International Conference
The Future of Education

THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN THE PLANNING OF TEACHING PRACTICES IN INCLUSIVE SPECIAL EDUCATION

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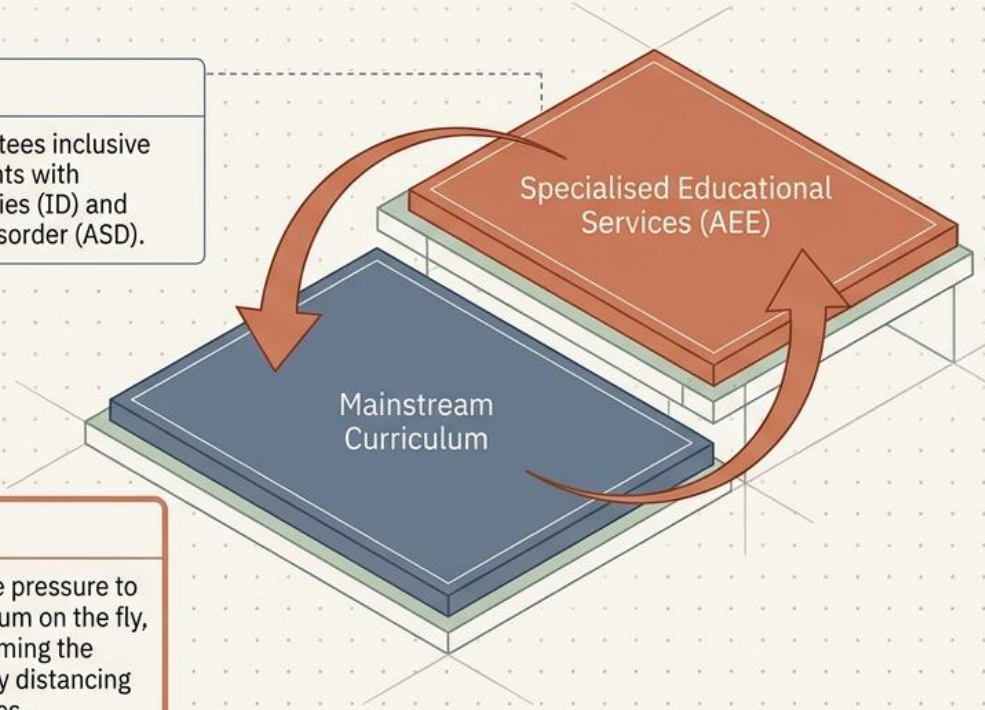
The Inclusion Imperative in Modern Classrooms

Introduction

The Mandate

Brazilian law guarantees inclusive education for students with Intellectual Disabilities (ID) and Autism Spectrum Disorder (ASD).



The Reality

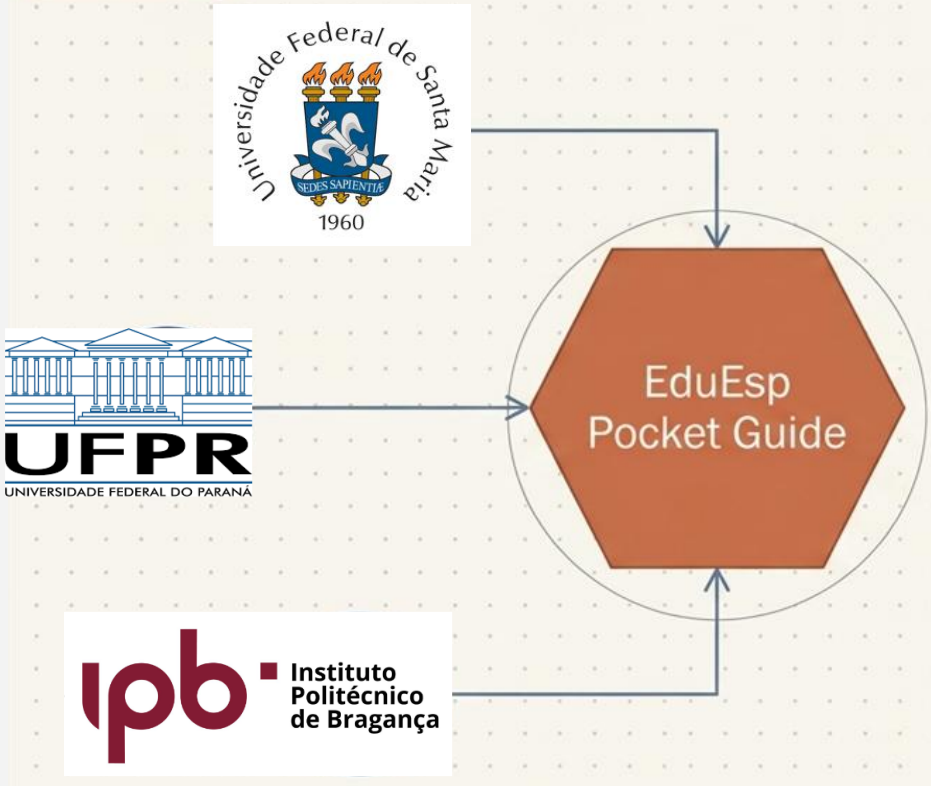
AEE exists to supplement schooling and eliminate barriers, not to replace the traditional classroom.

