V-Edu Lim

V-LIM EDUCATION

Hello, we are Nicolò Berardino, Diana Antonio Valentino, Fabio Erra and Fabrizio Avena. Today, we present our project to revolutionize learning through the implementation of AI in Interactive Whiteboards (IWBs), starting a new way of learning right from the school desks. V-Lim Education is an application that can be directly installed on IWBs and students' smartphones via the app store. V-Lim Education uses storytelling through images and videos to emphasize and improve classroom lessons. We are all tired of passive lessons where most of the information can be lost. Through this new way of interpreting lessons, students will be motivated to participate in the lesson, creating a great educational show together with the teacher. It is a fact that visual input association helps learning and keeps students' attention more vivid, and AI will help the teacher in the task, especially in real-time.

•Student questions

Questions are displayed anonymously here.

●Notes given by the teacher

They will be summarized and immediately displayed here with the help of various in-depth links of keywords declared by the teacher using the "in-depth" command.

●Simultaneous translation into other languages

here images and videos will be transmitted to enhance the lesson with visual insights

Input audio

●Timeline

The timeline of the lesson topic is displayed here.
The timeline will be connected to all the lessons of the class, placing the topics in historical chronological order also indicating the teacher and the lesson date.
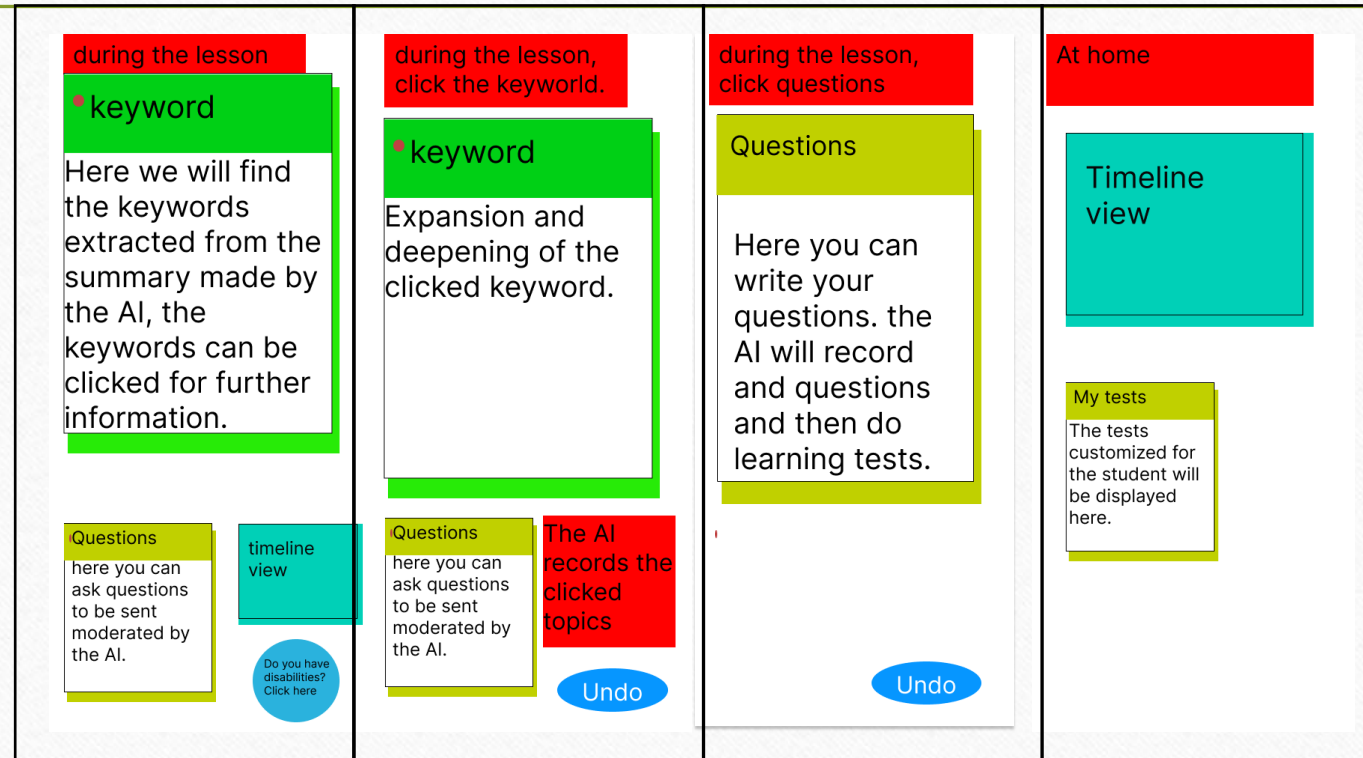
LIM interface

