Design & Use of AI in Mira

Human-Centered Innovation for
K–16 Learning and Teaching

Version 1.0

Human-Centered AI for K–16 Learning

Mira is a suite of AI-powered educational tools built to support personalized, equitable learning experiences across K–16 classrooms. Rooted in research-based pedagogy, Mira enhances teaching and learning without ever replacing the teacher. Its design keeps educators, students, and authentic human interaction at the heart of every experience.

> *Mira is built by educators for educators — designed by teachers, linguists, and learning scientists who understand the realities of classrooms and the diverse needs of K-16 learners.*

At the foundation of all Mira products is MiraCore™ —a proprietary toolkit that uses AI to adapt dynamically to each learner's strengths, needs, and goals. MiraCore listens, interprets, and guides through meaningful interactions that foster confidence, academic growth, and engagement.

> *Mira ensures technology serves learning — never the other way around.*

How Mira Uses AI

Mira's AI systems are designed to support educators and students in real classrooms helping teachers provide timely feedback, monitor progress, and engage learners in authentic communication tasks.

MiraCore: The Intelligent Learning Engine

MiraCore powers all Mira products, analyzing student input in real time to tailor feedback and next steps. Whether students are reading, writing, speaking, or reflecting, MiraCore ensures that each task is personalized and purposeful.

Pedagogical Wrappers

Every AI-supported activity is framed by Pedagogical Wrappers — instructional frameworks that connect language and content learning to real-world and academic contexts. This ensures that Mira's AI supports educationally meaningful practice aligned with curriculum goals.

AI Bumpers

Mira's AI Bumpers act as guardrails that prevent inappropriate behavior and keep students focused on the task.

Adaptive Algorithms

Mira's adaptive algorithms personalize each learner's pathway. As students complete activities, Mira continuously analyzes their progress and selects new tasks that challenge and grow their skills.

Specialized AI Components

Mira integrates specialized AI tools to support instruction and assessment, including:

- Automated evaluation of open-ended written and spoken responses
- Adaptive task and prompt selection tailored to proficiency and growth
- Context-aware feedback generation aligned with proficiency-level standards

How and When Mira Uses External AI

Mira selectively integrates external AI technologies, such as OpenAI, under the supervision of MiraCore™ and within a secure, closed educational framework. This approach allows Mira to deliver high-quality and natural feedback while protecting student privacy.

When Mira Uses External AI

Mira connects to external AI models only when:

- Deep language understanding is needed to interpret complex, open-ended student responses
- Context-sensitive feedback enhances the quality and precision of guidance
- Dynamic prompts or examples increase engagement and authenticity

Each interaction is tightly controlled and always focused on learning. Mira never functions as an open chatbot or general-use AI tool.

What Data Is (and Isn't) Shared

No student or educator data from Mira is used to train AI models. All data handling is transparent and fully compliant with FERPA and COPPA privacy standards.

Why Mira Uses External AI

External AI technologies like OpenAI enhance Mira's ability to deliver timely, natural feedback that mirrors real-world communication. They make it possible for students to receive instant, constructive guidance while freeing teachers to focus on individualized instruction, relationship building, and higher-order thinking.

All external integrations operate within MiraCore's governance. Mira decides what data is processed, how responses are used, and ensures all outputs serve educational goals.

What Students Can and Cannot Do with AI in Mira

What Students Can Do

- Receive instant, formative feedback on writing, speaking, and comprehension tasks.

- Engage in adaptive learning activities that match their level and build confidence.

- Practice safely and independently within a moderated educational environment.

- Stay on task —Mira redirects off-topic responses and keeps learners focused on goals.

- Reflect on progress through visual dashboards and feedback summaries.

- Communicate respectfully, as Mira models academic language and tone.

- Explore authentic, real-world communication scenarios supported by AI feedback.

What Students Cannot Do

- Access or produce unsafe, hateful, or inappropriate content: Mira filters all such language automatically.

- Receive random or unrelated answers: AI feedback always aligns with the educational task.

- Engage with uncontrolled AI tools.

- Manipulate or exploit the system: Mira identifies patterns of misuse and provides redirection.

- Use AI to generate or complete assignments: Mira promotes genuine learning and effort.

- Bypass work with random or irrelevant inputs: Mira detects and redirects such attempts.

A Safe, Responsible AI Environment

Mira's AI framework prioritizes safety, transparency, and accountability. Comprehensive language moderation protects users from harmful or inappropriate content. Every AI response is anchored to a specific educational purpose. Educators have full visibility into student activity and progress, ensuring AI remains a trusted partner in learning.

Mira's AI keeps students safe, focused, and growing and always within teacher-guided boundaries.

AI You Can Trust

Mira's AI is grounded in pedagogy, privacy, and ethics. Across all Mira products, MiraCore ensures every AI decision is purposeful, safe, and aligned with learning outcomes.

- No student data is ever used to train AI models.

- All integrations operate under strict compliance and transparency protocols.

- AI supports, never replaces teachers.

- Mira fosters equitable, personalized learning for all students.

By blending the precision of advanced AI with the care, empathy, and expertise of great teaching, Mira builds trust, helping educators and students thrive together in every classroom.

Mira was created by teachers who believe that technology should amplify, not replace the art of teaching.