



Research Paper

Perception of Secondary School Physics Teachers on Whole Brain Instructional Strategies (WBIS)

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Abstract

Young children need to be taught using effective interventions. A good teaching method is one that will growth children's motivation to learn, keep them conscious of their understanding and encourage them to reflect on what they learn, if this teaching is based on relevant and visible training. One of these effective instructions is Whole Brain Teaching (WBT). The participants were 30 secondary school physics teachers. The opinionnaire is analyzed using percentage. The learning competency will increase while implementing these strategies. This method is effective in enhancing the student's achievement in Physics. The effectiveness of WBIS had great results which were obvious on children's learning, affection and behavior. During and after the exhibition and application of the involvement, children maintained behavioral engagement. Prior to the intervention, the teacher took a long time trying to manage children.

Keywords: whole brain instructional strategies, Perception, whole brain teaching

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I. INTRODUCTION

Whole brain instructional strategy was developed in 1999 to keep students engaged throughout the lectures. It is a strategy where we educators use games and motivational methods to encourage students and help them express their thoughts. It is a high-energy and hyper-focused method to make students concentrate on their studies. One of the benefits of the WBIS methodology is that it continually engages students mind and keep them focused. As a result, they do not get involved in any activity that is not related to their learning.

Biffle (2013), referred WBIS as "Command Teaching" WBIS removes passive learning and improvements active student engagement.

This method as showed by Biffle (2013) makes learning fun. When children are fully involved and attentive during lessons, it is imaginary that they will become the most ready of them (Hannah, 2014). The philosophy of Whole brain teaching is surrounded by seven core techniques of teaching denoted to as the Big Seven (Elfiky, 2022).

The WBIS approach was comprised of seven teaching techniques .WBIS Basics provides a simple starting point for teachers new to Whole Brain Teaching. (Elfiky, 2022)

Many researchers and teachers (e.g. Battle, 2010; Brobeck, 2015; Calhoun, 2012; Lindstorm, 2010; Lockhart, 2016; Palasigue, 2009), when employed Whole Brain Teaching (WBT), reported positive results comprising significant academic improvements and increases in children's engagement in the classroom.

Engagement, participation, whole brain and principles can teach us about philosophy of whole brain teaching (Preslee & Prakasha, 2017).

It is said, "Everyone is bright to learn." It is additional accurate that each individual assumes the process of learning, since man is born with a brain that learns by instinct, so learning is innate and natural in human beings (Winters, 2001). This is where the theory of brain-based learning originated. In this article, we learn about this type of learning and review some of its applications in the learning and teaching processes (DEG Elfiky, 2022).

II. PURPOSE OF THIS STUDY

The purpose of this study was to investigate the Perception of Secondary School Physics Teachers on Whole Brain Instructional Strategies (WBIS).

III. SIGNIFICANCE OF THE STUDY

As literature, in our country, about Whole Brain Teaching (WBT) reveals that there is a dearth of research that employs this method in Secondary school student's learning, the present study contributes to the literature about Whole Brain Teaching (WBT) by gathering data from an survey design on the effectiveness of Whole Brain Teaching (WBT) with secondary children. This method is flexible and can be used for all age group including secondary children, as it helps to increase children's involvement in learning (Biffle, 2013). Children are given the opportunity and freedom to visualize, draw and act out their learning.

IV. OBJECTIVES OF THE STUDY

The present study takes the following objectives:

1. To find out the perception of secondary school physics teachers on WBIS.
2. To analyses the perception of secondary school physics teachers on WBIS.

V. HYPOTHESES

1. Whole Brain Instructional Strategies in Physics is not effective than activity oriented teaching method.

VI. METHOD

PARTICIPENTS

The participants were 30 Secondary School Physics Teachers from different Schools in Ernakulum District, Kerala.

INSTRUMENTS

1. Opinionnaire Scale: This scale was developed by the researcher for assessing the opinion about the secondary school physics teachers on Whole Brain Instructional Strategies.
2. Awareness Class

DESIGN

A pretest-posttest design, where the dependent variable is measured once before the treatment is implemented and once after it is implemented, was employed.

