

Effectiveness of Re-Teaching for Struggling Students

Erin Gries, Sanofi-Aventis, Texas Instruments; Tucson High Magnet School
10th Grade Biology

Introduction

Students who fail unit tests are more likely to fail their classes and less likely to graduate from high school. There are several major differences between how people learn in high school and how they learn in the workplace. In particular, I noticed that employees have a persistence that is not as present in high school. When employees are learning new skills or content, they must keep trying to learn until they have mastered the skill. In high school, students who do not understand a concept just get passed over as the class moves to the next unit. In addition, employees in the workplace usually learn in small group settings. I implemented both of these changes, into my classroom to see if it would help to increase student learning.

The goal of this research project was to determine if it was effective to re-teach concepts to students who failed a unit exam. I taught a 10th grade Biology unit on evolution with 32 students using my regular teaching methods. Students who received less than a 70% on the unit exam met with me for 3 hours of small group instruction on evolution. The instruction included one on one discussion of key concepts, similar to the conversations I witnessed in the workplace. Then, the students took a similar unit exam again. During the intervention, I attempted to clarify conceptual misunderstandings by discussing the major concepts of evolution with the small groups of students.

Findings

I found that there was a significant increase in student learning as a result of small group work. All students showed an increased understanding from their first test to their second test. Additionally, the number of students who wrote about an incorrect statement signifying a misconception in their essay answer decreased slightly. This shows that if students are given time in a small group setting, they may be able to gain the understandings that they originally did not have. Readjusting a unit schedule to include small group instruction with select students may be successful for students and the teacher.

Plan of Action

In the future, I will work to design my units so that they include more one on one time for students who may be struggling to develop major understandings. Although this can be a challenge in a classroom, this research shows the effectiveness of providing this time and space for students. Incorporating daily small group discussions into the classroom will be even more effective. Making these changes will show students how perseverance can increase their level of learning in the classroom, which can have domino effects on their lives. With this change, students will be able to apply their perseverance for learning to their future careers.

