# Chapter 9 Dual Language Teacher Leaders Creating Equitable Spaces in a Cross–State Collaboration to Support K–2 Science

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### ABSTRACT

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This study draws on the expertise of dual language teacher leaders (DLTLs) teaching science, a linguistically and cognitively demanding subject, in the language native to Spanish-dominant and new to English-dominant students. Data come from a three-state project in which teacher leaders collaborated with faculty to develop resources to support young and multilingual students in K-2 science classrooms. Findings document DLTLs' Culturally and Linguistically Responsive, Sustaining Pedagogy approaches shared with the cross-state network, namely: promoting student agency, positioning students and families as valued collaborators, and leveraging the language and cultural assets of students and families. The DLTLs provided

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pedagogical leadership for participating non-dual language teachers and faculty learning how to leverage pedagogical strategies effective with multilingual learners for science classroom applications. These findings offer actionable pathways to expanding the influence of DLTLs to support science teachers' abilities to be more effective teachers to all primary students.

#### INTRODUCTION

With evidence supporting the benefits of developmental dual language programs (Goodrich et al., 2021; Rolstad et al., 2005), the emergence of K-12 Spanish Language Development Standards (WIDA, 2013) "encored to the reality of Spanish language instruction" (Guerrero, 2023, p. 253), and the recent publication of national standards for bilingual teacher preparation (Guerrero & Lachance, 2018), national conversations turn to such topics as the need to create transdisciplinary spaces for re-conceptualizing dual language teacher preparation (Guerrero, 2023). At the same time, the need to better prepare mainstream teachers to work with multilingual learners remains (Butcher, 2020; Okhremtchouk & Sellu, 2019; Samson & Collins, 2012). This is important as the number of multilingual learners constantly increases in the United States and worldwide; currently, over 5 million are enrolled in the U.S. public schools (National Center for Education Statistics, 2025).

To address these goals, the present study draws on the expertise of three dual language teacher leaders teaching science, a linguistically and cognitively demanding subject, in the language that is native to Spanish-dominant and new to English-dominant students – all at different proficiency levels in their oracy and literacy skills. The three teachers are part of a three-state collaboration of teacher leaders and university faculty developing resources for K-2 science while engaging in pedagogical leadership, advancing the science teaching and the science language integration expertise of all involved, with each team member bringing unique strengths to the project.

Evidence suggests that teacher leaders are strong advocates for students, garnering support from administrators, colleagues, and beyond schools (Bradley-Levine, 2018). Often mirroring the cultural backgrounds of many of their students, dual language teachers—teachers focal to the present study—are particularly adept at creating "spaces for access and inclusion" (Navarro Martell, 2022, p. 2151) for their students through *Culturally and Linguistically Responsive, Sustaining Pedagogy* (CLRSP; Gay, 2000; Ladson-Billings, 2001; Paris, 2012), a mind- and skill set much needed for *all* teachers. This is important, as research suggests that engaging CLRSP practices—including in science classrooms—supports students' engagement, 34 more pages are available in the full version of this document, which may be purchased using the "Add to Cart"

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