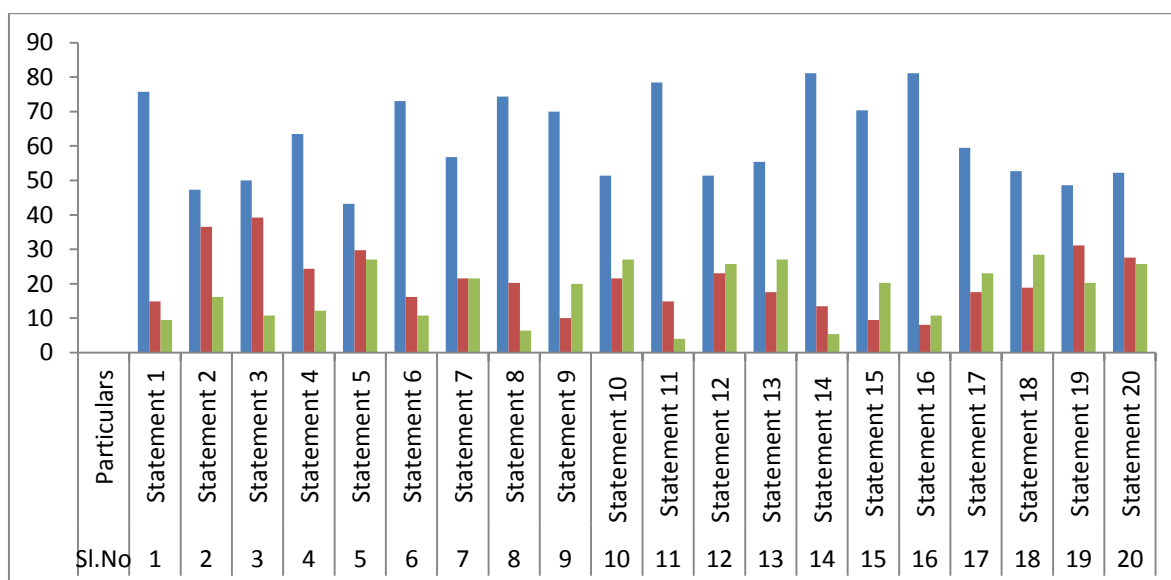
VII. ANALYSIS AND INTERPRETATION OF DATA

The main purpose of the study was to analyze the opinion of secondary school physics teachers on Whole Brain Instructional Strategies. The data collected have been analyzed statistically based on the objectives of the study. The statistical technique used was Percentage Analysis.

The details of the Percentage Analysis done to find out Perception of Secondary School Physics Teachers on WBIS for total sample are presented in the below table-

Sl.No.	Particulars	Percentage Corresponding Item		
		Agree	Disagree	Undecided
1	Statement 1	75.7	14.9	9.5
2	Statement 2	47.3	36.5	16.2
3	Statement 3	50	39.2	10.8
4	Statement 4	63.5	24.3	12.2
5	Statement 5	43.2	29.7	27
6	Statement 6	73	16.2	10.8
7	Statement 7	56.8	21.6	21.6
8	Statement 8	74.3	20.3	6.4
9	Statement 9	70	10	20
10	Statement 10	51.4	21.6	27
11	Statement 11	78.4	14.9	4
12	Statement 12	51.4	23	25.7
13	Statement 13	55.4	17.6	27
14	Statement 14	81.1	13.5	5.4
15	Statement 15	70.3	9.5	20.3
16	Statement 16	81.1	8.1	10.8
17	Statement 17	59.5	17.6	23
18	Statement 18	52.7	18.9	28.4
19	Statement 19	48.6	31.1	20.3
20	Statement 20	52.2	27.6	25.7

The graphical representation of the Percentage of Agree, Undecided and Disagree with respect to each of the 20 statements related to the Perception of Secondary School Physics Teachers on WBIS can be represented as follows:



FINDINGS OF THE STUDY

- Majority of Teachers (75.7%) opined that WBIS is an innovative proposal in Secondary School Level.
- 81.1% opined it creates a positive charged environment.
- 52.2% opined it provides corrective feedback.
- 52.7% opined that it provides passive and active learning opportunities.
- 48.3% opinion that this strategy provides novelty.

VIII. CONCLUSION

Based on the analysis, the investigator reached the following conclusions. WBIS is accepted as an innovative proposal in the School level. WBIS will helpful in ensuring the qualitative improvement of students learning process. It enhances student's achievement in physics. It provides highly active and engaging classrooms. Create a positive emotional climate in the classroom.

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