The Challenge

Teachers face immense pressure to adapt complex curriculum on the fly, risking either overwhelming the student or inadvertently distancing them from peer activities.

Engineering the EduEsp Prototype

Introduction



The Initiative

Developed under the Institutional Program for Teaching Initiation Scholarships (**PIBID**) by near-future professionals enrolled in Special Education.

The Mission

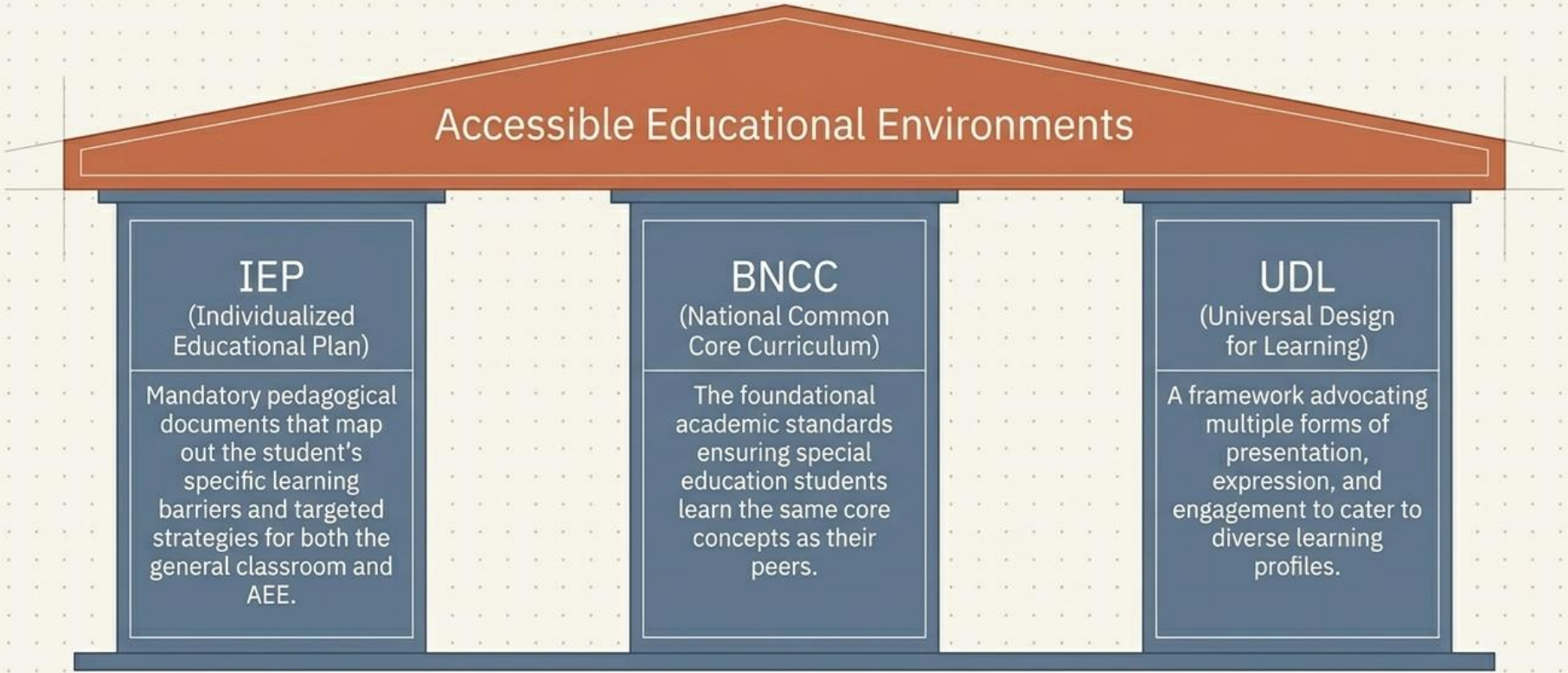
To create an AI-based prototype that acts as a decision-making assistant for teachers.

