

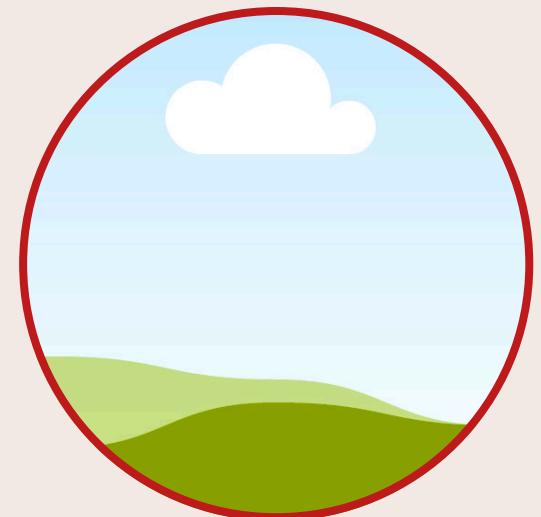


Learnify

Tailored Learning, Empowering Success.

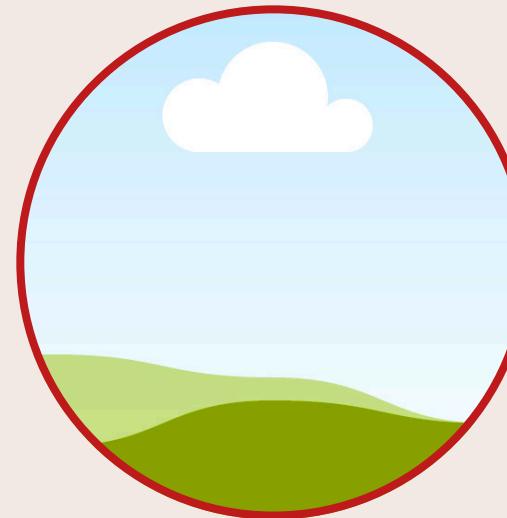


Our Team



El Amrani Wadie

M2 AI Student (Paul Sabatier University)



