

Ecology-oriented integrated curriculum with Latino students in an urban middle school: An exploratory case study

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Setting

-A recently adopted curriculum model based on ecological concepts and inquiry

-Implementation of teacher-developed investigations of the local environment



Research question:
How does this instructional approach support Latino students in

learning science, English language skills, and about the environment?

Analysis

-Luykx and Lee (2007) framework for instructional congruence
-Content analysis using National Science Education Standards (2000)

Methods

-Classroom observations of a science teacher working with ten Latino students over 2 weeks
-Interviews and survey with teacher and students

Findings

- Latino students participated in bilingual language practice and scientific argumentation in English and Spanish
- Latino students tied cultural and community-based experiences to school-based investigations
- Shared scientific authority and student-driven action were components of classroom investigations of the local environment

Theory

Curriculum integration

Cultural congruency of instruction

Inquiry-based instruction

Second language acquisition