The Goal

Personalize instruction for ID and ASD students to ensure inclusive, accessible, and highly efficient pedagogical practices in a digital society.

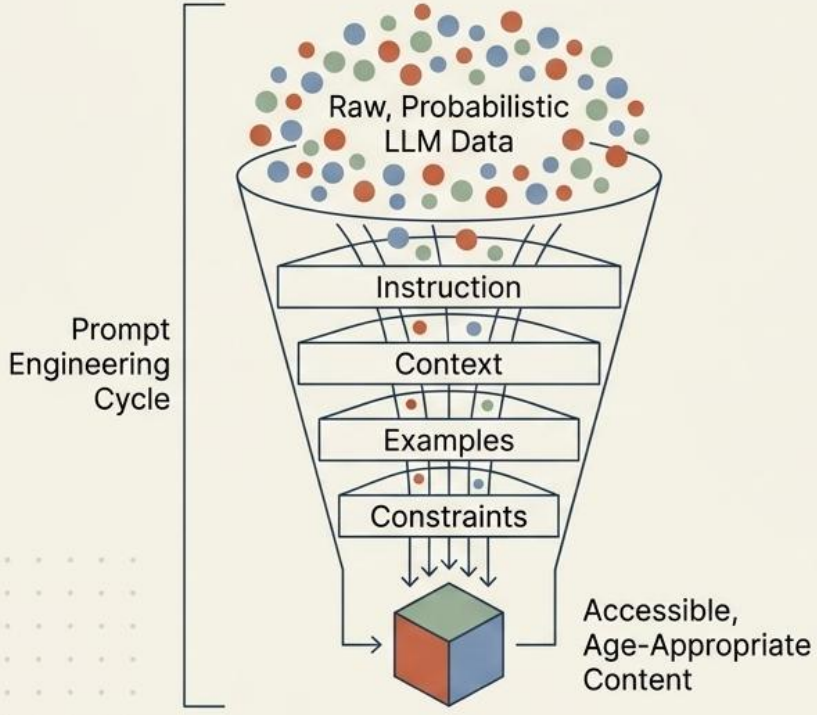
The Three Pillars of the Inclusive Classroom

Theoretical Framework



Prompt Engineering as a New Teaching Competency

Theoretical Framework



The Mechanism

GenAI operates probabilistically, predicting word sequences. Without strict constraints, it can produce inaccurate, biased, or inappropriate outputs.

The Filter

A well-structured prompt must define the student's exact capabilities, interests, and age.

The Critical Constraint

Bypassing the default AI tendency to produce childish materials for intellectual disabilities. Treating a 14-year-old like a child leads to profound demotivation.

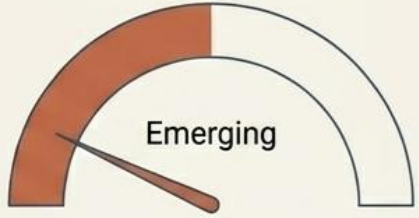
The Learner Persona: Rafael's Diagnostic Dashboard

Methodology

Rafael

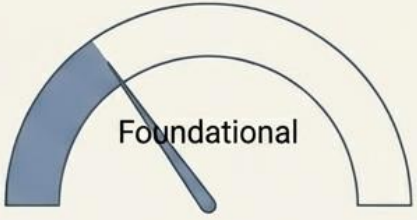
14-year-old adolescent
Year 8 of primary school
Diagnosed with Intellectual Disability (ID)

Communication



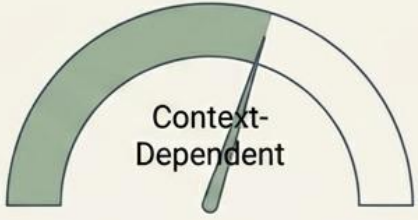
Speaks softly, shy, relies heavily on gestures.