Ayoub Sbai

Systems Engineer



Khadija Haddaoui

Data Scientist Graduate

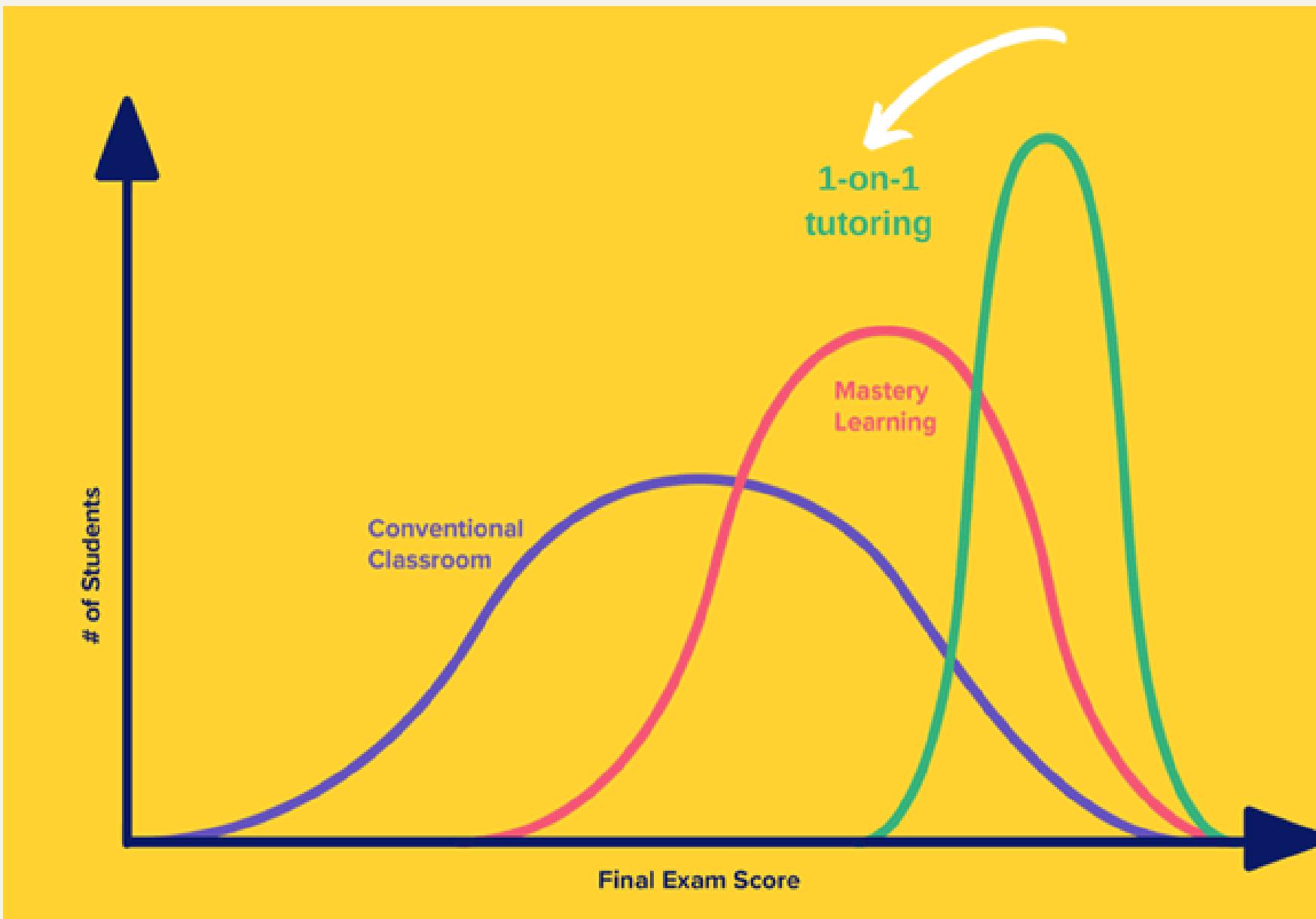


Chaimaa Smouni

Data Analyst



Bloom 2-Sigma Problem



1-on-1 Tutoring Advantage

Object of change process	Alterable variable	Effect Size	Percentile equivalent
Teacher	Tutoring instruction	2.00	98
Teacher	Reinforcement	1.2	
Learner	Feedback-corrective (mastery learning)	1.00	84
Teacher	Cues and explanations	1.00	
Teacher, Student	Student classroom participation	1.00	
Learner	Student time on task	1.00	
Learner	Improved reading/study skills	1.00	
Home environment / peer group	Cooperative learning	0.80	79
Teacher	Homework (graded)	0.80	
Learner	Initial cognitive prerequisites	0.60	
Home environment / peer group	Home environment intervention	0.50	69

