

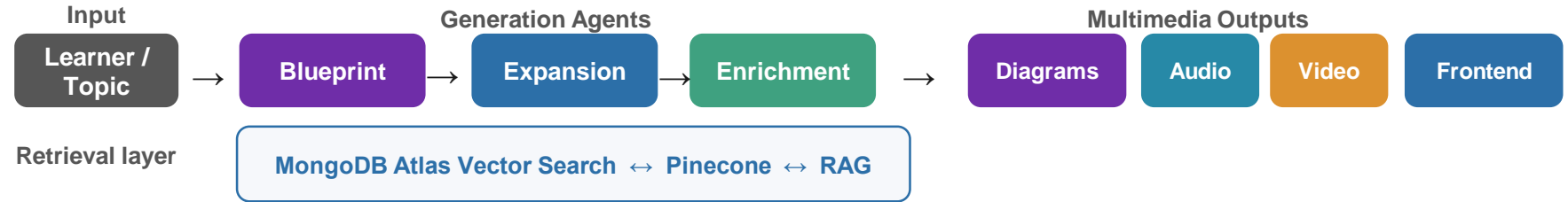
Why this matters?

- Generic tutors** Fluent but often unstructured
- Weak grounding** Can drift from source material
- Low richness** Text alone misses multimedia gains

Designed for better clarity, engagement, and learning flow

AIAT = structure + retrieval + synchronized multimedia

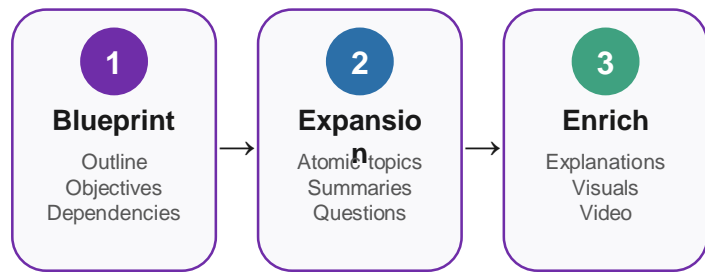
System Architecture



Core idea: content is first structured by agents, grounded with retrieval, then transformed into multimodal learning materials.

Pedagogy: Mastery Learning · Cognitive Load Theory · CTML

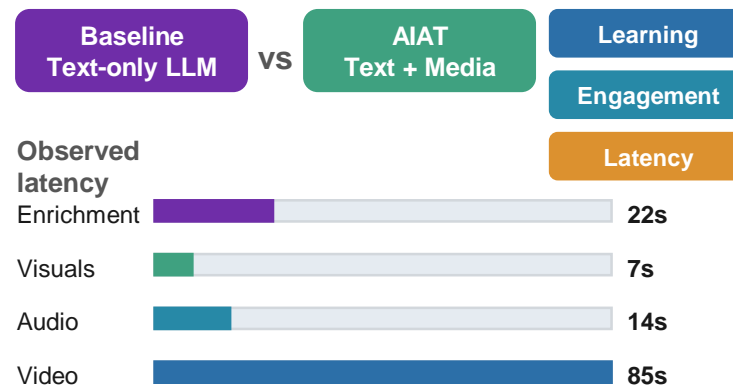
Three-Agent Workflow



Design

- Atomic
- Complete
- No fluff
- Align
- Adapt

Evaluation & Results



Current bottleneck: video generation dominates end-to-end latency

Conclusion

AIAT is a structured tutoring pipeline, not just a chat tutor.

Grounded + multimedia-enhanced learning delivery

- ✓ **What it adds** Structure + retrieval + media
- ✓ **What it shows** Architecture works in practice
- ✓ **What comes next** Human learning validation

Future

- Adaptive assessment
- Instructor review
- Distributed rendering

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