

Título: LA REALIDAD AUMENTADA COMO FACTOR DE MOTIVACIÓN Y DE RENDIMIENTO ACADÉMICO EN EL ALUMNADO DE ENSEÑANZA SECUNDARIA

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Departamento: Escuela de Doctorado de la Universidad Internacional de La Rioja

Fecha de lectura: 19/09/2023

Programa de doctorado: Programa de Doctorado en Ciencias de la Computación por la Universidad Internacional de La Rioja

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Descriptores:

- > MOTIVACION
- > ENSEÑANZA CON AYUDA DE ORDENADOR
- > COMUNICACIONES SOCIALES

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- > 726213_1647252.pdf

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Resumen: New technologies stand today as a tool of great importance today, especially in the educational context. In this sense, Augmented Reality (AR) is a technology that is gaining a greater presence in educational centers in the last decade. However, Augmented Reality has not been explored in depth in the Secondary Education stage. Therefore, the objective of this research is to evaluate the degree of motivation and academic performance generated using Augmented Reality in Secondary Education students, considering the variables gender and previous experience.

The research is focused on a mixed methodology that uses various methods (systematic literature review, field work, semi-structured interviews) to learn about the impact of Augmented Reality on students. For this reason,

the systematic review analyzes all the existing literature and concentrates the scientific research developed around this educational technology at that stage.

In reference to the field work, the ARCS motivational model by Keller (1987) is followed, consisting of four phases: analysis, design, development and pilot (implementation and evaluation). This instructional design model is implemented in a sample recruited for convenience, where 321 students from the Secondary Education stage of the Colegio Cerrado de Calderón (Málaga), aged between 14 and 17, were assigned to an experimental group (n=159) and a control group (n=162). The control group used a traditional methodology in a slide-based learning environment, while the experimental group worked with an AR (ComputAR) mobile application designed with the same concepts. For data collection, an identical pre-test and post-test was developed for both groups, an instructional materials motivation questionnaire (IMMS) adapted to each of the groups and semi-structured interviews in the experimental group.

The results showed better grades and greater motivation in the students who used Augmented Reality, highlighting a great interest in the integration of this technology in the teaching process. However, no significant differences have been obtained in the motivation of the students according to gender and previous experience. Therefore, the sensations and impressions of the students around the use of this educational technology are very positive, highlighting the motivation and academic performance that it provides in the students. In conclusion, this study provides data that encourages the use of Augmented Reality in the teaching and learning process of the Secondary Education stage.