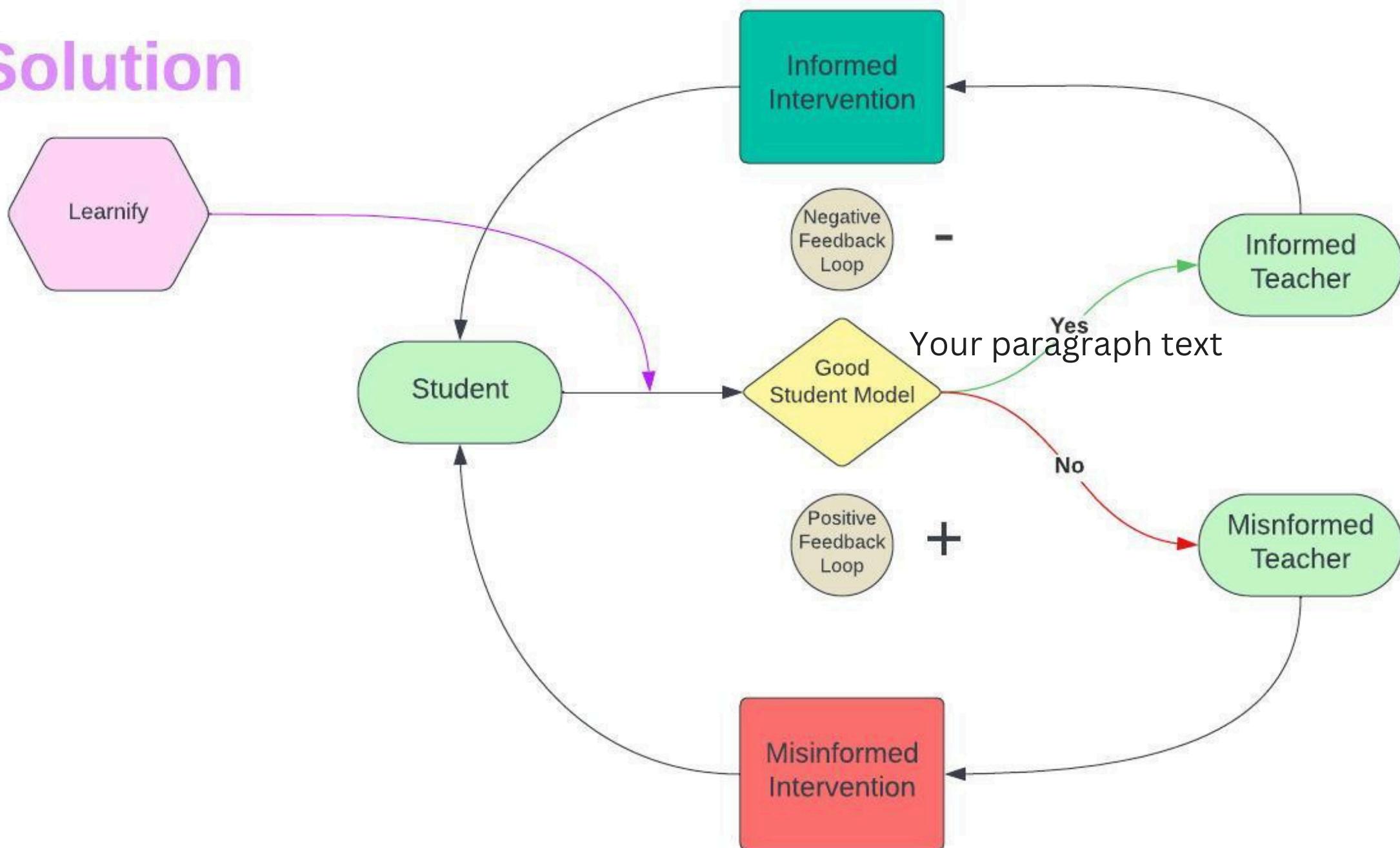


Problem Representation

Teacher



Solution



Learnify

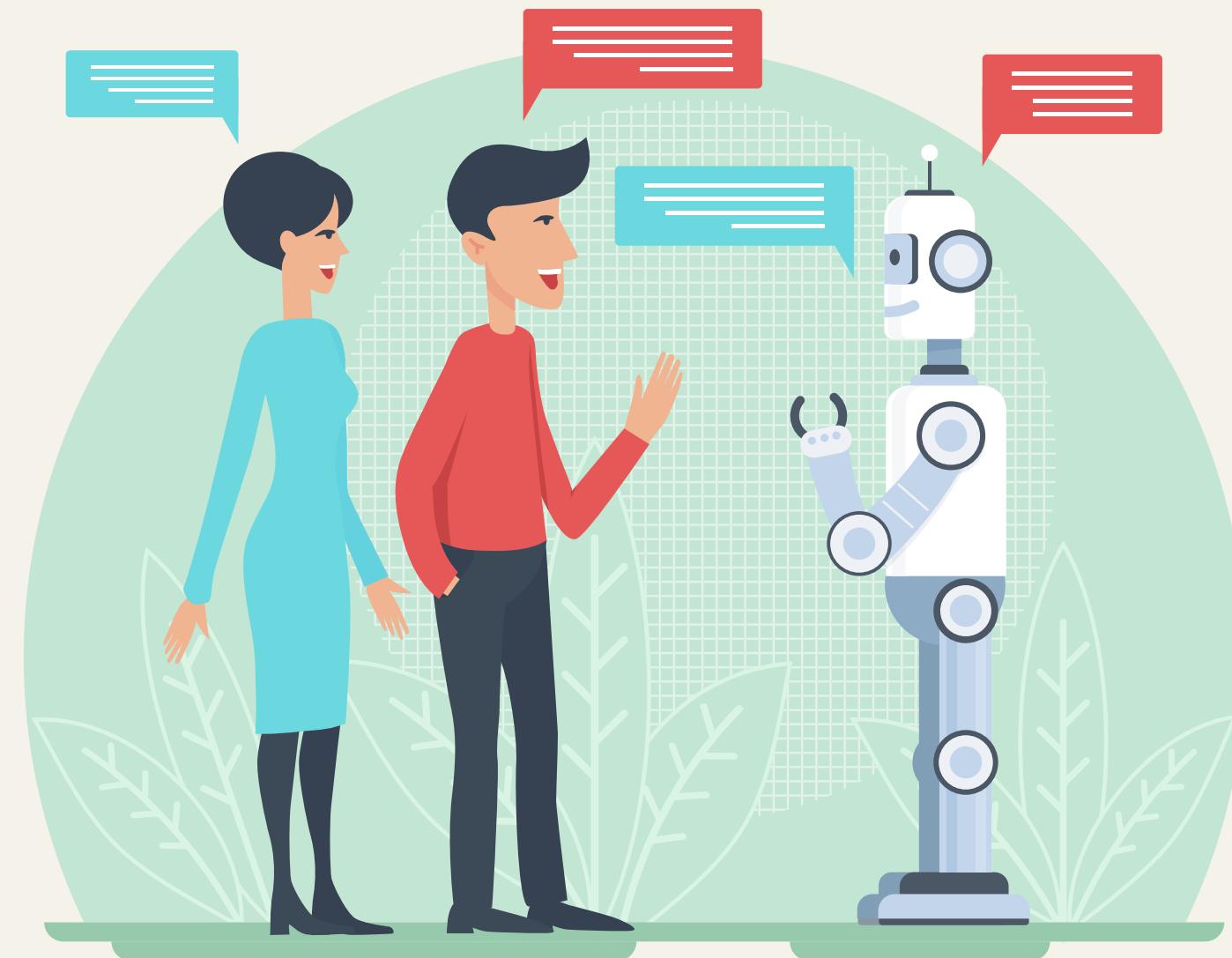


Student



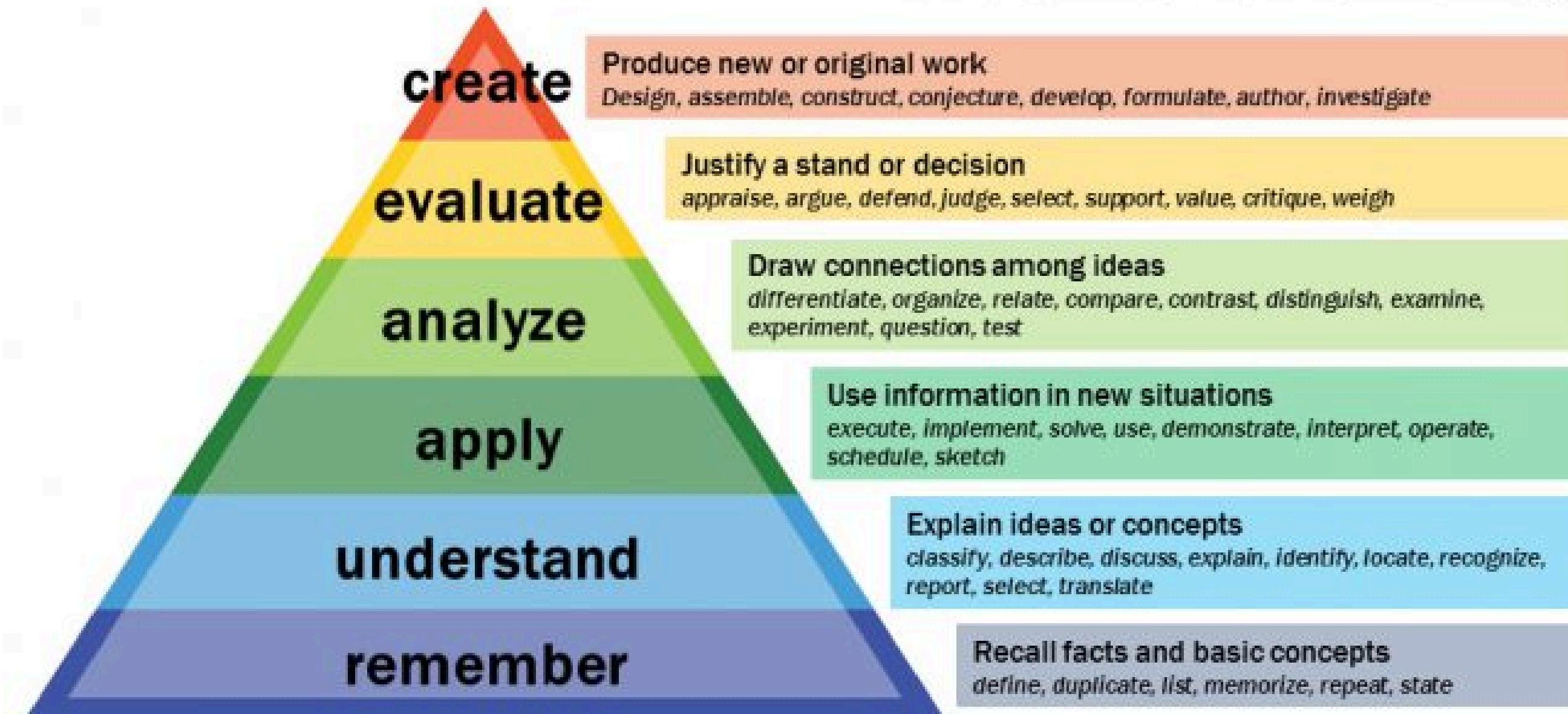
PROPOSED SOLUTION

Our solution personalizes education by combining an accurate student model with Bloom's Taxonomy as a learning framework. Instead of focusing on domain-specific expertise, it personalizes the student profile, using large language models (LLMs) for student modeling and leaving domain expertise to teachers and students. This approach enhances personalization, autonomy, and accuracy, addressing learning gaps without the common pitfalls of current ITS solutions. It aims to improve global education by focusing on foundational student models, going beyond traditional K-12 and language learning markets.





