



Web 2.0 Serious Game

Web 2.0 tools for school education



- Game-based learning (GBL) is an approach through which different scenarios of specific problems can be organized in a game context. It specifically refers to the use of computer games with educational value or software applications that leverage games to enhance learning in various domains.
- It specifically refers to the use of computer games with educational value or software applications that leverage games to enhance learning in various domains.



- Through this approach, students can enhance knowledge and improve thinking skills because they face immersive and realistic problem-solving scenarios in an engaging and not frustrating environment.
- Web-based Serious Games (SG) are promoted as an excellent tool to support formal and non-formal learning because they are often simulations that are closer to real-life experiences.



- SGs are used to enhance learning at different ages and in different branches of knowledge, to engage players in activities and tasks aimed at improving knowledge and thinking skills, and to repeatedly recall learning experiences in an engaging way.
- SGs are spreading quickly due to their efficacy in all the field they are applied.



- Several research and review studies have been conducted to investigate the effectiveness and positive effects of GBL on improving players' knowledge.
- The pedagogy of the last century has extensively debated the role of play within the learning process of the child, because the game is the natural way to learn from birth, and if properly guided by an adult, can serenely stretch to the zone of proximal development (ZPD) to discover new horizons.



Kidseconomics

- Kidseconomics is a Web 2.0 Serious Game developed by the National Council of Research (CNR) with the aim of spreading the basic concepts of economics for primary and secondary school.
- Among the many activities that are offered, the project also provides a web tool for playing a series of games, for example economics-related crossword puzzles.



Kidseconomics

- Kidseconomics can be used both remotely or in presence, through a digital animator (the teacher) that will organise the room and a number of challenges regarding economics.
- The students will be divided into teams and will play four different games (Crossword puzzle, Taboo, Quiz and What, Where, Why?).



Kidseconomics

- Their aim is to compete and climb the leaderboard (which is accessible from the home page of the virtual room) and to become Economy Master.
- The students are motivated to take on the challenge since the games are very simple but entertaining and the graphics are captivating.





Scratch

- Scratch is a Web 2.0 visual programming language Serious
 Game that allows students to create interactive stories, animations, and games.
- In the process, they learn to think creatively, reason systematically, and work collaboratively - essential skills for anyone in today's society.
- Several educators are integrating Scratch into the study of many subjects and with students of different ages. Its intuitive user interface is designed specifically for the 8 - 16 age group, but is used by people of all ages.



Scratch

- Children have always been fascinated by games with Lego bricks, with which, using their creativity, they were able to build 3D physical objects, even of great complexity.
- Scratch provides colored bricks, each of which contains a very simple script that allows you to perform an elementary action: move forward, backward, rotate to the right, play a sound, etc. These colored bricks can be dragged onto the main screen (stage) and fitted together in a logical order to create a flow of instructions.



Scratch

- These colorful bricks can be dragged onto the main screen (stage) and interlocked in a logical order to create a flow of instructions.
- The instructions thus assembled will be used to guide characters and objects, to make them move and act, thus making it possible to create interactive stories, videogames, musical stories, and much more.





AdaptedMind

- AdaptedMind is a serious game for teaching Maths, Science, and Reading designed for primary and secondary school students.
- The game is designed to keep students' engagement high and in fact integrates a number of social mechanics such as the use of badges, leaderboards, and the possibility to customize one's characters with graphic add-ons.



AdaptedMind

- ✓ The main characteristic of the game is the light and attractive graphic interface that offers engaging gameplay.
- The continuous positive and negative feedback from the game is a valuable reinforcement for learning the subject.
- The maths course includes more than 300,000 maths problems in different levels with video explanations and, in case of errors, videos detailing how to solve the problem.



AdaptedMind

Teachers are provided with a dashboard where they can follow the progress of individual students, analyze their learning results, and, thanks to the possibility of creating and managing groups/classes, analyze the results of the whole group.