Reading/Writing



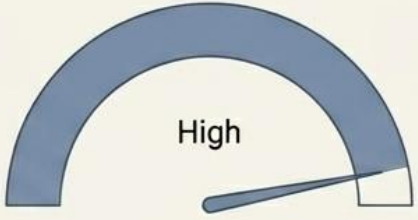
Recognizes letters and numbers up to 20.

Socialization



Keeps to himself at breaks, interacts well in small MRR groups.

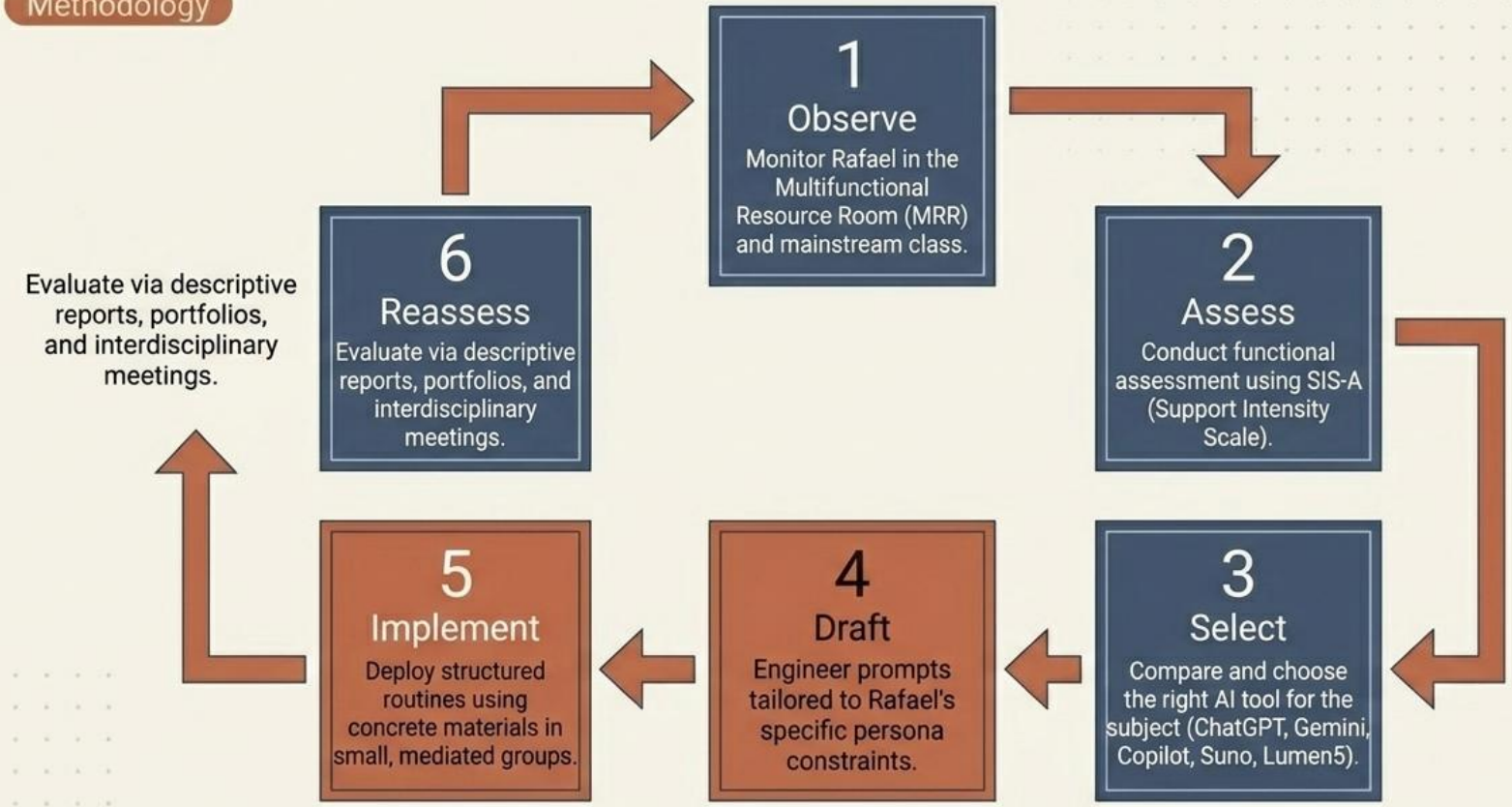
Independence



Takes care of meals, hygiene, and clothing autonomously.

