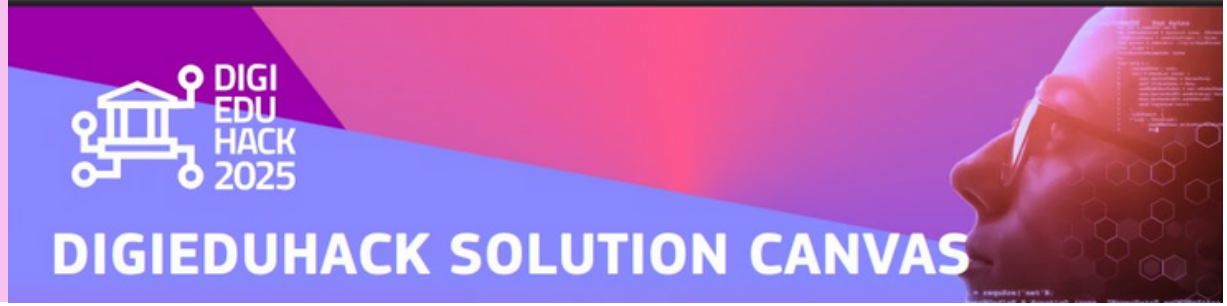

Solution Title:	**Activa360**
Team Name:	**COGNITIVOS**
Challenge Addressed:	Protect yor mind and Digital World: Self-Care and Safety Online
Challenge Category:	Well - being in digital education

About the Team

- [x] Higher Education Students
- [x] Teachers
- [ ] Others
- [ ] Researchers
- [ ] Professionals

DESCRIBE IT IN A TWEET.

Activa360 gives you back the power to think, analyze, and reflect. It turns learning into a game: the more you think, the more you grow. AI is no longer the enemy , it's your ally. #ThinkBeyondAI

DESCRIPTION OF THE SOLUTION

Activa360 is an educational application that transforms the current use of artificial intelligence into an active and reflective learning process. The solution addresses a real problem: many university students use AI passively, obtaining answers without understanding them, which weakens their critical thinking and reduces their intellectual autonomy. We propose to reeducate the use of AI by turning it into a cognitive mediator capable of expanding students' analytical, reflective, and self-regulated learning skills. Activa360 does not replace thinking , it trains it.

The application integrates a pedagogical AI based on the Socratic method and spaced repetition, capable of guiding students through reflective questioning, reasoned feedback, and adaptive exercises that adjust to each user's cognitive style. Instead of providing direct answers, the AI accompanies the student's mental process, helping them build meaning, justify ideas, identify mistakes, and understand topics at a deeper level. This personalized experience is complemented by a cognitive gamification system that rewards skills such as argumentation, analysis, and autonomy, reinforcing motivation through badges, visible progress, and challenges designed to strengthen critical thinking in an engaging and sustained way. It also includes an emotional personalization feature that sends motivational messages and tracks the student's reflective process, promoting healthy study habits and self-confidence.

The technology used is based on conversational models such as GPT, integrated with adaptive learning mechanisms, a secure educational server, and a user experience (UX) design that enables continuous interaction. The goal is for students to learn how to think better, not depend on quick answers.

To ensure its operation, the implementation plan includes three stages: an initial design phase with interaction testing; a pilot phase with university students to measure real cognitive impact; and finally, an institutional integration phase with UPC's academic platform, offering free access to the entire educational community under a scalable freemium model.

This solution enhances digital education by promoting active, ethical, and self-regulated learning, where AI is no longer a shortcut but a formative companion capable of strengthening comprehension, analysis, and problem-solving abilities. Its success can be measured through indicators such as improvement in academic performance, reduction in dependency-based queries, increase in autonomous reasoning, consistency of app usage, and student satisfaction with their learning process. Activa360 proposes a new relationship between students and technology: learning with AI, not from AI. It is a sustainable, adaptable educational solution designed to transform the way young people think, study, and engage with knowledge in the digital age.

