International Summer Research or Residency Award

Chaeyeon Kim, 2025
Research in Mokpo-si, South Korea
Educational Psychology

I conducted an international research project in Mokpo-si, South Korea, focusing on embodied geometry learning among elementary students. Thirty students participated and engaged in geometric reasoning using two types of manipulatives: physical manipulatives (e.g., foldable 3D solids) and augmented reality (AR)-based virtual manipulatives using GeoGebra MR. Through gesture and discourse analysis, I am now investigating how embodied interactions with both physical and virtual tools support students' mathematical reasoning and conceptual understanding. This project will contribute to international scholarship on immersive learning and STEM education. It will be presented at the KAERA Conference to share insights with both Korean and American educational communities and will be developed into a journal paper.

I am deeply grateful for the opportunity to explore how AR technologies developed in the U.S. can be applied in rural Korean contexts and to examine how students' physical interactions and reasoning processes may differ.