- Our solution involves an app designed for interactive whiteboards (LIMs). This program will divide the screen into multiple sections, always visible to users. Let's delve into the different sections:

1. **Student Questions**: In this section, students can anonymously submit questions. The AI will moderate these questions, allowing real-time intervention during the lesson. Queries may relate to clarifying misunderstood concepts or seeking further insights. Each question will be logged by the AI, enabling post-lesson assessment of learning success.

2. **Teacher Notes**: The AI will listen to the instructor during the lesson and generate a summary marked with keywords. Students can access this summary on their smartphones. By using the keywords, they can delve deeper into class topics, even exploring additional materials.

3. **Timeline**: This section displays a chronological overview of a specific topic covered in any teacher's class. Managed entirely by the AI, it provides immediate access to any part of the program.

4. **Simultaneous Translation and Media**: An invaluable tool for language learning during any lesson. Linguistics instructors can seamlessly connect to all classes without missing crucial points. Additionally, interactive images enhance storytelling during lessons.

The input for our app is the voice captured from any microphone connected to the interactive whiteboard (LIM). Users can customize their experience based on their preferences and the specific teaching environment. These settings can be navigated using either voice commands or the LIM pen. The range of settings is diverse, including options like switching to a more traditional chalkboard view when the pen is close or allowing instructors to highlight keywords with a simple underline. Personalization for each teacher's needs is essential. By configuring the app and setting their schedules via smartphone, instructors can ensure that the relevant settings are automatically activated at the beginning of each lesson.

To safeguard privacy for both students and teachers, the app will **not** have access to webcams or video cameras.

For the Studets

during the lesson

•keyword

Here we will find the keywords extracted from the summary made by the AI, the keywords can be clicked for further information.

Questions

here you can ask questions to be sent moderated by the AI.

timeline view

Do you have disabilities? Click here

during the lesson, click the keyworld.

•keyword

Expansion and deepening of the clicked keyword.

Questions

here you can ask questions to be sent moderated by the AI.

The AI records the clicked topics

Undo

during the lesson, click questions

Questions

Here you can write your questions. the AI will record and questions and then do learning tests.

Undo

At home

Timeline view

My tests

The tests customized for the student will be displayed here.

The **student app** will be displayed on their smartphones during class. Students will have access to the following features:

1.Keywords: Students can view keywords related to the lesson.

2.Question Box: A section for students to ask questions directly to the teacher.

3.Timeline View: A button to access the complete lesson timeline.

Upon first launch, the app will inquire whether the student has any disabilities. Based on their response, the app will adapt accordingly. For instance:

- For **visual impairments**, it may provide a **text-to-speech** feature.
- For **hearing impairments**, it could offer a **fully transcribed** version of the lesson.

When students click on keywords, the app will provide further explanations, and the AI will record these for personalized quizzes. Additionally, students can ask questions related to specific topics.

The **question section** will display all previously asked questions along with their corresponding answers. Students can ask a question suggested by AI or type them manually.

Finally, the **timeline view** will present a chronological overview of past lessons, complete with relevant keywords.

At Home

during the lesson, click timeline view

timeline view, With clickable words for topics also covered by other teachers.

Undo

At home, click timeline view

|Timeline

Here all the lessons will be displayed in chronological order also indicating the teacher, you can click on the various lessons to find all the contents covered in the lesson.

Undo

At home, click timeline my question

My tests

Questions customized for the individual student will appear here.

