



# DIGIEDUHACK SOLUTION CANVAS

**Title of the solution:**

**EduTrack**

**Challenge addressed:**

Digital Co-creation Designing Tomorrow's Lesson, Teacher-Student Partnership

**Background of the team:**

(multiple selections possible in case of mixed teams)

Higher Education Students

Teachers

Others (please specify)

**Team name:**

**EduTrak**

**Challenge category:**

**Learning Spaces and Pedagogies**

**Secondary School Students**

## 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?

EduTrack is a browser-based platform that helps students prepare for exams through interactive tests, progress tracking and a digital laboratory for math, chemistry and graphs. It uses simple web technologies (HTML, CSS, JavaScript) and offers instant feedback, unlimited practice and personalized learning.

The platform includes: a short registration, structured exam tests for different grades, a dashboard showing progress and a laboratory that generates exercises, explains reactions and draws graphs. Its goal is to make learning easier, more engaging and accessible for all students.

Implementation involves building the main interface, adding the exam system, developing the laboratory modules and then expanding with AI-generated content. Needed resources include 1 - 2 developers and someone to prepare educational content. Barriers may include creating enough questions and ensuring good performance on all devices.

EduTrack enhances digital education by increasing motivation, providing immediate feedback and supporting teachers with ready-made tests. Success can be measured through active users, completed tests, improved results and feedback from students and teachers.

## 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 that many students do not have access to ergonomic, structured and interactive tools to prepare for exams. They often study chaotically, get overwhelmed, and lack feedback about their progress. Teachers who have time preparing tests and cannot always offer personalised practice. In the future, this problem will grow as digital skills become essential but many schools remain under-digitalised.

EduTrack solves this by offering an accessible online platform with automatic tests, progress tracking and interactive tools such as math generators, chemistry explanations and graph drawing. It supports self-learning, increases motivation and reduces pressure for both students and teachers.

The solution aligns with DigiEduHack 2025 because it focuses on digital transformation of education, giving students modern ways to learn and practice. It prioritises inclusion, digital skills, personalised learning and affordable educational innovation – key elements of the 2025 theme.

EduTrack confronts the hackathon challenge by directly addressing the category of "innovative digital tools for learning". It modernises how students revise, how teachers assess, and how schools integrate technology. It offers a practical, scalable and student-friendly system that can be used immediately and expanded with AI-generated content in the future.

## 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?

The main target groups of EduTrack are students, teachers and schools. Students benefit by having unlimited practice tests, instant feedback, interactive tools and a clear view of their progress. This helps them feel more confident and improves their results. Teachers benefit from ready-made tests, faster evaluation and a tool that keeps students focused. Schools benefit by offering a modern digital learning platform without needing expensive equipment.

The solution is relevant because many students struggle with exam preparation, lose motivation or don't know what to study first. EduTrack offers structured practice, clear chapters, and engaging tools like the math generator, chemistry explanations and graph visualisation. It fits their learning style and reduces stress before exams.

To engage these groups, the platform uses simple navigation, attractive design and gamification elements. Students are encouraged through progress bars and instant corrections. Teachers can integrate the tests directly into lessons. Feedback from both students and teachers will be collected to adapt the content, difficulty and features to their real needs.

## 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?

EduTrack catalyses change in education by making learning more interactive, personalised and accessible. It helps students understand where they stand, what they need to improve and how to learn step by step. Teachers gain a modern tool that reduces preparation time and increases student engagement. This shifts education from passive memorisation to active practice and continuous feedback.

Socially, the platform increases equal access to quality learning. Any student with a phone or laptop can prepare for exams without private tutors. It reduces stress, builds confidence and supports students who normally struggle in traditional classrooms. It also strengthens collaboration between teachers and students through shared progress data and clearer learning goals.

Environmentally, EduTrack reduces the need for printed worksheets, tests and preparation materials. Entire classes can practice digitally, lowering paper use and supporting eco-friendly learning habits.

Examples:

- A rural school with limited resources uses EduTrack for exam preparation, allowing all students to practice equally and teachers to track progress instantly.
- A student who normally avoids homework becomes more motivated thanks to interactive tests and instant feedback, improving results without extra tutoring.
- A school replaces printed monthly tests with online versions, cutting paper waste while giving students faster corrections.

These scenarios show how the platform can create long-term changes in learning behaviour, confidence, inclusion and sustainability.

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

EduTrack transforms exam prep into a game. Students practice with interactive tests, track their progress and learn exactly what they need for big exams — anytime, anywhere.

