Review of: "Teaching the seasons of the year to kindergarten students using desktop virtual reality. A comparative study"

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Potential competing interests: No potential competing interests to declare.

Emmanuel Fokides and Antigoni Samioti present a compelling evaluation of dVR in the context of kindergarten students, in particular, because they are proposing to use dVR, a cheaper and more accessible technology than VR. However, a number of questions came to mind when I was reading their work. A primary concern revolves around whether variations in learning outcomes between the two tools can be attributed to the use of dVR or to the gamification of the task. In this sense, my question to the authors is aimed at understanding what distinguishes their proposal using dVR from a gamification approach? In other words, why do they believe dVR is the key factor explaining differences in learning outcomes?

On the other hand, I have doubts related to the adaptation of the response scales and the use of emoticons. Specifically, I question whether a happy face might be perceived as indicating greater immersion compared to a sad face when assessing the immersiveness of the activity. How to separate what each child feels from what is being asked. The latter is because the operationalization of the questions (using emoticons) is based on the assumption that children of this age possess a clear understanding of emotions, an assumption that may not necessarily hold true.

Furthermore, I suggest that the presentation of results could be enhanced with figures, preferably utilizing box plots featuring jitter points for each participant's response. This visualization method would facilitate an assessment of whether the data distribution is genuinely normal and whether the choice of a parametric test was appropriate.