

Increasing Students' Academics Through the Use of Whole Brain Strategies

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Does the "Whole Brain Teaching" method impact students' academics found in an urban setting?

Introduction

- Students are engaged when teachers address each of them by addressing their whole brain, reaching the different learning styles, and incorporating physical movement into the urban classroom. When working with students found in this urban environment I found that students responded well when each child's needs were met through the use engagement in the classroom. Kopetz, Lease, & Warren-Kring (2006) explained that an elementary school in an urban environment can include students who come from single parent households with no male role models. High populations of immigrants that come to America are found in the urban environment. Thus, an urban school setting can include many different ethnicities, which bring language barriers where students can fall further behind in reading and their vocabularies will be diminished.
- As stated by Silverstein, A. L. (2013), "Whole Brain Teaching (WBT), also known as Powerteaching, is a classroom instructional and management system that utilizes a variety of methods to optimize student engagement, improve classroom management, and are rooted in the concepts of brain development" (p.1).
- Whole brain learning cannot be executed without first looking at the brain. McCarthy (1990) explained that students have major learning styles and hemispheric (right-mode/ left-mode) processing preferences.
- This research was designed to test the hypothesis that using whole brain teaching strategies can help students' increase their academics in an urban setting.

Method

Participants

18 elementary students aged 6-7

Boys	10
Girls	8
English Language Learners (ELLs)	18

Materials

18 pre/post individual exams were performed by each participant.

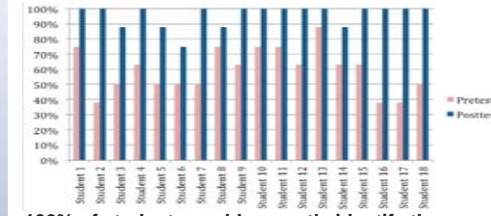
Procedure

- Participants completed a pre-test that included brain chants and gestures taught during a science unit on the states of matter. As well as, five perception questions about how they best remember information. Each participant was required to answer the questions to their best ability.
- After the data was analyzed, students engaged in a series of five lessons that included whole brain strategies. The lessons included whole brain strategies like "mirror me", "teach, okay", and other interactive activities.
- Participants completed a post-test that included four content whole brain chants that needed to be completed and three images that students had to identify as a solid, liquid, or gas. As well as, five perception questions about how they best remember information. Each participant was required to answer the questions to their best ability.



Results

1. The pre/post tests were compared to test the hypothesis. All 18 students' scores improved from pre-test.



•**100% of students could correctly identify the number of states of matter.** (55.56% of students could answer this on the pre-test.)

•**83% of students could identify that matter is anything that takes up space.** (16.67% of students could answer this on the pre-test.)

•**100% of students could identify the picture that represented a solid state of matter.** (83.33% of students could answer this on the pre-test.)

•**94% of students could identify the picture that represented a liquid state of matter.** (94.44% of students could answer this on the pre-test)

•**88% of students could identify the picture that represented a gas state of matter.** (66.67% of students could answer this on the pre-test.)

•**100% of students could correctly define a solid.** (33.33% of students could answer this on the pre-test.)

•**100% of students could correctly define a liquid.** (44.44% of students could answer this on the pre-test.)

•**100% of students could correctly define a gas.** (72.22% of students could answer this on the pre-test.)

2. The pre/post test perception survey's were compared to test the hypothesis.

•On the post-test 88% of students chose they best learn information by using hand/body gestures and chants. (77% of students chose they best learn information by using hand/body gestures and chants on the pre-test.)

Discussion

- The increase in scores of 100% of the students proved that the whole brain strategies incorporated in lessons like the use of chants and hand/body gestures positively impacted students' academics. This finding is consistent with that of Silverstein (2013) who discovered that these whole brain strategies when incorporated into the lessons create an engaging and child-centered classroom.
- It is hypothesized that using whole brain teaching methods like "mirror me" and teach, okay!" which incorporate hand/body gestures and chants increase students' academics in an urban setting.



References

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