs human judgment.
- Model critical thinking. Let students see how you question and adjust what Al suggests.
- Invite students to co-analyze rubrics. This helps builds understanding and ownership of learning goals.

#### What Families Should Know

- Teachers are using AI tools with care and professional expertise.
- Not everything AI creates is used "as-is"—it's always reviewed for quality.
- We're teaching students that AI is a helper, not a shortcut, and they still need to think, question, and learn.

# Appendix 12

# Sample District-Level Al Tool & Policy Review Plan

### District Al Tool & Policy Review Plan

Designed to guide a responsible, collaborative, and future-ready approach to adopting and evaluating AI in education. This plan ensures alignment with instructional goals, student safety, access, and transparency.

Purpose – To develop, review, and implement AI tools and policies that are aligned with district goals, instructional priorities, student privacy laws,

and the developmental needs of learners. This plan centers access, transparency, and ethical use of AI in K–12 education						
Phase 1	Phase 2	Phase 3	Phase 4	Phase 5		
Establish Oversight & Vision	Inventory & Initial Review	Evaluation & Approval Framework	Drafting Policies & Procedures	Communication & Launch		
Goal: Set up structures and shared understanding for thoughtful AI use Create a District AI Task Force Include representatives from: Instructional leadership IT/EdTech Classroom teachers (across grade levels) School administrators Special education Family/community reps Student reps (MS/HS) Define District's AI Vision  Guiding Principles Frame AI as a support for teaching and learning, not a replacement. Align with district mission, Portrait of a Learner/ Graduate, and strategic plan.	Goal: Understand what's currently in use and begin evaluating it Audit Current Al Use  Survey schools: What Al tools are being used? For what purpose?  Review teacher-generated tools (e.g., Al for lesson planning, rubric creation)  Identify unofficial/unsupported Al use by students or staff Review Existing Policies & Legal Frameworks  Data privacy compliance (FERPA, COPPA, etc.)  Acceptable Use Policies (AUP) and Responsible Use Agreements  Review Al clauses in vendor contracts	Goal: Create criteria and processes to review Al tools and practices  Develop an Al Tool  Evaluation Rubric  Key areas to include:  Alignment with instructional goals  Developmental appropriateness  Accuracy and transparency  Accessibility  Student data privacy and security  Teacher oversight and adaptability  Pilot Review Process  Choose 3–5 tools for evaluation  Engage teachers and students in pilot feedback  Report findings to Task  Force and leadership	Goal: Establish guidelines that support innovation and protect students  Draft Clear District AI Guidelines For each group:  • Teachers (e.g., using AI to support planning, not student evaluation)  • Students (e.g., when AI can/can't be used in classwork)  • Families (e.g., transparency about how AI is used with students) Update Professional Development Plans Provide training on critical evaluation of AI tools Offer guidance on modeling ethical and responsible use	Goal: Build transparency, trust, and shared understanding Create Family & Community Communication Plan Share how AI will (and will not) be used Provide FAQs, sample lessons, and opt-out options if needed Launch Finalized Guidelines & Tool Approval List • Publish approved AI tools • Provide process for new tool submission • Share reporting process for concerns or misuse Ongoing: Monitoring, Reflection, and Adjustment Annual Review of Tools and Policies • Solicit feedback from staff, families, and students • Monitor new AI trends and adapt policy accordingly • Update PD as new tools and needs emerge		

	Establish Continuous Learning Loop

# Appendix 13

# Handout: Human Connections in the Age of Al: A Balanced Approach for Schools

As artificial intelligence (AI) continues to grow in classrooms, it's essential that we embrace innovation without losing sight of what matters most: human connection, care, and relationships. Technology can support learning, but it can never replace the meaningful bonds between students and educators.

