



DIGIEDU HACK SOLUTION CANVAS

Title of the solution:	Alnspire Hub		Team name:	Alnspire	
Challenge addressed:	AI and emerging technologies for Education		Challenge category:	AI and emerging technologies for Education	
Background of the team:	Higher Education Students ☒ Researchers Professionals Teachers Primary School Students Secondary School Students Others (please specify)				

(multiple selections possible in case of mixed teams)

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?

The final product is the Alnspire Hub, an intelligent digital platform combining artificial intelligence and collaborative learning. It is an adaptive learning hub, organized by university courses, where students, teachers, and researchers share materials and interact with specialized AI Tutors. Each course is a smart folder containing materials, tests, and multimedia resources. The AI Tutor provides personalized explanations, creates exercises, and adapts content difficulty based on the user's level and pace. The hub integrates self-assessment, anonymous feedback for teachers, and direct communication tool. Main technologies include Generative and Adaptive AI (LLMs, NLP), Machine Learning for pattern analysis, and Learning Analytics Dashboards.

Objectives are to personalize and improve the learning experience for every student, support teachers in material creation and revision, promote intelligent collaboration and self-assessment, and make learning flexible, inclusive, and data-driven.

Development is planned in four main phases over 12-18 months:

1. Analysis and Design (0-3 months)
2. Prototype Development (4-8 months): Includes implementation of the AI Tutor and personalized functions.
3. Validation and Feedback (9-12 months): Includes integration with existing LMS systems (Moodle, Canvas).
4. Scalability and Diffusion (12-18 months): Includes expansion to more courses/departments.

Resources and Barriers

Resources required include the technical team, experts, and cloud infrastructure. Foreseen barriers include material standardization difficulties, initial faculty resistance, and the need for GDPR compliance.

Enhancing Digital Education & Success Measurement Alnspire Hub enhances digital education by offering a personalized, adaptive, and collaborative environment. Success will be measured using quantitative and qualitative indicators: Learning outcomes (academic results and course completion), Engagement metrics (interaction time, frequency of use), Feedback quality and Adoption rate, AI accuracy (coherence of AI responses).

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 problem is static educational materials failing to adapt to diverse student paces/styles.

Alnspire Hub confronts this by using a dedicated AI Tutor to generate and adapt materials in real-time. The solution aligns with the "AI and emerging technologies for Education" theme by using AI to personalize content , support collaboration , and dynamically adapt to student performance. The solution directly confronts the SIMA challenge by providing an AI-based platform with a dedicated AI Tutor. This Tutor generates and adapts materials in real-time, simplifying or deepening concepts based on the student's level and study pace.

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?

Alnspire Hub is designed for three main groups: Students, Teachers, and Researchers.

1. Students seek personalized materials that adapt to their rhythm, style, and knowledge level. They want immediate feedback and self-assessment tools. They feel frustrated by generic content and delayed feedback, and feel that materials are often standardized. The solution benefits them by providing adaptive content and personalized feedback, enabling them to improve skills without being blocked by the course rhythm.
2. Teachers need support in creating effective materials, monitoring student progress, and flexible evaluation tools. They feel frustration over the time lost in content preparation. The solution benefits them by providing smart tools to optimize materials and better understand student difficulties.
3. Researchers are interested in learning data, personalization models, and possibilities for experimenting with innovative educational approaches.

The solution is highly relevant because the current system suffers from a lack of content personalization for different students and limited collaboration between students and teachers in content design. Teachers find it difficult to create adaptive materials quickly, and there is scarce real-time monitoring of student engagement. The core issue is that current platforms do not integrate advanced AI for adaptation , due to technological complexity.

Engagement focuses on providing the missing technological and collaborative tools.

For Students: Engagement is driven by allowing them to co-create materials (AI generates drafts they modify) , and by using gamification (mini-tests and motivational badges). They also receive motivational support with personalized suggestions on rhythm and study strategies.

For Teachers: Engagement includes workshops to learn how to use the AI Tutors , using analysis dashboards to visualize anonymous results and improve teaching , and a dedicated space for collaboration with other teachers.

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?

Alnspire Hub will catalyze profound change by transforming education into a more personalized, inclusive, and sustainable process. The solution promotes adaptive, student-centric learning that values individual paces and styles. It enhances collaboration between students and teachers, supporting faculty in creating data-driven materials.