Bloom's Taxonomy





Differential Value

Innovation

We assigned student-model expertise to the LLM and domain expertise to the student and teacher (most approaches do the opposite), avoiding the risky reliance on LLMs for domain knowledge, which can cause harmful errors and misuse, as well as ensuring autonomy.

Impact

Our solution redefines learning with a universal measure "Bloom Unit" to address learning in any context regardless of age, domain, educational level or country by basing it on a universal theory of learning and tailoring it to individual student profiles.

Feasibility

Our solution is feasible by leveraging Bloom's Taxonomy to extract student model information and correct learning strategies in real-world scenarios.

Scalability

Our solution is scalable because it personalizes learning for each student and adapts across domains and educational levels using Bloom Taxonomy. The student model can be used by student, peers, or teachers, encouraging self-improvement and collaborative learning. By leveraging information effectively, the system creates positive network effects, enhancing its value as more people use it.



Why Learnify and not



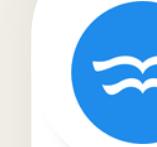
Khanmigo

Very focused on domain-expertise, rather than student model.



Tahseen AI

- Misled focus on poor learning proxy variables (engagement, retention)
- Mislead emphasis on information format more than student profile (video, audio)



TutorOcean

Primarily offers tutoring services without providing insights into student learning and progress

BloomBERT

It only classifies exercises into Bloom's Taxonomy Levels.

