
NEWSLETTER

Can Augmented Reality Improve Learning?

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ON the basis of 40 effective experimental and quasi-experimental studies from home and abroad, the article recently published in *Modern Educational Technology* explored the issue of whether augmented reality technology can improve learning effectiveness through the usage of Review Manager.

The main research results are as follows:

This study provides strong evidence for the education and teaching effects of AR technology and confirms that AR technology does have a moderate ($d = 0.57$) effect on student's learning effects. The AR technology has a moderate influence on student's cognitive ability and non-cognitive ability.

- AR technology has a moderate influence on the learning effectiveness of different learning stages, with the most significant effects on the preschool stage, followed by a primary school, and the least effects on the college stage.
- Combined with different teaching methods, AR technology can always greatly improve the practical learning effects, but moderating effects vary in different interventions.
- The effect size of AR application in different scenarios ranging from high to low in turns is: off-campus venues ($d = 0.73$), classroom ($d = 0.63$), and campus laboratory ($d = 0.48$). Moreover, there exist differences in the moderating effects on learning effectiveness under different scenarios.

Based on the findings above, this study also provides some practical recommendations, such as improving the role of technology on learning effectiveness, flexibly choosing the situation according to the teaching contents, and carefully selecting the original teaching methods in the application of AR technology.

Source: *Modern Educational Technology*, 2021; 31(2):40-47.