Experts hope Video Game Development can unlock pupils' full potential

School pupils will soon be creating their own video games in the classroom, as part of a new project to link gaming to the wider curriculum.

The ‘No One Left Behind” project, co-funded by the EU Horizon 2020 Framework Programme, will allow children to use a non-leisure gaming ‘toolkit’ to develop digital games on mobile devices – with the aim of enhancing their abilities across all academic subjects, as well as their computational proficiency, creativity and social skills.

Children aged 8-17 will be able to programme and design games linked to subjects such as science, maths, history and languages, effectively developing and adapting the learning material themselves.

‘No One Left Behind’ is being driven by the pressure on schools to address the challenge of too many pupils leaving school with no meaningful job skills, children at risk of exclusion and not reaching their full potential.

Partners of the project will adapt the mobile programming environment ‘Pocket Code’ – which allows users to create games, animations and interactive music videos directly on their phone or tablet – for academic curricula. It will initially be piloted in five schools and tested by 600 pupils – across up to 12 subjects – in Austria, Spain and the United Kingdom before being rolled out more widely.

Project outputs will have a real impact in the European gaming and educational ecosystem. The project will allow European entertainment gaming SMEs to observe at first-hand the educational development of students and explore face-to-face the connections between game play and education. This will enable dialogue and collaboration between applied research disciplines (social, pedagogy, serious games, etc.) and digital gaming industry players. Also, “No One Left Behind” will support effectiveness in digital game-making environments by adjusting and optimizing game making software towards a new generation version.

‘No One Left Behind’ is a 30-month innovation action project with a budget of €3.2 million that started on January 2015 and that involves a consortium of European educationalists, computer scientists, videogame companies and designers. The project is co-ordinated by INMARK Europa (Spain) and it includes the participation of 7 key partners coming from 4 European countries: Austria, Germany, Spain and United Kingdom.

What is Pocket Code?
Pocket Code is a learning application for mobile devices that has been initiated and developed in Austria at Graz University of Technology. This app allows teenagers to create their own games, animations, interactive music videos, and many types of other apps, directly on their phones or tablets. It uses a visual programming language and it is developed by the free and open source project Catrobat.
Pocket Code games are created by snapping together command blocks which are called “bricks”. The bricks are arranged in “scripts” which can run in parallel allowing concurrent execution. Broadcast messages are used to ensure sequential execution of scripts. Currently there are more than 30 ongoing subprojects with the main goal of extending Pocket Code’s functionalities.

Additional information
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