### Why Balance Matters

Balancing AI and human relationships in education is essential because while AI can enhance learning through personalization, efficiency, and access to information, it can't replace the empathy, trust, and mentorship that human educators provide. Human connection fosters emotional safety, motivation, and a sense of belonging—critical components for student success. By thoughtfully integrating AI to support instruction while preserving strong teacher-student relationships, we create learning environments that are both innovative and deeply human.

Al tools can:	But human connection:	
<ul> <li>Personalize instruction</li> <li>Provide immediate feedback</li> <li>Save time on routine tasks</li> <li>Open access to global resources</li> </ul>	<ul> <li>Builds trust and motivation</li> <li>Supports emotional and social growth</li> <li>Encourages curiosity and belonging</li> <li>Teaches empathy, communication, and collaboration</li> </ul>	

# **Handout: Guiding Principles**

### Guiding Principles for Balancing AI with Human Connection

### 1. Lead with Relationships

Prioritize face-to-face time and personal interaction. Use AI to *support*—not replace—real conversations.

### 2. Keep Teaching Human-Centered

Let AI handle routine tasks (e.g., grammar check, quiz generation). Use the time saved to deepen student discussion, mentoring, and coaching.

### 3. Teach Students to Reflect, Not Just Respond

Pair Al use with journaling, peer feedback, and dialogue. Encourage students to ask: Why does this matter to me?

#### 4. Practice Ethical Al Use

Talk with students about fairness, privacy, and responsibility. Help students recognize bias, verify accuracy, and credit sources.

### 5. Support Well-Being

Balance screen time with movement, play, and collaboration. Check in with students emotionally—technology can't notice how a student is really feeling.

### A Healthy Learning System Includes:

- Human connection
- Critical thinking
- Emotional safety
- Purposeful technology

"Al may offer speed and insight, but only humans offer heart."

NH Learning Initiative

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# Al Tools for Educators (circa 2025)

### Planning, Content Creation, & Presentation

- MagicSchool.ai All-in-one assistant for lesson planning, feedback,
   IEP writing, communication, rubrics, and more.
- Education Copilot Streamlines lesson planning, project outlines, student reports, and handouts.
- Curipod Quickly generates interactive lessons with polls, SEL check-ins, word clouds, and open responses.
- Canva Visual design platform for presentations and classroom materials.
- Canva Magic Write Al writing support for brainstorms, outlines, lesson plans, and creative prompts.
- SlidesAI Automatically generates slide decks with educational templates.
- Slidesgo Offers beautiful, editable slide templates and includes an Al Presentation Maker.
- **Gamma** Creates engaging, scrollable web-style presentations and interactive digital reports.
- Figma Collaborative design tool with AI features, ideal for UI/UX and STEAM projects.
- Eduaide.ai Offers 100+ instructional resources, including assessments, IEP supports, feedback bots, and multilingual options.
- **Diffit** Differentiates text by reading level and generates scaffolds like summaries and glossaries.
- Twee Al generator of ELA resources like vocabulary tasks, grammar games, and story-based lessons.
- Brisk Teaching Helps generate rubrics, assess student work, and adapt materials for accessibility.
- NotebookLM (formerly Notebook) Summarizes uploaded materials and generates insights from them.
- OpenAl Teaching Guide Offers prompt ideas and guidance for responsibly using ChatGPT in class.
- Microsoft Copilot Built into Office tools; helps write, summarize, and analyze educational content.
- Gemini Google's generative AI tool in Workspace for research, content creation, and analysis.

#### **Assessment & Feedback**

- Gradescope Speeds up grading for written, math, and science assessments with AI support.
- **Formative** Offers real-time AI feedback and formative assessment tracking.
- Class Companion AI Provides writing feedback and rubric-aligned scoring for student work.
- Quizizz (Al-enhanced) Builds quizzes with adaptive difficulty, grammar support, and real-world question generation.

# Communication, Productivity, & Notetaking

- Otter.ai Live transcription for meetings, class discussions, and accessibility support.
- AudioPen Voice-to-text app that refines spoken thoughts into clean, editable writing.
- PowerPoint Speaker Coach Helps educators practice and improve presentation delivery.
- Napkin Al tool for visual notetaking and idea mapping.

