Integrating Literacy Strategies In The Biology Classroom: Using A Generative Vocabulary Matrix To Improve Standardized Test Scores

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Abstract
This dissertation focuses on the development and implementation of an action research study that seeks to determine the impact of integrating literacy strategies in the biology classroom on standardized test scores. The teacher-researcher identified the problem of practice in her classroom after four years of observation of ninth-grade biology students. These observations led the teacher-researcher to develop, research, and investigate the following question: What is the impact of Larson's (2014b) Generative Vocabulary Matrix (GVM) in a high school biology course as demonstrated by students' performance on the South Carolina End-of-Course Examination Program? This dissertation orientates the research question from a theoretical perspective and provides literature to support the relevance of this work. Additionally, this dissertation provides details associated with the process of planning, developing, acting, and reflecting on this action research study.

Recommended Citation

Using this theoretical lens, we describe how an experienced classroom teacher used discursive moves to scaffold her students' appropriation of scientific argumentation over several weeks. As her prompting of their critiques changed, we noticed that the participation structures shifted from her position as a mentor to as a partner. Orchestrating opportunities for students to engage in scientific talk in the classroom is challenging for most teachers and even more so for novice teaching assistants (TAs) who typically instruct introductory science laboratories at the postsecondary level. Achievement was measured using a standardized reading literacy test. Use these top 10 learning strategies in your elementary classroom to engage, motivate, and enhance student learning. Studies show that children need to practice reading every day in order to improve their reading skills. Developing and teaching reading strategies to elementary students will help increase their reading ability. Often when students get stuck on a word they are told to "sound it out." While this strategy may work at times, there are other strategies that may work even better. The link contains a list of reading strategies for elementary students. Teach your students these tips to help improve their reading ability. 03. of 10. Word Walls. A Word Wall is a categorical listing of words. Do Standardized Tests Improve Education in America? Last updated on: 5/24/2019 | Author: ProCon.org. Standardized tests have been a part of American education since the mid-1800s. Opponents say the tests are neither fair nor objective, that their use promotes a narrow curriculum and drill-like “teaching to the test,” and that excessive testing undermines America's ability to produce innovators and critical thinkers. Read more background... Pro & Con Arguments. Pro 1. 93% of studies on student testing, including the use of large-scale and high-stakes standardized tests, found a “positive effect” on student achievement. According to a peer-reviewed, 100-year analysis of testing research completed in 2011 by testing scholar Richard P. Phelps. [138].