GeoQuest an Interactive Role Playing game

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The acquisition of knowledge and enhancing skills at actual time requires different approaches, involving students as much as possible, taking advantage of informal learning strengths and opportunities of formal learning. In this perspective, the game seems to be a perfect vehicle, not a single student's playing but a cooperative one.

The GeoQuest project consists of an interactive role-playing game which involves all students using a patented system: the "teaching projector". This system allows the interaction of the class group through the use of smartphones and tablets, and it shows in real-time the game progress to the whole class.

Our role-playing game is based on three routes at different degrees. The students, divided into several categories (physicist, chemists, disseminators, technicians, historians) have to follow a geological trail in order to discover the present and the past of the Earth.

During the path, students have to pass some doors in teamwork; they allow assessment and represent the main sharing/disclosure moment. The doors allow to modulate the activities according to single lesson, teaching unit, module.

Main Objectives:

Working on PC by themselves, students could be even more alone: it needs a best fitting between ICT and cooperative learning. Role-playing helps students to reach their goals easily through cooperation; this in order to avoid the risk of loneliness of Inquiry Based Science Education, preserving entirely the educational value.

Science Research now is based on field expert interaction: the role-playing game categories reflect the necessary team to get their goal.

The several roles allow everyone to enhance their own skills.

the "teaching projector" allows students to comment and to evaluate the groups activities and route them, providing real-time corrections to everybody.

The playing categories represent all the aspects of the research areas: from scientists (physicists, chemists), to technicians, to disseminators and historians.

The effective output of the project is guaranteed by the presence of paths with different levels; easier route contains the necessary dispensatory measures and allows the use of compensatory measures for a full inclusion of Special Education Needs (SEN) students.