

# Triseum Pilot: Future Classroom Scenario

*Title of the scenario:*

**Variants: Limits: Game Win**

*Names of author(s)*

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## **Relevant Trends/s**

*Write the trend(s) or trends the Scenario is intended to respond to.*

*e.g. <http://www.allourideas.org/trendiez/results>*

Game Based Learning & Gamification: Pedagogies based on game design principles and play are increasingly seen as a tool for enjoying teaching and learning.

## **Learning Objectives and Assessment**

*What are the main objectives? What skills will the learner develop and demonstrate within the scenario? (e.g. 21<sup>st</sup> Century Skills). How will the progress in achievement be assessed, ensuring the learner has access to information on their progress so they can improve?*

Use games to motivate and engage students in their learning.  
The learner will use the properties he has learned to overcome the challenges of the game.  
The assessment of the student is done according to his progression in the levels of the game and through online test.

## **Learner's Role**

*What sort of activities will the learner be involved in?*

Using games to engage students in a school environment with personalized feedback around progress that is accessible at any time.  
Teachers will mentor students by giving clues about the mathematical concepts they must possess to overcome the challenges of the game. They often build tokens to consolidate learning, use motivating videos about domains under study, and encourage students to produce videos about subjects under study.

## **Tools and Resources**

*What resources, particularly technologies, will be required?*

Computers are required; students need to have information to record the levels they are reaching in the game. We should support the use of a social network that allows students to share with other colleagues experience and access to additional challenges. For this, we must allow the use of several mobile devices.  
Below can be found a video presentation about the continuous function to introduce the concept to the students. This video is in Portuguese. In order to adapt the lesson to the

students, the teachers can use another video in their language:

<https://drive.google.com/open?id=1zZdOCLR3vZ6jU8pTQz9QohdcNaiiliKX>

## **Learning space**

Where will the learning take place e.g. school classroom, local library, museum, outdoors, in an online space?

Computer Lab

## **Future Classroom Scenario Narrative**

Describe the main ideas of the scenario.

John is a math teacher. He is very passionate about video-games and plays a lot of them, including the Triseum game – Variants: Limits. He uses games to enhance teaching and learning. He uses Triseum in particular to motivate and engage players to develop their cognitive capacities and ability to interact with their colleagues.

In the beginning of the project, John shows the students a short video about continuity in order to make the learning process more interesting and appealing. Afterwards, the students complete a level of the game during which they have to solve several puzzles using the notion of continuity, the notion of limit, the value of a function at a point, the properties of continuity and their relation to the corresponding properties of limits and the Intermediate Value Theorem. Students are independent in their learning process, which is done alone, or in pairs and are responsible for monitoring and managing their own learning.

In the classes that follow the use of the games, they do an online test in which they formally validate the consolidation of the domains and mathematical concepts used in the game.

## **Learning Activities**

Link to the Learning Activities created with Learning Designer (<http://learningdesigner.org>)

<https://v.gd/PrzWYR>

*This Future Classroom Scenario has been developed as part of the Triseum Pilot project. Find more Future Classroom Scenarios in the Future Classroom Lab website (<http://fcl.eun.org/directory>) and learn how to create your own scenarios by using the Future Classroom Toolkit (<http://fcl.eun.org/toolkit>).*



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