Excellent Educator, ISSN: 3048-9121 (Online) Vol. 3-6, March 16, 2026

Gestures Guide Students' Visual Attention

Summary of Haataja et al. (2025)

Excellent Educator, *3*(6), 5, 2026

Academic Insights

When teachers point, trace shapes in the air, or gesture during explanations, they may be doing far more than emphasizing words. This study used eye-tracking technology to examine how teacher gestures influence student attention during geometry problem solving.

Researchers discovered that gestures play a crucial role in directing where students look and what they focus on. Pointing and tracing gestures helped students notice important features of mathematical diagrams and guided their reasoning. The findings suggest that learning is not only verbal—it is also visual and embodied.

Apply This Now

Use clear gestures when explaining diagrams, graphs, or geometric shapes.

Add This in Your Lesson

Trace shapes or movements in the air when explaining spatial concepts.

Avoid This Mistake

Do not rely solely on verbal explanation when visual information is essential.

Keywords

teacher gestures, visual attention, mathematics learning, eye tracking, classroom interaction

Reference

Haataja, E. S. H., Koskinen-Salmia, A., Salonen, V., Toivanen, M., & Hannula, M. S. (2025). Student visual attention during group instruction phases in collaborative geometry problem solving. *Educational Studies in Mathematics*, 118, 387–407.
DOI: https://doi.org/10.1007/s10649-024-10337-1

Suggested Citation

Excellent Educator. (2026). *Gestures Guide Students' Visual Attention*. Excellent Educator, 3(6), p. 5.