



Mathematics Education in Greece



Challenge:

Students with special needs struggled with math concepts due to traditional approaches

Why AIEIP Is Essential

- Data Privacy & Consent:**
 - Provides transparent frameworks for ethical data collection
- Stakeholder Understanding:**

Addresses awareness gaps through comprehensive training.
- Human Oversight:**

Maintains humans in the loop for critical decision-making.
- Equitable Access:**

Ensures fair distribution of AI resources across student populations

Full Case Study



AI Implementation:

- Created personalized worksheets with ChatGPT
- Incorporated students' personal interests
- Tailored for specific learning disabilities
- Aligned with curriculum requirements
- Created 'mathematical familiarity'

RESULTS

Significant improvement in test performance and math engagement

I felt familiar with these problems... I saw the role they have in my everyday life.

-Student with Dyslexia

(Rizos et al., 2024)

Ethical Considerations:

- Risk of algorithmic bias in student interest interpretation

(Rizos et al., 2024)



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Full Case Study



Active Reading Systems in Japan

Challenge:

Resource room limitations in providing individualized reading support

AI Implementation:

- Learning Evidence Analysis Framework (LEAF) system for active reading
- Real-time learning analytics
- Monitored reading behavior patterns
- Visualized learning processes
- Enhanced stakeholder communication

RESULTS

Early intervention detection and improved parent and teacher insights

“Being able to see what he is doing through learning logs helps me understand him.

- Parent of Student with ASD
(Toyokawa et al., 2023)

Ethical Considerations

- Data privacy concerns and consent challenges

(Toyokawa et al., 2023)