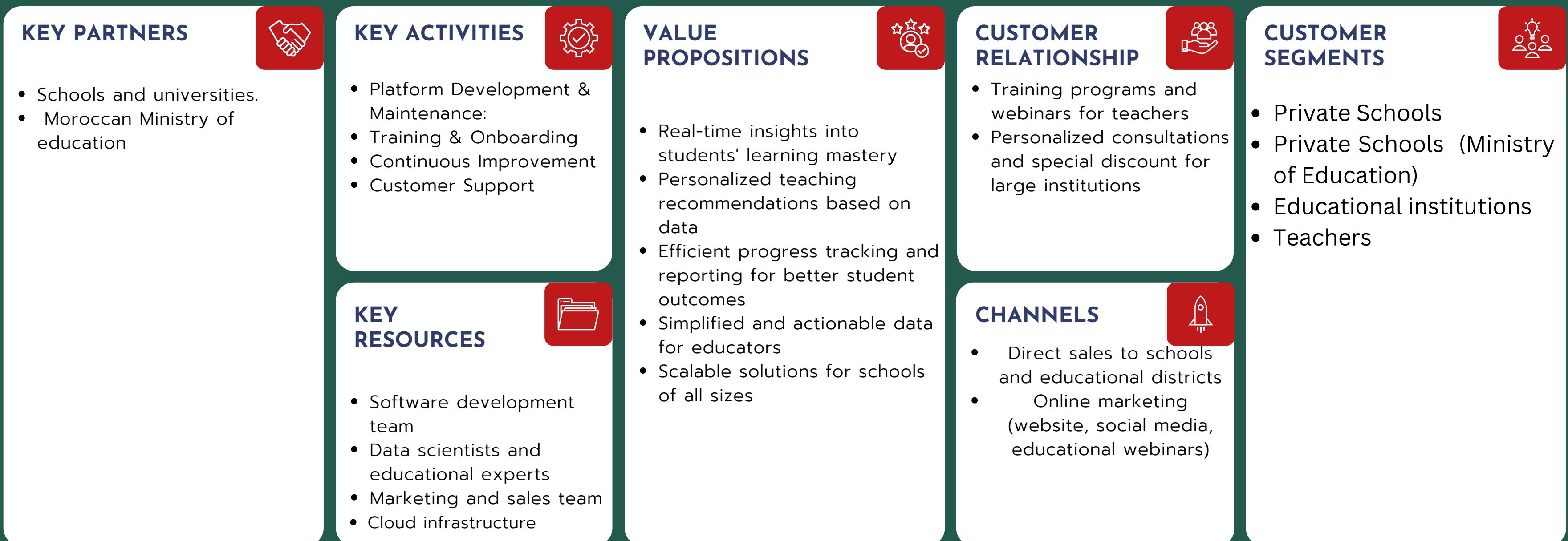


Thank You



Appendix - 1

BUSINESS MODEL CANVAS



COST STRUCTURE

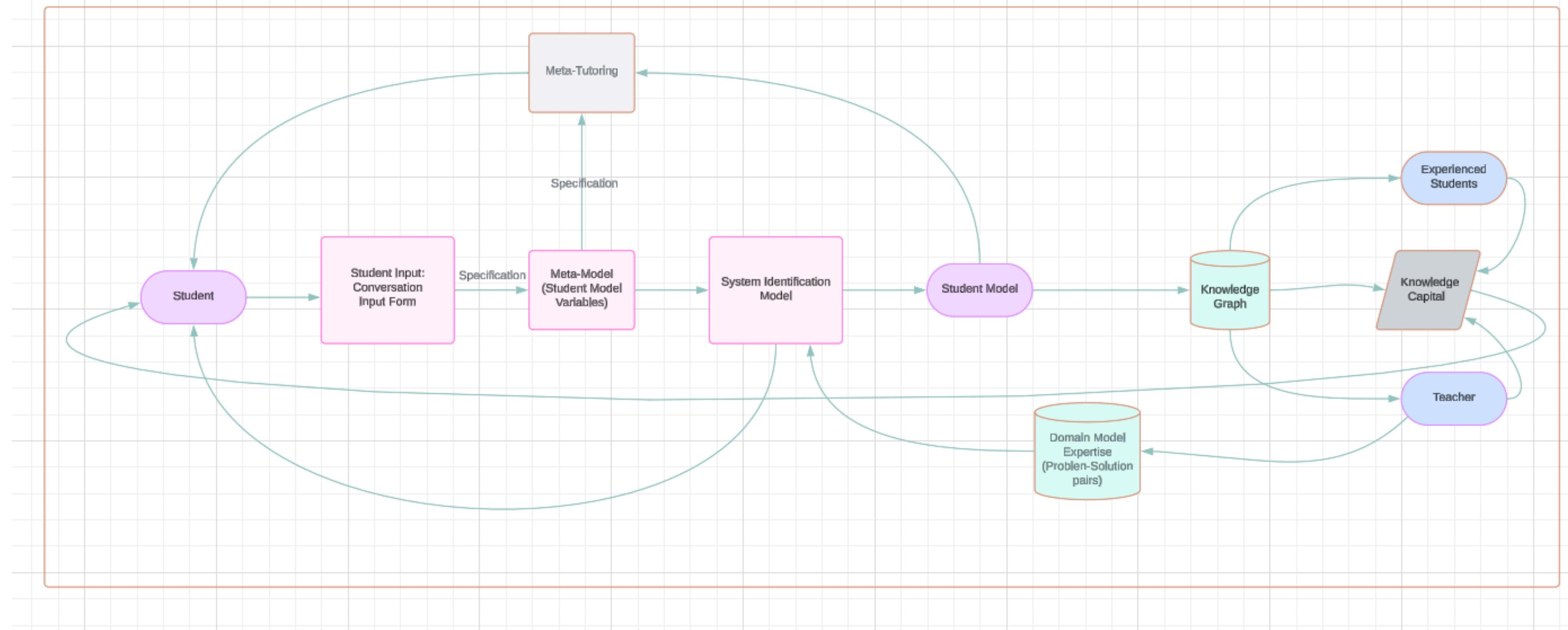
- Development and maintenance of the platform
- Salaries for software developers, data scientists, and support teams
- Marketing and sales expenses
- Customer support and training resources
- Cloud infrastructure and hosting fees
- Legal and compliance costs

REVENUE STREAM

- Ads: Display relevant ads for educational tools or services to students and teachers, ensuring they don't disrupt learning.
- Premium Subscriptions: Offer schools and teachers paid plans with advanced tools for better teaching and personalized learning for students, plus an ad-free experience.