CONTEXT

The rise of artificial intelligence has transformed the way students learn. Although it has brought great progress in access to information and ease of completing academic tasks, many students today depend on AI to obtain answers, but not to think. This cognitive dependence reduces reflection, creativity, and intellectual autonomy.
According to Vásquez (2025), artificial intelligence can and should function as a cognitive mediator that enhances students' abilities, fostering autonomous and self-regulated learning, always within an ethical and pedagogical framework that prevents technological dependence. This reinforces the importance of re-educating the use of AI in academic environments, directing it toward active, reflective, and formative support.
While we cannot control the indiscriminate use of AI, we aim to employ it pedagogically and personally, promoting a new form of learning that strengthens students' reasoning skills instead of replacing them.
Our project aligns directly with the theme "Protect your mind and digital world: Self-Care and Safety Online." We focus on the current need for digital education, proper learning with the support of new technologies, and the responsible interpretation of information.
Activa360 aims to teach UPC university students to use artificial intelligence as a tool to think better, learn autonomously, and study academic topics in the clearest and most conscious way possible. It promotes cognitive well-being, digital self-care, and a safe, formative use of AI.
Activa360 directly addresses the challenge posed by the UPC Hackathon, which seeks digital solutions that reduce passive dependence on AI and promote higher cognitive skills among students. Our proposal turns AI into an active pedagogical agent, it guides, questions, challenges, and supports instead of delivering automatic answers.
By integrating the Socratic method, gamification, and adaptive learning, the app develops exactly the competencies required by the challenge: critical thinking, reflection, intellectual autonomy, and responsible use of digital tools. Instead of replacing students' reasoning, it strengthens it, fulfilling the core objective of the organizing institution's challenge.

Bibliographic Reference:
Vásquez Cruceta, I. (2025). La inteligencia artificial como mediadora cognitiva y formativa en el aprendizaje autónomo universitario: una teoría fundamentada. Revista SAGA, 2(3). Retrieved from https://revistasaga.org/index.php/saga/article/view/213

TARGET AUDIENCE

Our target audience is undergraduate students at the Peruvian University of Applied Sciences (UPC), aged 18 to 26, who frequently use artificial intelligence to study, complete assignments, or solve academic tasks. This group benefits directly by developing critical thinking, cognitive autonomy, and greater intellectual confidence. The application transforms AI into a pedagogical guide, helping students reason for themselves instead of depending on automatic responses.
To validate this approach, we conducted surveys with 10 UPC students, of whom 9 out of 10 admitted to using artificial intelligence for their academic activities. During this process, we created the profile of our ideal user: Camila Torres, an 18-year-old first-year International Business student. She represents users who feel insecure when responding without relying on AI and wish to regain the ability to generate their own ideas.
Activa360 addresses these needs through personalized learning: it adapts challenges, questions, and modules according to each student's motivations, learning style, and emotional context, including factors such as cognitive insecurity, the need for recognition, and the desire for visible progress.

IMPACT

Activa360 transforms the role of artificial intelligence in universities: from a shortcut tool to a cognitive trainer. By applying a Socratic pedagogical flow, the app compels students to generate their own reasoning before receiving feedback. This change in dynamics turns passive activities (copying an answer) into active processes of knowledge construction, improving deep understanding, argumentation skills, and the transfer of knowledge to new problems.
The application is designed under principles of inclusion and accessibility, adapting to different learning paces, cognitive styles, and emotional needs. In this way, it promotes equitable learning for all students. In the short term, this results in better performance on assessments that measure analysis and synthesis; in the medium term, it leads to greater autonomy in facing complex tasks without external dependence.
Activa360 supports students from diverse contexts through an accessible and inclusive freemium model.
Although its main focus is cognitive, Activa360 also provides indirect environmental benefits: it reduces the need for printed materials by centralizing digital resources, minimizes travel to in-person tutoring by offering constant support, and optimizes the use of educational infrastructure. Through responsible design (cache optimization, efficient API calls, and energy-efficient servers), the app minimizes its environmental footprint.
It is important to note the water consumption required due to the app's need for fast and clear responses. This demand increases server heat, requiring a certain amount of water per response to cool down the API servers.
Furthermore, the proposal aligns with Sustainable Development Goal (SDG) No. 4 – Quality Education, by promoting inclusive, equitable, and quality education. Activa360 adds value to institutions, teachers, and students by encouraging an ethical, conscious, and formative use of technology, strengthening meaningful learning and digital responsibility.

