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Abstract. This paper is a part of a project, which aims to design a forest simulator in virtual reality (VR). The goal of the present experiment was to test a multimedia, "principle" in order to apply it in an immersive live forest simulator. To investigate the influence of (de)-synchronization between narrated text and dynamic pictures in VR, we used a multimedia lesson about organic matter decomposition. The lesson was presented in the form of a non-immersive VR video The effect of five temporal contiguity conditions was tested on recall and comprehension, involving 83 high school participants, the delays between the narration and the animation were respectively: -6, -2, 0, +2, +6 seconds. Result showed a significant effect of temporal gaps in 12 years' children, thus extending previous research. Even a – 2 sec. delay was detrimental to learning, mediated by working memory; there was an asymmetry between negative and positive delays.

Keyword: virtual reality, temporal contiguity, learning, multimedia, eye tracking.