## 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?

Our solution is original because it combines an exam simulator, a "laboratory" of generators (math, chemistry, graphs) and progress tracking in one simple browser tool, focused on helping students prepare for one big test, not just random practice. It works without complex accounts or expensive hardware and can be quickly adapted to local curricula and languages, so teachers and students in any school can use it easily.

Yes, there are quiz apps and learning platforms, but most of them either only offer generic questions, only one subject, or are designed mainly for homework, not for targeted exam prep. Our solution is better because it focuses on concrete exam chapters, generates unlimited similar tasks, gives instant feedback, integrates several subjects in one place and is light enough to run on almost any device. This makes it especially useful for schools with limited resources and for students who need structured, step-by-step preparation for high-stakes tests.

## Transferability

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

Yes. EduTrack can be used in many other education contexts because it is built as a flexible platform with generators, quizzes and progress tracking. Any subject that requires practice, repetition or step-by-step learning can be added.

For example, the math generator can be adapted for physics formulas, accounting exercises or programming tasks. The random test module can be used for language vocabulary, geography facts or biology quizzes. The graph tool can be expanded for economics curves or science experiments.

This means teachers from different disciplines can use EduTrack not only for exam prep, but also for regular lessons, revision sessions and homework support.

## 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 the prototype is ready (as shown above), the next steps are to improve it by adding more questions, subjects and features based on user feedback. We would test it with a small group of students and teachers to see how they use it and what needs to be improved. After that, we can scale the platform by adding AI-generated tests, a teacher dashboard and support for more classes.

Because the prototype already works in the browser and doesn't require powerful devices, it can be easily implemented in many schools and adapted to different subjects. In the mid-term, it can be used regularly in class for practice and revision. In the long term, it can grow into a full learning ecosystem where students prepare for any major test and teachers track progress in real time.

## 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?

Our team is formed of five motivated members: Theodor, Tiberius, Doira, Adrian and Victoria. Together, we combine technical skills, creativity and strong understanding of how students actually prepare for big exams. Each member contributes a key competency:

Tiberius - coding, platform development, logic and prototype building

Victoria - educational content, test design and learning methodology

Doira - user experience, interface design and visual clarity

Theodor - research, structure, communication and presentation

Adrian - AI integration, innovation ideas and system improvement

We are the perfect team for this work because we are close to the problem we solve: we know what students need, what confuses them, and what makes learning engaging. Our prototype already shows our technical and creative capacity, and our combined strengths allow us to develop a complete digital learning solution.

We plan to continue working together in the future because we share the same goal: helping students prepare more easily and confidently for major exams. Our different skills complement each other perfectly, and as a team we can keep developing the platform, introduce more AI features and expand it.

EduTrack

## I. Quality of the proposed solution

EduTrack is a clear and easy-to-understand solution: an interactive platform that helps students prepare for major exams through smart quizzes, instant feedback and visible progress tracking. It directly answers a real educational need: many students struggle to organise their study and measure their readiness. The solution combines web technologies, item generation, modern UX and AI, making it interdisciplinary and fully aligned with current digital education trends.

## II. Quality of the team

Our team of five members brings complementary skills: web development, UX/UI design, educational content creation, AI integration and project coordination. We understand the problem from within, as active learners preparing for real exams. We are motivated, collaborative and fully capable of implementing the complete solution.

## 2. RELEVANCE

The solution aligns perfectly with the DigiEduHack 2025 theme focused on digital transformation in education. It targets a critical learning moment – exam preparation – and enhances learning efficiency, accessibility and motivation.

### 3. ORIGINALITY

EduTrack is original because it combines exam simulation, STEM laboratory tools and AI-powered exercise generation in one unified platform. Unlike many existing tools that offer generic quizzes or only learning theory, EduTrack focuses on personalised exam preparation and progress-based practice.

## 4. FEASIBILITY

The platform is highly feasible: a functional prototype already exists, built with accessible web technologies (HTML/JS/CSS) that run on any device. Our implementation plan includes expanding content, integrating AI and testing the platform in schools. Required resources are realistic, and foreseeable barriers (content creation, scaling) are manageable.

## 5. SUSTAINABILITY

Once implemented, EduTrack can be continuously expanded with new subjects, AI-generated content and teacher tools. Because it is browser-based and lightweight, it requires minimal maintenance and can grow organically with user needs.

## 6. TRANSFERABILITY

The solution is highly transferable. It can be adapted to many learning contexts: national exams, university admission tests, online learning, vocational training or any discipline requiring structured practice. The test engine and generators can easily be repurposed.

