DIGIEDUHACK SOLUTION CANVAS

DIGI EDU HACK 2025

Describe it in a tweet

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

AI Learning Companion 🤖🧠 Your smart, emotionally-aware tutor that learns how you learn. Adapts to your pace, mood & goals through micro-lessons + real-time feedback. Boosts motivation, focus & results. Because learning should feel human again. 💡🎓 #DigiEduHack #AIForEducation

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Title of the solution:

Challenge addressed:

Background of the team:
(multiple selections possible in case of mixed teams)

Team name:

Challenge category:

- X Higher Education Students
- Teachers
- Others (please specify)
- Researchers
- Primary School Students
- Professionals
- Secondary School Students

Innovativeness

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

it is an Affective Intelligent Tutoring System (A-ITS) that surpasses current cognitive-focused AI tutors. Its originality lies in using real-time emotional detection via NLP to offer psychological and motivational support. This approach addresses burnout and anxiety—the biggest blockers to student success and retention—making it holistically better.

Solution description

What is the final product/service/tool/activity you're proposing? What are its main elements, technologies and objectives? Could you please include a brief implementation plan with some key overall milestones, resources required and eventual barriers foreseen?
How could your solution be used to enhance digital education nowadays? How could its success be measured?

Proposed Solution: The AI Learning Companion is an adaptive, emotionally intelligent tutoring platform designed for university students in hybrid environments. It addresses the core problem that existing AI tools are generic and disconnected, failing to provide personalized, emotionally responsive tutoring.

Main Elements:
Adaptive Learning Engine: Generates personalized 10-minute micro-lessons, adjusting to the student's pace and difficulty patterns.
Emotional Feedback System (AI-EQ): Detects student stress or motivation from interactions, providing real-time emotional support.
Smart Dashboard: Offers professors analytics on engagement and emotional readiness, facilitating early interventions.
Implementation: The plan moves from Prototype Development (Q1 2025) to Pilot Testing (Q2 2025), followed by LMS integration (Q3 2025).
Impact: It transforms learning into a human-AI collaboration, enhancing personalization and motivation. Success is measured by increased student engagement (+30%) and improved GPA/retention.

Target group

Who is/are the target group/s of your solution and how will they benefit from it? Why is your solution relevant to them? how do you plan to engage these groups so you fully meet their specific needs?

Primary users: University students in hybrid or online programs.
Secondary users: Professors and teaching assistants managing large cohorts.
Benefits:
Students receive real-time motivation and personalized tutoring.
Professors gain analytics to guide interventions early.
Relevance: Bridges emotional, cognitive, and technological gaps in higher education, improving both learning outcomes and student satisfaction.
Conduct co-creation workshops with students and teachers.
Build feedback loops inside the app for continuous improvement.
Introduce gamified engagement incentives (e.g., badges for consistency).
Partner with university innovation hubs for pilot testing and research integration.
The platform grows with its users, ensuring ongoing relevance and emotional connection.

Transferability

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

The AI Learning Companion can be adapted for multiple contexts because it is built on modular features (adaptive engine, emotion detection, analytics)
Possible transfers:
Secondary education: personalised guidance for high-school students preparing for university or state exams.
Vocational training: adaptive micro-lessons for skill development (IT, healthcare, technical skills).
Corporate learning: onboarding, upskilling, compliance training with emotion-aware progress tracking.
Language learning: personalised micro-sessions improving speaking confidence and comprehension.

Sustainability

Once you have a prototype, 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?

Mid-term (1–2 years):
Expand emotional detection from text → voice & gesture (ethical, consent-based).
Integrate with European universities through YERUN partnerships.
Implement premium analytics package for institutions.
Long-term (3–5 years):
Cross-university data ecosystem improving adaptive learning models.
Scalable plug-ins for any LMS platform.
Continuous co-creation cycles with students allowing constant evolution of tutoring features.
Possibility to integrate with national digital education strategies (EU Digital Education Action Plan).

Impact

How will your solution catalyse changes in education and what impacts will it have at social and environmental level? Could you provide examples or scenarios illustrating how such changes and impacts might unfold?

The AI Companion catalyzes a profound shift toward radical personalization, moving beyond standardized teaching via adaptive micro-lessons and real-time emotional support.

This change improves social equity by proactively identifying and supporting at-risk students (e.g., predicting dropout due to anxiety), significantly boosting retention and well-being.

Environmentally, the solution integrates Green Curriculum elements. For example, a student can use the AI to run a localized simulation where they calculate the precise carbon footprint reduction of redesigning a campus supply chain, turning abstract sustainable concepts into tangible, practical action.

Context

What is the current or future problem you're trying to solve? How does your solution align with DigiEduHack 2025 annual theme?
How does your solution confront the challenge posed by the hackathon organiser and how does it address the challenge category?

The current problem is the lack of personalized, emotionally aware tutoring for university students in hybrid settings, leading to decreased engagement and higher dropout rates. Existing AI tutors are generic and fail to adapt to a student's emotional state or pace.
Our solution, the AI Learning Companion, directly aligns with the DigiEduHack 2025 theme of "AI and emerging technologies for Education" by using advanced AI for hyper-personalization. It confronts the YERUN challenge, "Hack the Future of Tutoring," by moving beyond simple Q&A to offer adaptive micro-lessons and real-time emotional support. The solution addresses the challenge category by focusing on Personalized and Adaptive Learning to create an effective, individualized path for every student.

Team work

Present the members of your team.
Why are you the perfect team to develop this work and what are the competencies you all bring in so the solution is developed successfully? What is your expertise within the thematic field concerned? Are you planning to continue working as a team in the future? If so, why?

Jovana focused on understanding how students experience hybrid learning and what emotional or motivational problems they face. She helped define the persona and shaped the idea of an AI tutor that adapts to real student challenges.
Edona worked on identifying which AI elements are realistic and helpful for students, especially adaptive micro-lessons and emotional detection. She ensured that the solution addresses actual learning gaps rather than just giving answers.
Berfin designed how a student interacts with the AI Companion from start to finish (what they see, what support they receive, and how the interface guides their learning). She helped make the solution intuitive for everyday student use.
Emma analysed how hybrid students study, what tools they already use, and how the new solution could improve their learning outcomes. She worked on impact scenarios showing how students benefit in real situations