

Virtual Intercultural Environments, Dual Language Classrooms, and SES Across Countries: Co-Editors' Notes

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We welcome you to the Fall 2025 Issue of Volume 28 of the *Educational Research and Development Journal*. This issue features three articles. The first examines how participation in a semester-long virtual research symposium affects U.S. and German doctoral students' research skills and intercultural competencies. The second investigates how effectively elementary teachers use mathematics instructional strategies in Chinese-English Dual Language Immersion classrooms. The last uses PISA 2022 data to analyze the relationship between students' socioeconomic differences at the student and school levels and their academic achievements in mathematics, reading, and science across Australia, Brazil, Finland, Mexico, Singapore, and the United States.

A virtual cross-cultural environment is considered useful for enriching students' intercultural learning experiences because it provides multidimensional content and real-time peer discussions among participants in various cultural contexts (Ogan & Lane, 2011; Shadiev et al., 2025). Such a learning environment is also valuable in developing research skills, as it provides access to diverse perspectives and ideas from instructors and students and connects them with research data and resources (Stagg & Kimmins, 2012). Thus, it is important to verify these assumptions among graduate students placed in such a virtual cross-cultural environment (Gallagher & Savage, 2013). In their mixed-methods study, Kissau, Wang, Roters, and Lenz examine these assumptions by analyzing surveys and semi-structured interviews with 31 doctoral students from a U.S. program and a German apprenticeship in teacher education during a semester-long virtual research symposium. They found that, contrary to the common assumption, participation in the virtual symposium did not enhance participants' perceptions of intercultural competence or increase their asynchronous interactions. In contrast, the symposium significantly enhanced their research skills, especially those related to research presentations.

With the growing number of dual language learners (DLLs) in U.S. schools, it is important to identify evidence-based teaching strategies that support DLLs' academic learning, including in mathematics (Lussier et al., 2025). Central to identifying effective instructional strategies is examining the characteristics of strategies that dual language teachers develop in their classrooms, taking into account their students' cognitive, memorization, affective, and metacognitive needs (Christian, 2016). Consequently, it is necessary to examine what instructional strategies teachers employ in their dual-language classrooms and the characteristics of these strategies (Downer et al., 2012). In an exploratory, observation-based study, Sung analyzes the mathematics teaching strategies developed by an elementary teacher in her Chinese-English dual-language classrooms, based on six weeks of observational data. The study revealed that the participant used metacognitive strategies, such as evaluating and attending to students' learning in classrooms, more frequently than other teaching strategies, including memorization, affective, and cognitive instructional strategies, which conflicts with the existing empirical understanding in research on dual language teaching.

Socioeconomically disadvantaged students and schools are found to perform worse on

standardized measures than their more advantaged peers across countries (Baird, 2012). School-level socioeconomic differences also had a greater impact on students' academic learning outcomes than student-level SES differences across countries (Marchant & Finch, 2016). However, little is known about how the relationship between SES differences and academic performance across content areas varies when socioeconomic differences at the student and school levels are considered across countries (Perry & McConney, 2010). Zhang, Giri, Pathirannehelage, and Baffoe examine how socioeconomic status at the student and school levels influences the performance of 15-year-old students in mathematics, reading, and science, drawing on the 2022 PISA data from Australia, Brazil, Finland, Mexico, Singapore, and the United States. The study shows that school-level SES has more consistent effects across all three subject areas than student-level SES in all five countries. However, country-specific analyses reveal that school-level SES effects are stronger in more affluent nations, such as Australia and Singapore. In contrast, student-level SES effects are relatively small in lower-income countries, such as Mexico and Brazil.

We hope this issue will deepen your understanding of how virtual cross-cultural environments, dual-language classrooms, and socioeconomic status across national contexts influence teachers' instruction and students' learning at the student and school levels. It will also expand your knowledge of the relationship among SES, teaching, and learning in virtual and dual-language environments from a comparative perspective. We hope this issue will serve as a valuable resource for you to examine similar topics in greater depth, breadth, and continuity.

Finally, we would like to thank all the reviewers for their thorough and constructive suggestions and comments. We also encourage all members of the Chinese American Educational Research and Development Association, as well as other professional researchers and practitioners, to contribute to the *Educational Research & Development Journal*. These contributions will make the journal a high-quality outlet for enriching our understanding of various professional education issues.

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