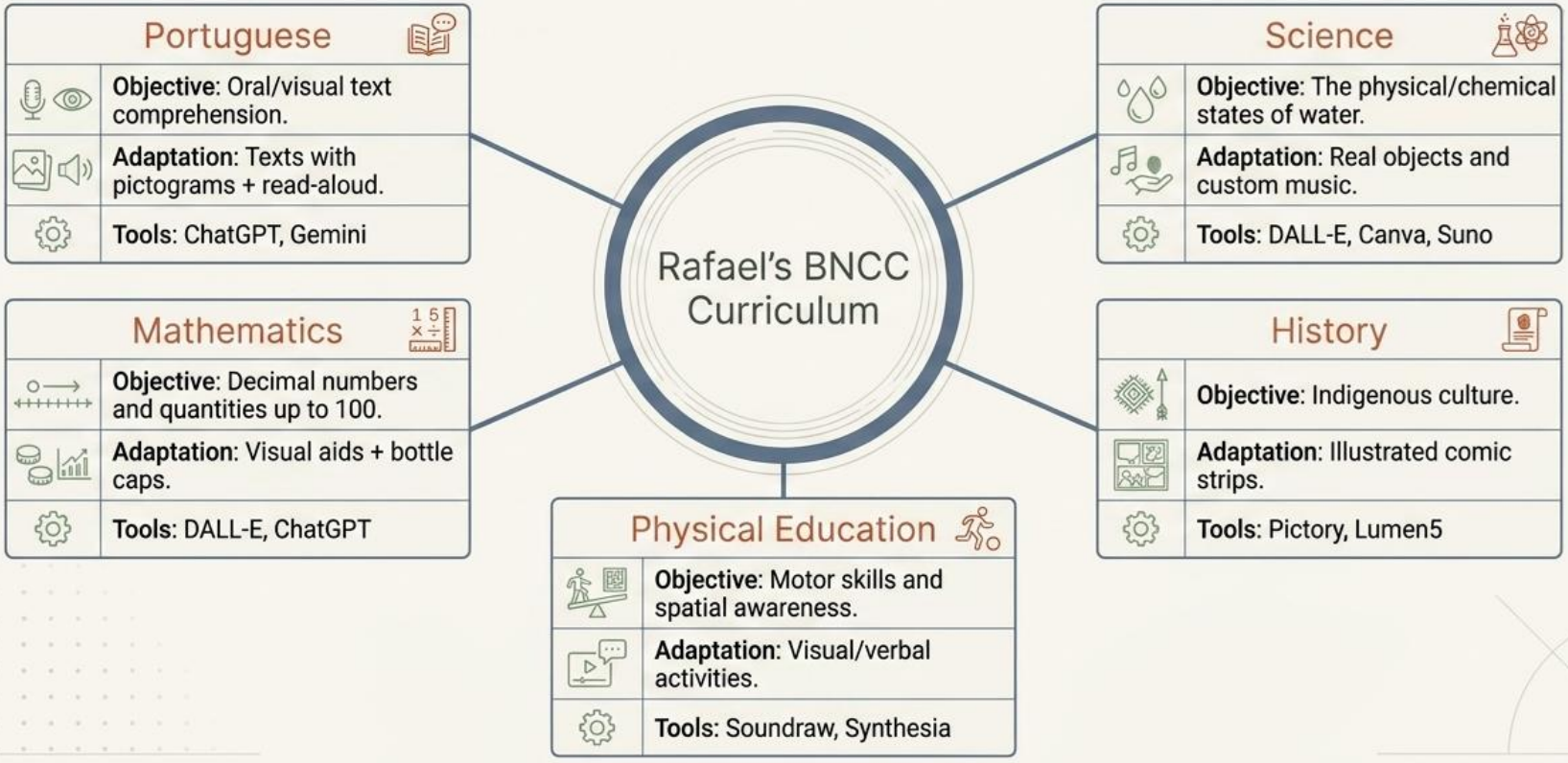
The Pedagogical Intervention Loop

Methodology



The AI Integration Ecosystem

Results



From Standard Prompt to Accessible Artifact

Results

The Input (Prompt)

Rewrite text on waste sorting using emojis as pictograms...