Undo

Once the lessons conclude, the app will transform its interface. It will display a box for accessing the **lesson timeline** and another for **personalized tests**.

1.Timeline Box: This section will present all topics covered during the lessons in chronological order. Students can search for specific lessons using voice commands, describing concepts, or mentioning keywords. The AI will automatically locate the relevant content.

1.My Tests Box: A powerful feature of our app, the **My Tests** section is invaluable for learning. It collects information provided by the student throughout the course. Here's how it works:

1. The app generates **self-assessment tests** with accurate explanations for each question.
2. Students can make mistakes without social pressure or fear, as learning from errors is crucial.
3. All results are private and not comparable with others. Personalized questions ensure no two tests are identical.
4. These tests also help students become aware of their limits and express themselves more clearly to the teacher.

Below we will present you a video demo of our product, as an example of simultaneous translation we have opted for Italian
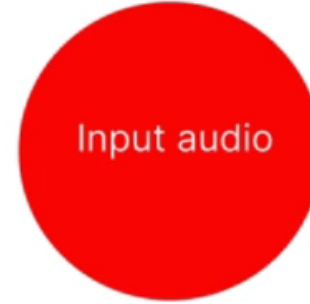
- Student questions

Questions?

- Notes given by the teacher

- Simultaneous translation into other languages

here images and videos will be transmitted to enhance the lesson with visual insights

Input audio

- Timeline

V-LIM EDUCATION
B .D.E.A

5. Quante volte Gandhi fu imprigionato dai britannici?

Risposta D) Più volte -> Corretta

6. Come morì Gandhi nel 1948?

Risposta D) Assassinato -> Corretta

Tutte le risposte sono corrette. Le domande sono formulate in modo chiaro e le opzioni di risposta sono plausibili ma una sola è quella esatta. Non ci sono suggerimenti per migliorare queste domande a scelta multipla sulla vita di Gandhi. Ottimo lavoro!

📋 copy

Write something...

DIGIEDUHACK SOLUTION CANVAS

Title of the solution: V-Lim Education

Challenge addressed:

Team name: Fantastic Four

Challenge category:

Describe it in a tweet

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

" Learning is good, V-lim Education is better. Create your own future. "

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 successof the solution be measured? How will the solution provide benefits to the challenge owner?

Our application uses artificial intelligence to record the teacher's voice and through a virtual blackboard allows students to have a summary of the lesson through interaction with keywords and images. From the teacher's point of view, our application, through the teacher's voice who will use a microphone, will understand the topic and thanks to artificial intelligence will identify and project photos, summaries, keywords following a logical thread. Subsequently, the application through AI will elaborate questions related to the topic, which will be sent at a later time to the students so that they can also work from home, where they will find support from the application that will act as a tutor for dedicated and supported learning.

Target group

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

The application is intended for the entire learning sector, starting from early childhood education with interactive images up to universities with reference questions on specific topics that facilitate learning compared to textbooks "

Innovativeness

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

Support at home for student learning, reducing the workload of teachers.

Transferability

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

It can be used for professional training, meetings, and throughout the learning sector.

Sustainability

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

Being an application, it does not involve the creation of additional devices to dispose of and reduces the use of textbooks.

Impact

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

The impact will be to facilitate learning with targeted questions for the student, support them in all phases of learning, and help the teacher in the exposition and visualization of the topic.

Context

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

Improve student learning level, mitigate teacher workload.

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?

We shared harmony and diverse skills that together led us to the realization of our application. We hope for future collaboration.

European Commission

In conclusion

Our app envisions a revolution in the educational sphere. We are aware of any potential limitations, as it was our deliberate choice to implement them. We aimed to create a tool that serves solely for teaching and assisting school communities, fostering better education and a more enlightened future, rather than one that could be wielded as a weapon.

The End

V-LIM EDUCATION

- A NEW FUTURE FOR LERNING AND IMPROVING AT SCHOOL

All resouces

https://1drv.ms/f/s!Ag863IH9lnYuvWqVmWkmIZYjzcWe?e=cPo3gc