# Al Tools for Elementary (PreK-5)

# Reading, Writing, & Literacy

- **WriteReader** Book-making platform where students author content with Al-generated images.
- **Microsoft Immersive Reader** Provides read-aloud, translation, and picture dictionary tools.
- Book Creator (Al Assist) Students build digital books with voice typing and Al support.
- Quill.org Writing and grammar practice with feedback (Grades 3–5).
- Twee Creates story-based ELA activities tailored to younger learners.

# **Creativity & Exploration**

- Curipod (Young Learner Mode) Interactive lessons adapted for younger grades with emoji responses.
- StoryJumper AI Digital storytelling with AI-generated images.
- Scratch with Al Extensions Beginner-friendly coding platform introducing Al and programming basics.

# **Accessibility & Speech**

- Seeing Al Describes text, people, and scenes for students with visual impairments.
- ELSA Speak (Younger Learners) Supports multilingual students with pronunciation and speech fluency.

# Al Tools for Secondary (Grades 6-12)

# Writing, Feedback, & Research

- **Grammarly** Grammar, tone, and clarity feedback in real-time.
- Writable Essay building, peer review, and teacher feedback with Al scaffolds.
- QuillBot Al tool for paraphrasing, summarizing, and improving academic writing.
- Class Companion Al Detailed writing analysis aligned with teacher rubrics.
- **ChatGPT (OpenAl)** Helps with explanations, brainstorming, quiz creation, and student writing feedback.
- PerplexityAl Conversational Al with cited research support and topic exploration.

# STEM, Coding, & Al Literacy

- Khanmigo (Khan Academy) Personalized Al tutoring for math, science, and inquiry-based learning.
- Socratic by Google Step-by-step explanations for solving academic questions.
- Scratch (Advanced Projects) Builds simulations and interactive content with Al logic.
- Code.org Al Explorations Modules exploring ethics, design, and coding with Al.
- **Century Tech** Personalized learning engine powered by AI data analytics.
- **Figma** Excellent for STEAM projects involving design, interfaces, and digital creativity.

### Design, Presentations, & Speaking

- Slidesgo Offers dynamic slide templates for student projects and reports.
- Gamma Turns topics into beautiful, scrollable, interactive web presentations.

- PowerPoint Speaker Coach Rehearsal tool that helps students strengthen their speaking skills.
- Adobe Firefly Generates visual content and graphics from text prompts.
- Canva for Education. (n.d.). Retrieved from https://www.canva.com/education/

# **Educator-Focused AI Voices & Thought Leaders**

#### John Spencer

Educator, author, and advocate for creative, student-centered learning with Al.

Known for his practical frameworks for AI use in K–12 classrooms John Spencer

Website: https://spencereducation.com/

Teach with A.I. Website:

https://www.teachartificialintelligence.com/?utm\_source=chatgpt.com

#### Monica Burns (ClassTechTips)

Edtech consultant sharing classroom-ready AI tools and practical tech tips.

Website: https://classtechtips.com/

#### Rachelle Dené Poth

Teacher, author, and speaker on AI, emerging tech, and language learning.

Website: <a href="https://www.rdene915.com/">https://www.rdene915.com/</a>

### Matt Miller (Ditch That Textbook)

Practical AI ideas and creative teaching resources.

Website: <a href="https://ditchthattextbook.com/">https://ditchthattextbook.com/</a>

### **Eric Curts (Control Alt Achieve)**

Google tools and AI classroom integration expert.

Website: <a href="https://www.controlaltachieve.com/">https://www.controlaltachieve.com/</a>

#### Tina Zita

Instructional coach exploring AI, literacy, and creativity in learning.

Website: <a href="https://www.tinazita.com/">https://www.tinazita.com/</a>