Scenario (Teachers): Professor Bianchi receives AI insights showing 60% of students struggle with a concept. The system suggests a simpler analogy, enabling the professor to adapt the material in real-time.

The impact concerns the following areas:

1. Social Impact: Alnspire Hub fosters equitable access to digital education, reducing disparities related to background or language. It builds a collaborative learning community and develops essential digital skills.
2. Environmental Impact: By fully digitalizing learning materials and processes, the solution reduces the use of paper and physical resources. This encourages more sustainable and low-impact study methods.
3. Scenario (Sustainability & Inclusivity): An institution adopting the Hub reduces its paper usage by 70%. International students can instantly translate content with an AI tool, while visually impaired students access materials via AI-generated voice reading.

Describe it in a tweet

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

Alnspire Hub is a smart platform where students and faculty collaborate with AI to create tailored and personalized resources. The AI dynamically adapts content because it knows your subject... and your way of learning!

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?

Alnspire Hub is unique because it combines personalization, collaboration, and real-time adaptivity via a course-specific AI Tutor. Unlike static LMS or generic LLMs, our solution:

1. dynamically adapt content based on student interaction;
2. enables co-creation between students and faculty;
3. provides bidirectional feedback;
4. Features a reliable, expert AI Tutor trained on specific course materials.

Alnspire is unique because it integrates features found individually in other solutions into a single, cohesive AI ecosystem.

Transferability

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

Yes, the Alnspire Hub solution is designed with a modular, AI-based architecture, making it highly transferable across different contexts, disciplines, and educational levels. The key to its transferability is the course-specific Expert AI Tutor foundation. Since the AI is trained on materials provided by the institution (not on general web data), it can be swiftly retrained for any new subject or educational level.

Examples of Transferability:

1. Secondary Schools (High Schools): The platform can be deployed to offer personalized, adaptive content, quizzes, and real-time feedback to younger students, ensuring they master core concepts at their individual pace.
2. Corporate Training & Professional Development: Alnspire Hub can be used for upskilling or compliance training, adapting materials and assessments based on an employee's existing competency level.
3. Massive Open Online Courses (MOOCs): The intelligent folder structure is ideal for large-scale online courses, providing personalized AI Tutors and autorevaluation tools to thousands of simultaneous users globally.

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?

Once we have a prototype, our plan focuses on three main levels of sustainability: continuous development, scalability and implementation, and replicability.

1. Continuous Development: Constant updating of AI models to improve accuracy and adaptivity. Introduction of new functionalities based on student and teacher feedback, such as advanced progress analysis tools and multilingual support. Continuous training of teaching staff to maximize the effective use of the platform.
2. Scalability and Implementation: Gradual extension to more courses, departments, and partner universities. Integration with existing LMS systems, ensuring compatibility and continuity with digital tools already in use. Creation of a community of users and teachers who share materials and best practices, promoting organic and sustainable growth of the platform.
3. Replicability and Upscale to Long-Term Value: Alnspire Hub can be adapted to different educational contexts, from high schools to professional training and MOOCs, ensuring transferability. In the mid-to long-term, the platform will become an AI-driven ecosystem. This ecosystem will promote personalized learning, collaboration, and digital sustainability, reducing the use of paper resources and optimizing educational efficiency.

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?

We are four Italian girls with academic and professional backgrounds in marketing, economics, management, AI, languages and communication. Our own experiences as students helped us recognize what education truly needs from AI. Our complementary skills turned our insight into action: the logic of coding, the strategic creativity of digital marketing, the innovation of AI, the persuasive integrity of selling, the organized adaptability of project management, the expressiveness of video editing, and the rigor of accountability. We are passionate learners, always seeking new ways to broaden our horizons. That's why we created Alnspire Hub: to reduce repetitive work, give students and teachers more time to experiment, test themselves, and explore new knowledge. We care deeply about the educational environment and understand what both students and teachers need. Our collaboration has shown us the power of aligned minds and a free flow of ideas, supported by solid organization, mutual encouragement, and genuine respect and admiration for each other's talents and dedication. We truly believe Alnspire Hub can give students and teachers the freedom to learn, grow, and expand their potential.