

## ABSTRACT

Cantu, Nereida N., Science Instruction in Texas: Instructional Models for 5<sup>th</sup> Grade Students. Doctorate of Education (Ed. D.), May, 2007, 108 pages, 17 tables, references, 142 titles.

Large numbers of elementary age students throughout Texas and more particularly in South Texas (Region I Education Service Center) perform poorly in science. State assessment data indicate that science is the subject in greatest need for improvement.

The Texas Education Agency reports that the 5<sup>th</sup> grade science results on state mandated assessments indicate the lowest passing rate of all subjects tested. Of the 285,701 fifth grade students who tested in English language science in 2005, only 70% of all students met passing standard. In Spanish language science, only 35% of all students tested, in the same year, met passing standard. These results support the urgency to focus on the improvement of science performance starting at the elementary level.

Science achievement of American students is far behind that of children in most industrialized nations, and even some third-world countries. In order to narrow the gap, they challenge educators to immerse students in the most direct possible experience of the content area. This indicates the need for a continuous effort to improve the instructional delivery of science at the elementary level, as currently science is typically taught in self-contained settings in elementary schools.

The predominant and more traditional classroom instructional model is the self-contained classroom. Although there is very little experimentation with the departmentalized concept, departmentalization has been implemented to improve science instruction at the elementary level and to respond to the technological developments of this increasingly demanding society.

The study proposes to compare departmentalized and self-contained instructional models and their effectiveness in 5<sup>th</sup> grade student performance in science.