Short sentences...
Accessible to a 14-year-old with ID.

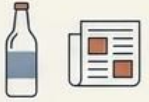
Organic, Recyclable.

The Output

Portuguese Adaptation

1. Organic waste
-> Food scraps.
-> Turns into compost.

2. Recyclable Waste
-> Paper, glass.
-> Turns into new objects.



Science/Suno Adaptation

Constant transformation
Non-stop
Water is magic
Always changing
From liquid to vapour
It condenses.

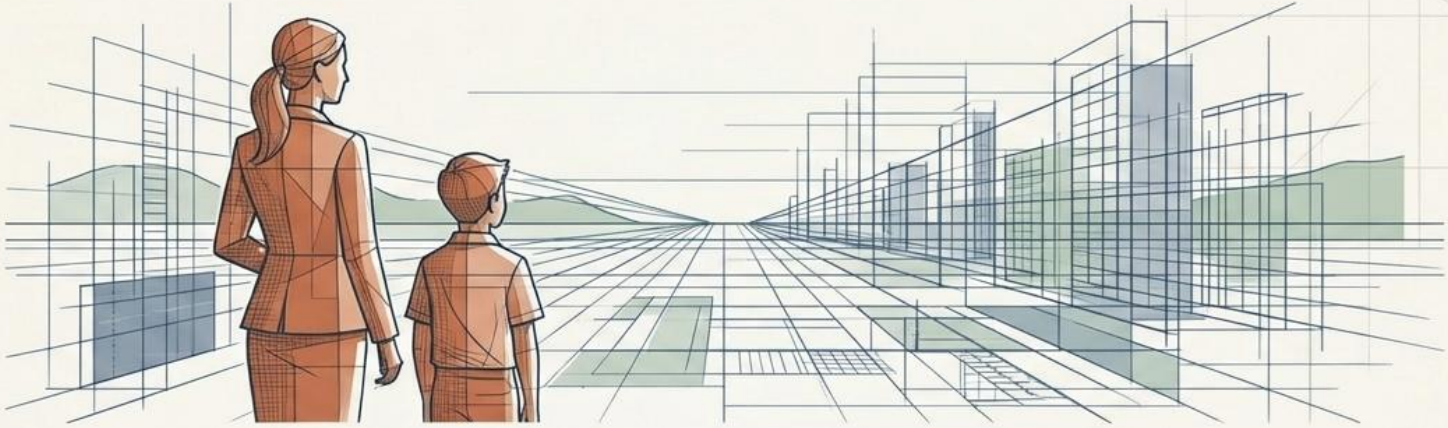
Diagnostic Matrix: AI Capabilities vs. Ethical Vigilance

Discussion

AI Value (Capabilities)	Ethical Vigilance (Requirements)
Gamification: Transforms static text into highly engaging quizzes, word searches, and comics.	**Age-Appropriateness:** Requires constant iterative refinement to prevent the generation of infantilizing, child-like materials for teenagers.
UDL Execution: Instantly generates variations of content (audio, pictograms, simplified text) to meet diverse learning profiles.	**Bias Mitigation:** Teachers must critically evaluate probabilistic outputs for plausible but inaccurate or biased information.
Time Optimization: Drastically reduces administrative burden, freeing teachers to focus on direct pedagogical mediation.	**Human Mediation:** AI cannot operate in a vacuum; it acts as an assistant to human pedagogical authorship, governed by the BAIP.

Technology as an Ally for Educational Equity

Final Remarks



Optimizes Planning Time

AI accelerates the development of Individualized Education Plans (IEPs), enabling educators to prioritize meaningful, in-person interactions.

Enhances Accessibility

Multi-modal outputs reduce learning barriers and foster greater autonomy, engagement, and self-esteem without distancing students from peers.

Empowers Future Educators

Training undergraduate teachers to use AI critically ensures the next generation is equipped to build truly inclusive, technology-mediated classrooms.

Foundational References

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