

TEAM NUMBER:	1	TEAM NAME:	Homebase
TITLE OF SOLUTION:	Metabase		

1. SOLUTION DESCRIPTION

What is the final Intelligent Analytics solution you're proposing? What are its main elements, technologies and objectives? How could your solution be used to enhance active learning in digital higher education? How could its success be measured?

The objective of the Intelligent Analytics solution is to enhance active learning in higher education environments by providing an Al-powered model that assists on planning lessons that integrate digital technologies and bridges the digital literacy gap that both students and teachers are facing. The main elements include:

- 1. An AI engine: a specialised LLM trained on proven learning methodologies, data and information that align with EU values and KPIs.
- 2. Intuitive interface: a guided, form-based input and output canvas to be able to visualise the learning process.

This solution moves courses beyond passive, lecture-based classes, as instructors can put in their desired learning outcomes and context; the AI then generates a structured lesson plan filled with collaborative activities, interactive assessments, and different digital tools, making active learning the default setting in a pedagogical environment.

Metrics to measure success:

- 1. Usage metrics
- 2. Instructor feedback
- 3. Student outcomes

Link to Prototype:

https://www.figma.com/proto/5jyfgiPtGW0yxI1AkW0PIs/Metabase?node-id=45-664&p=f&t=bdPgJwtso2XtKRd2-1&scaling=contain&content-scaling=fixed&page-id=0%3A1

2. CONTEXT

What is the current or future problem you're trying to solve? How does it help to empower active learning through Intelligent Analytics and fit into the problem-based learning setting? How does your solution align with DigiEduHack 2025 annual theme "Rethinking Education in the Age of Digital Skills"?

The problem:

EU higher education faces rising workloads, staff shortages, and declining digital integration, leading to reduced teaching quality and global competitiveness.

Active learning empowerment:

Our solution, a knowledge-based Large Language Model integrated with Intelligent Analytics empowers educators to create data-driven, engaging lessons aligned with EU digital KPIs. It promotes active learning by providing real-time insights into student engagement and by suggesting digital tools tailored to lesson goals. Supporting problembased learning, it helps teachers design collaborative, critical-thinking tasks efficiently. Aligned with DigiEduHack 2025's theme, it strengthens digital literacy and ensures a more adaptive and future-ready European education system.

3. TARGET GROUP

Who is/are the target group/s of your solution in higher education and how will they benefit from it? Why is your solution relevant to them and how does it relieve their pains and increase their gains? How do you plan to engage these groups, so you fully meet their specific needs?

The primary target group is university educators and lecturers who face high workloads, limited digital support, and pressure to modernize teaching. They benefit through an Alpowered assistant that simplifies lesson planning, suggests digital tools, and provides learning analytics aligned with EU KPIs. This relieves time pressure, reduces administrative work, and increases teaching quality and student engagement. Secondary beneficiaries include students, who gain more interactive, problem-based learning experiences. Relevance lies in addressing the EU's digital literacy gap.

4. IMPACT

How will your solution catalyse changes in higher education and how do you ensure it being ethical responsible? What impacts will your solution have at social and environmental level? Could you provide examples or scenarios illustrating how such changes and impacts might unfold?

Our solution catalyses change by redefining the professor's role from lecturer to learning facilitator, making digitally augmented pedagogy the default. This raises overall education quality.

Safety and ethics are foundational. We ensure these two elements through a human-inthe-loop design where the professor always retains final authority. The platform is built with strict data anonymisation and is GDPR compliant. An example of change would be socially, as it democratises access to high-quality teaching methodologies, bridging the digital gap between institutions.

5. DESCRIBE IT IN A TWEET

How would you describe your solution in a short catchy way with maximum 280 characters?

Give every professor a teaching assistant! Turn overwhelming course prep into one click with Metabase. Metabase generates structure and interactive lesson plans so educators can focus on what they do best as they reclaim their time: inspiring students. #EdTech #DigitalLearning #AlforGood

6. INNOVATIVENESS

What makes your solution different and original? Are there similar solutions or approaches currently available or implemented by higher education sector practitioners? If so, why and to what extent is your solution better?

Existing tools like lesson plan libraries or LMS plugins exist but are static and focus on delivery. Additionally, the databases that already exist are more disseminated, making them harder to navigate through. Metabase is original because it's more dynamic, merges class creation and specialised assistance into one intuitive platform, comprehensive of all the necessary materials.

7. TRANSFERABILITY

Can your solution partly or fully be used in other education/learning contexts or disciplines? Could you provide any example?

Yes, the solution can be fully applied in other educational contexts, including high schools and primary schools. As education becomes increasingly digital, both teachers and students benefit from integrating digital tools, enhancing learning effectiveness, inclusivity, and resource accessibility across various disciplines and educational levels.

8. STUSTAINABILITY

What are your plans for a further development, implementation upscale and replication of the solution? How do you see it working in the mid- and long term?

In the mid- and long term, the solution will continuously improve as more data is integrated, allowing the underlying language model to become increasingly precise and adaptive. As teachers and students enhance their digital proficiency, implementation and scalability will accelerate, enabling seamless replication across institutions and broader educational contexts.

9. TEAMWORK

Present the members of your interdisciplinary team. What are the competencies you all bring in so the solution is developed successfully? Why are you the perfect team to develop this work? Why are you planning to continue working as a team in the future?

Our team combines the different skillsets of project management, financial accounting, non-formal education projects design, system engineering, and law. The interdisciplinary nature of our team, and the experience that each member has granted us the capability to develop a pedagogically sound, technically robust, and intuitively usable platform. It is because of this reason that we are the perfect team to continue working on this project in the future and deliver a great product.