OCASTA

DigiEduHack
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INTRODUCTION

In our pursuit of advancing educational excellence, our engagement in this year's DigiEduHack prompted a thorough exploration of prevailing issues within the global education landscape. As we delved into the terrain of educational concerns, our attention honed in on a matter of great importance–the standardization of education.

This document serves as an analysis of the problem and culminates in our proposed solution. Our team endeavors to illuminate the consequences, opportunities, and potential pathways connecting education standardization and adaptive education to effect meaningful change.

THE CHALLENGE

The identified issue centers around the deleterious impact of **excessive standardization in the educational system**, reducing the teaching and learning process to quantifiable indicators. This uniform approach **neglects the diversity** of skills and abilities among students, seeking to measure their success through standardized parameters. Albert Einstein's analogy, comparing judging a fish by its ability to climb trees, underscores the incongruity of evaluating students uniformly without recognizing and appreciating their individual strengths. This issue suggests the imperative to adopt more flexible and personalized approaches in education, acknowledging the various forms of learning and the unique potential of each student.

TARGET AUDIENCE

Our main customers will be **private schools of Elementary, Middle and High School** education, some examples could be:

- Nuevo continente
- Colegio John F. Kennedy
- Colegio Washington
- Instituto Thomas Jefferson
- Colegio Harvest
- Colegio del Tepeyac

PRESENTING THE SOLUTION:

OCASTA

The proposed application introduces an innovative approach to **enhance teaching and learning**. Teachers have access to a diverse question bank from which they select specific questions to design personalized exams. These exams, administered as diagnostics to all students, are automatically assessed by the artificial intelligence, Minerva.

Based on the results, Minerva **identifies problematic areas** for each student and **generates customized tasks designed** to address those weaknesses. After a period of time, the original exam is re-administered to assess progress. This student-centered approach, backed by artificial intelligence, aims to provide a more adaptive and effective education, continuously improving the learning process.

THE OCASTA PROCESS

1

The application provides the teacher with access to a diverse and extensive bank of topics and questions.

Access to Question Bank

2

The teacher chooses questions deemed suitable for the exam, thereby customizing the assessment according to the specific goals and topics of the course.

Question Selection:

3

The application utilizes the artificial intelligence system Minerva to automatically assess the exams and analyze response patterns for each student.

Automated Evaluation

4

The exam is administered to all students with the purpose of diagnosing their current skills and knowledge in the selected topics

Diagnostic Exam Administration

5

Based on the diagnostic exam results, Minerva identifies areas where each student has struggled the most and designs personalized tasks to address those specific weaknesses.

Design of Customized Tasks

6

Students receive and complete the personalized tasks designed to strengthen their knowledge in the identified problematic areas.

Task Implementation

8

After a specified period, the original exam is administered again to assess student improvement and consolidate learning.

Second Exam

7

Minerva continuously monitors each student's progress, adapting additional tasks as necessary.

## Continuous

BUSINESS MODEL

The Business Model Canvas

Designed for: Designed by: Date: Version:

Key Partnerships

- **Educational Institutions:**
- Collaboration for testing and platform improvement.
- **Technology Providers:**
- Collaboration for updates and security.

Key Activities

- **Software Development:**
- Continuous development and improvement of the platform.
- **Teacher Training:**
- Courses to maximize effective use of the platform.

Key Resources

- **Artificial Intelligence Technology:**
- Development and maintenance of algorithms.
- Servers and data storage.
- **Development Team:**
- Software engineers.
- Data scientists.

Value Propositions

- **Personalised Educational Platform:**
- Creation of diagnostic exams.
- Generation of personalised tasks based on student performance.
- **Student-Centric Learning:**
- Individualised approach to address specific weaknesses.
- Improvement of academic performance.

Customer Relationships

- **Technical Support:**
- Online chat support.
- Phone assistance.
- **Continuous Updates and Improvements:**
- Feedback from teachers and students.

Channels

- **Direct Sales to Schools:**
- Presentations at educational institutions.
- Platform demonstrations.
- **Digital Marketing:**
- Social media advertising.
- Presence on educational blogs.

Customer Segments

- **Elementary, middle & high schools:**
- Private schools, middle to high socioeconomic class.
- Professors and educational administrators.

Cost Structure

- **Software Development:**
- Salaries for the development team.
- Server maintenance costs.
- **Customer Support and Service:**
- Expenses associated with technical support.

Revenue Streams

- **Subscription based system:**
- Annual
- Semester

SOLUTION CANVAS

DIGIEDUHACK SOLUTION CANVAS

DIGI EDU HACK 2023

Title of the solution:	OCASTA	**Team name:**	OCASTA
Challenge addressed:	Emerging technologies In education	**Challenge category:**	Emerging technologies for education

Solution description

Please describe your solution, its main elements and objectives as well as a brief implementation plan with some key overall milestones, resources required and eventual barriers foreseen. What is your final product/service/tool/activity? How could the solution be used to enhance digital education in the your challenge area? How could the success of the solution be measured? How will the solution provide benefits to the challenge owner?

A groundbreaking app for educators: generate customized exams from a question bank, and let artificial intelligence design individual tasks to reinforce weak areas identified in initial assessments. Tailor learning for each student, fostering academic success

Context

What is the problem you are facing?
What is the challenge that you are solving?

Ocasta addresses the problem of impersonal education, aiming to combat scholar demotivation and poor learning experiences caused by the lack of personalization. Our challenge is to use AI to tailor content and assessments to individual students, providing a more engaging and effective learning experience, and accommodating different learning rhythms and styles.

Target group

Who is the target group for your solution?
Who will this solution affect and how?
How will they benefit?

The first stage of target group is private schools of middle to high socioeconomic class, this solution will affect both students and teachers. Teachers will benefit from streamlined exam preparation, while students benefit from having tailored learning experiences that irons out their weaknesses.

Impact

What is the impact of your solution? How do you measure it?

Our solution's impact is measured by improved individual academic performance, increased scholar engagement, positive educator feedback, enhanced learning outcomes, high user satisfaction, adoption rates, long-term academic progress, and potential expansion through partnerships.

Describe it in a tweet

Describe your solution in a short catchy way in maximum 280 characters

Revolutionize education with our app, Customize quizzes leverage AI for tailored tasks, and reinforce weak areas. Individualized learning for academic success!

Innovativeness

What makes your solution different and original?
Can anything similar be found on themarket? How innovative is it?

A lot of people think that the rise of artificial intelligence means the ends of many jobs like teachers, but we don't want that, our main goal is to create a tool for teachers to use, combining both Artificial intelligence with human Intelligence.

Transferability

Can your solution be used in other contexts?
What parts of it can be applied to other context?

The app targets elementary and middle school but can extend to high school and college. It also has potential applications in corporate settings, including employee training, specialized courses, and self-directed study.

Sustainability

What is your plan for the implementation of the solution and how do you see it in the mid- and long term?

Our business model is a user-based suscription system that will have a value of $60 per school period, while charging a unique amount to the school to suscribe to our system.

Team work

Explain why you are the perfect team to develop this work and what are the competencies you all bring in so the solution is developed successfully. How well did you work as a team?
Could you continue to work as a team in the future?

Our collaboration succeeds through open communication, respect, and a shared project vision. Diverse skills create a dynamic work environment.

European Commission