INNOVATION

Activa360 is innovative because it transforms the traditional role of artificial intelligence in education. Instead of providing direct answers, it uses a Socratic and metacognitive approach that guides students to reason, reflect, and generate their own ideas. It is the first university-level application that simultaneously integrates pedagogical AI, gamification focused on critical thinking, and cognitive-emotional adaptive learning. This combination allows students not only to acquire content but also to actively train their intellectual autonomy.
Although there are similar educational solutions such as Duolingo and GPT Education, none of them address cognitive dependence on AI or are designed for the university context. Duolingo focuses on memorization and repetitive language practice; its model does not promote analysis or argumentation. GPT Education offers an AI tutor, but it functions as a generic chat: it answers questions without training critical thinking and lacks exercises, streaks, rewards, or integration with real courses.
Main function - Duolingo: Teaching languages through short, repetitive, and gamified exercises.
- Reward system (streaks, levels, gems)
- Spaced practice and immediate feedback
- Repetition of common mistakes

Main function - GPT Education: Conversational AI tutor for solving doubts and explaining concepts.
- Encourages autonomy: students can ask freely
- Provides personalized examples

Activa360 overcomes these limitations by combining the best of both worlds:
– The motivation and consistency of gamification
– The cognitive depth of an intelligent tutor
– The pedagogical rigor of university-level teaching
Furthermore, it simplifies access to learning: students do not need to upload documents or create complex prompts; they simply indicate the course or session to receive activities, Socratic questions, reflective feedback, and personalized micro-exercises. This makes it more practical, faster, and better aligned with real educational settings.
Our solution offers an original contribution to the field because it does not use AI as a response tool, but as a pedagogical ally that strengthens higher-order reasoning skills. Activa360 fills a gap that traditional platforms have not addressed: the development of critical thinking, cognitive autonomy, and the responsible re-education of AI use in academic environments. For these reasons, our proposal provides a more comprehensive, sustainable, and effective approach than existing solutions.

TRANSFERABILITY

Activa360 was designed with a flexible pedagogical core that allows its adaptation to multiple educational contexts beyond university. Although the current prototype is optimized for UPC students, its modular structure based on Socratic AI, cognitive gamification, and adaptive learning can be applied in schools, pre-university academies, institutes, and international programs equivalent to high schools. The personalization logic makes it possible to adjust exercise difficulty, question types, and levels of guidance according to the learner's stage.
For example, in pre-university academies, Activa360 could reinforce subjects such as mathematics, communication, or verbal reasoning through micro-quizzes and personalized study paths, while also training analytical and problem-solving skills common in admission exams. In schools, the app could focus on reading comprehension, logical thinking, or civic education using a more guided and visual approach. In technical institutes, it could support practical courses through immediate feedback, applied challenges, and contextualized learning experiences.
While the MVP is not yet ready to integrate with multiple institutions simultaneously, the model itself has scalability potential. With progressive development, the platform could evolve into a broader educational ecosystem similar to a Blackboard 2.0 focused on AI-powered active learning. Its API-based and modular technical design enables future adaptation to any institution seeking to strengthen active learning through artificial intelligence.