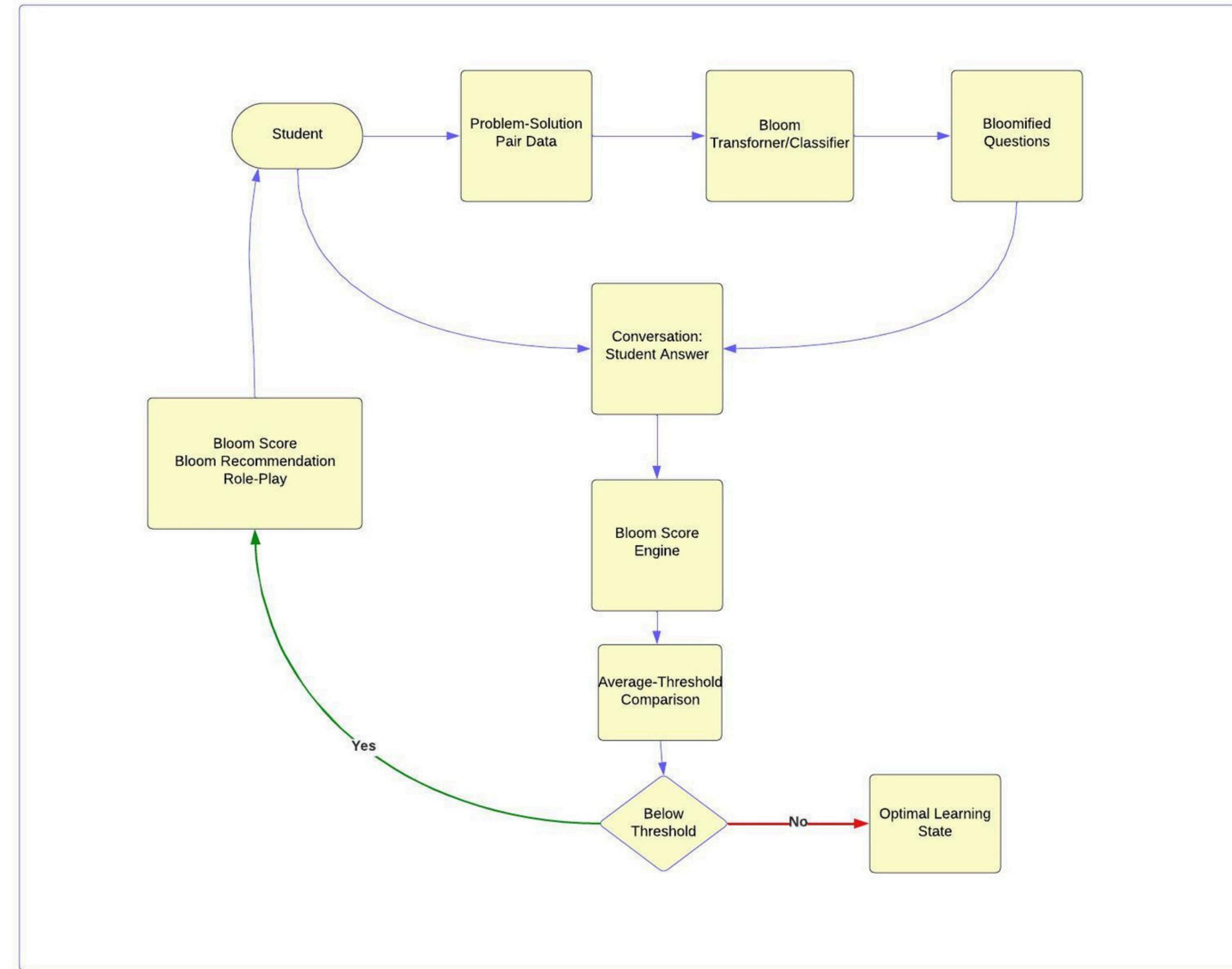
Appendix – 2

High-level Abstraction of the Overall EducAI System



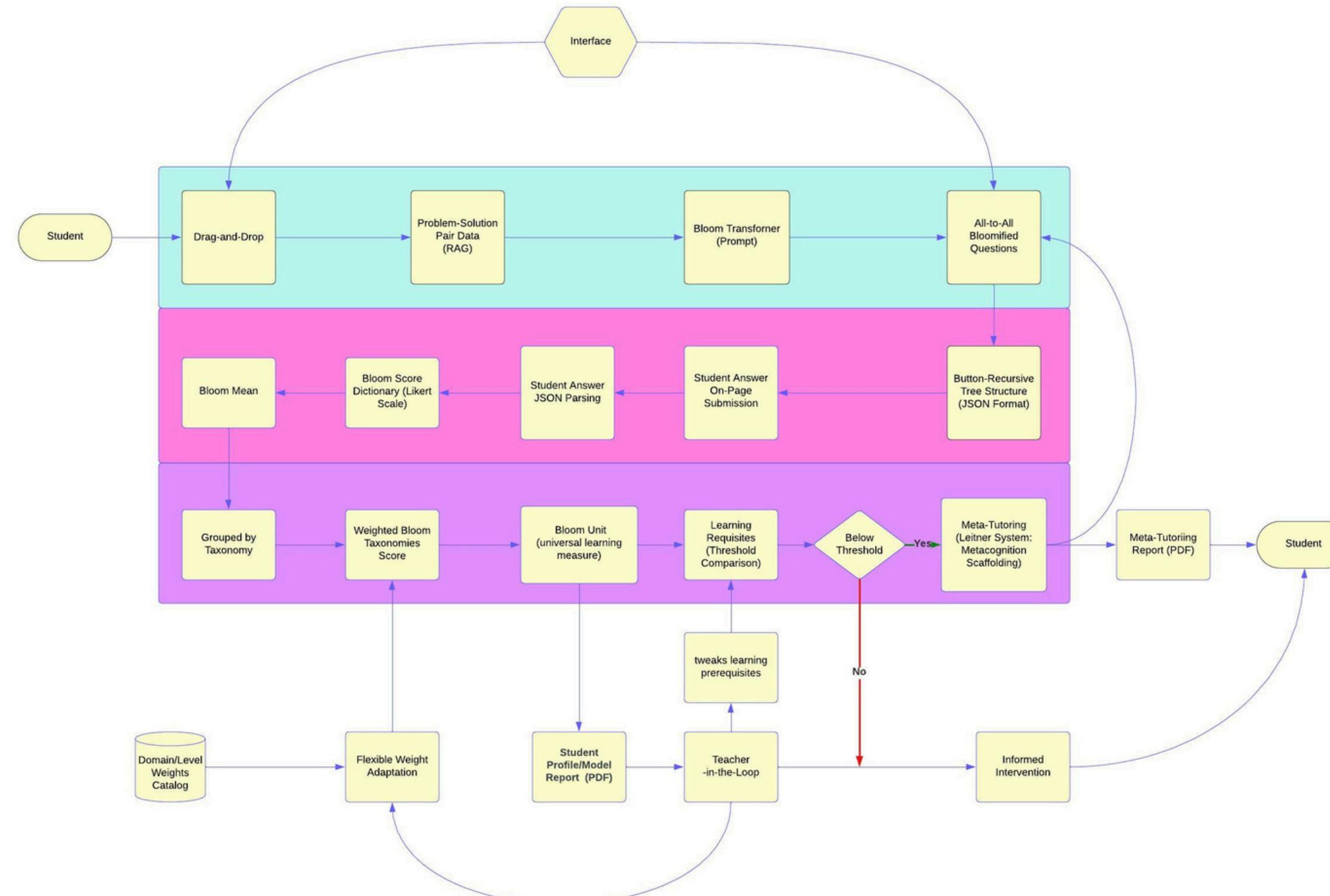
Appendix – 3

Low-level Abstraction of the BloomAI MVP
(Student-specific)



Appendix – 4

Physical architecture of the Learnify MVP



References

- 1- <https://web.mit.edu/5.95/www/readings/bloom-two-sigma.pdf>
- 2- https://en.wikipedia.org/wiki/Bloom%27s_2_sigma_problem
- 3- <https://www.simplypsychology.org/zone-of-proximal-development.html>
- 4- <https://fctl.ucf.edu/teaching-resources/course-design/blooms-taxonomy>