A Meta-Analysis on Using 3d Virtual Worlds in Foreign Language Education

Oguzhan Ozdemir, Kubranur Dag

Abstract

The aim of this study was to examine the effect of using 3D virtual world applications in foreign language education on student success. A brief literature review shows that 3D virtual world applications are used in foreign language education and there are studies investigating student success. However, there is not a study using the meta-analysis method. Based on this gap in the literature, an answer was sought to the question of "Is there a significant difference in the academic achievement of the students in the experimental studies examining the effectiveness of using 3D virtual world applications in foreign language education". The meta-analysis method, one of the systematic review methods, was employed in the study. Science Direct, ERIC, Taylor & Francis, EBSCO, JSTOR, DergiPark, Google Scholar, CoHE Thesis databases, which are frequently used in the field of educational sciences, were scanned. A total of 47,168 studies were reached in the first search using the pre-determined keywords. The dependent and independent variables of the studies were examined individually. Studies in which the dependent variable was the student success and which used 3D virtual world applications in foreign language teaching were identified. Then, based on the inclusion and exclusion criteria. a total of 16 studies were included in the meta-analysis. The studies included in the meta-analysis were analyzed using the Hedges' g value, and as a result, it was found that the overall effect size (d=1.190) had a large positive effect, which indicated that using 3D virtual world applications in foreign language education had a positive effect on student success. With its re-designable structure, 3D virtual worlds can be considered as a significant alternative in foreign language education. The courses that will be designed by diversifying the environments in 3D virtual world applications can help students in the foreign language learning process.

Keywords

3d virtual worlds, Foreign language learning, 3d virtual worlds and success, Meta-analysis

References

Abal, A. (2013). A comparison of the effects of classroom and multi-user virtual environments on the perceived speaking anxiety of adult post-secondary English language learners. Yayımlanmamış doktora tezi, Florida International University, Miami, Florida.

Abdallah, M., & Mansour, M. M. (2015). Virtual task-based situated language-learning with second life: Developing EFL pragmatic writing and technological self-efficacy. Arab World English Journal (AWEJ), Special Issue on CALL, (2), 150-182.

Alhajya, N. M., Alzaghamim, S. S., & Arouri, Y. M. (2018). The impact of virtual trips on the development of Arabic language listening skills among third grade students in Jordan. JOTSE, 8(1), 72-85.

Bainbridge, W. S. (2007). The scientific research potential of virtual worlds. Science, 317(5837), 472-476.

Borenstein, M., Hedges, L. V., Higgins, J. P. T. ve Rothstein, H. R. (2009). Introduction to meta-analysis. West Sussex-UK: John Wiley & Sons Ltd.

Tam metne ulaşmak ve tüm referansları görmek için tıklayın.