SUSTAINABILITY

Activa360 is designed to be sustainable and grow progressively over time. Although the Minimum Viable Product (MVP) focuses on a single course within the International Business program, its technological architecture, pedagogical model, and modular structure allow for continuous expansion. Our sustainability plan is based on a phased development strategy that ensures quality, technical viability, and educational relevance before scaling to new contexts.
In the medium term, our goal is to consolidate the solution within UPC:
Phase 1 — Beta Prototype Development (0–6 months):
Construction of the Socratic chatbot, basic quizzes, initial gamification, and minimal integration with International Business course sessions.
Phase 2 — Pilot with 50 students (6–9 months):
Measurement of cognitive impact, retention rate, active usage, and reduction of passive AI dependency.
Phase 3 — Institutional Implementation (9–18 months):
Expansion to more courses within the faculty, interface optimization, and correction of issues identified during the pilot.
Phase 4 — Refinement and Pre-Premium Launch (18–24 months):
Integration of new learning modalities (visual and auditory), AI-generated explanatory images, and cognitive accessibility modules.
Phase 5 — Premium Model Launch (24–28 months):
Advanced features for students with diverse learning styles, a teacher dashboard, and enhanced cognitive analytics.
In the long term, we aim to scale the project to other educational institutions. Although the concept is flexible, full implementation requires careful curricular and technological adaptation; therefore, the process must remain gradual.
Phase 1 — Institutional Partnerships and Scouting (3 years):
Identification of universities, institutes, and pre-university academies interested in integrating pedagogical AI.
Phase 2 — Prototype Adaptation for New Institutions (3–4 years):
Customization of modules according to each institution's curriculum and cognitive needs.
Phase 3 — Expanded Pilot with 200 students (4 years):
Evaluation of academic performance, pedagogical effectiveness, and teacher acceptance.
Phase 4 — Institutional Freemium Expansion (4–5 years):
Free basic model for students, with premium versions tailored to specific educational focuses (visual and auditory learning).

TEAMWORK

Team Cognitivos is composed of four UPC students committed to reactivating cognitive skills and promoting critical thinking through the pedagogical use of artificial intelligence.
- **Melanie Leiva Pizán – Marketing**
  Role: Responsible for the project's positioning.
  Experience: Design and implementation of academic and promotional campaigns.
- **Sebastian David Navarro Tejada – Graphic Design**
  Role: Responsible for the visual design and prototype of the application.
  Experience: Development of educational interfaces and interactive prototypes; creation of graphic and UX materials for learning platforms; proficient in prototyping tools (mockups).
- **Alexis Aron Polina Mucnites – Administration and International Businesses**
  Role: Strategic management, sustainability, and economic viability of the project.
  Experience: Development of business models and monetization strategies (freemium, institutional contracts); experience in planning for scalability and sustainability.
- **Gabriela Guadalupe Grosmann Hernández – Systems Engineering**
  Role: Functional design, technological integration, and operational performance of the application.
  Experience: System implementation and architecture with AI integration; development of functional prototypes and integration testing (APIs, file/multimedia handling); experience ensuring system operability.

All team members also have experience in interdisciplinary academic projects and demonstrate strong commitment, motivation, and dedication to the initiative. We are an interdisciplinary team where each member contributes complementary skills: strategic and persuasive communication (Marketing), student-centered interface design (Graphic Design), financial viability and commercialization (Business Administration and International Business), and the technical capacity to integrate AI and build the prototype (Systems Engineering). This combination covers the key areas needed to take Activa360 from concept to a validated and scalable prototype. We have experience in projects related to digital education, persuasive design, and the application of AI. We have worked on prototypes, user validation, and academic outreach campaigns, which allows us to address pedagogical, technical, and market challenges effectively.
We plan to continue developing Activa360, moving from the prototype to institutional pilots and scaling the solution. The complementarity of our skills, our shared vision of education, and our motivation to transform the use of AI into a pedagogical ally drive us to continue working together as a team.

Link:https://www.canva.com/design/DAG4Ppv_N60/lm_1-cLrfXIW7uHarJoIqw/edit?utm_m%C3%A9dium=link2

Link: **https://youtube.com/shorts/aLukUsa9pQs?si=gdPLkBnJzidSb-vd**