STUDY OF THE PERCEPTION OF THE IN-SERVICE AND PRE-SERVICE TEACHERS TOWARDS THE BRAIN-BASED STRATEGY AND THEIR CLASSROOM PRACTICES

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Abstract

This action research focuses on the effect of brain based strategy on the academic achievement of the in-service and pre-service teachers. During the plenary session for the in-service teachers, initially I found majority of learners were uncomfortable in handling the statistical technique for the item analysis for the achievement test. To solve this problem , I did an action research by applying a brain storming technique on the learners. I found that the brain based strategy has been very effective foe the in-service teachers. Here I perceived that the learners shows great enthusiasm in the topic and at last they succeed in getting their self assessment. Similar technique I used on Pre-service teachers (regular B.Ed students) by asking them to take an example whatever you gained during your teaching practices. I found that pre-service teachers are less efficient in handling the data as compared to the in-service teachers, may be because they have less experienced than in-service teachers .

Keywords:-Brain storming technique, Pre-service teachers, In-service teachers.

1) INTRODUCTION

During my M.Ed programme , one of my professor Dr. Shalini Yadav tried hard to develop self confidence in us with the help of the brain storming technique that she usually used during her lecture , I never felt bored in her class, her class was always an interesting. She usually spoke one punchline that- "unused knowledge in the brain is just like a stagnant pool". I inspired a lot from her and I perceived that this is one of the best teaching strategy that she usually used during her lecture. From then I wish to opt for the similar area of research ,if I get an opportunity for further higher education.

2) OPERATIONAL DEFINITIONS OF THE KEYWORDS:-

i)BRAIN STORMING TECHNIQUE:- It is a modern style of an instructional strategy. It works on the principal that a learner can learn better in a group rather than individually .It is also an problem and creativity oriented strategy.

ii)PRE-SERVICE TEACHERS: They are the pupil -teachers or the future teachers who are pursuing their B.Ed programme.

iii)IN-SERVICE TEACHERS: They are the working teachers. In my study they are the working primary teachers in Delhi MCD schools who are pursuing their B.Ed programme through distance mode (IGNOU).

3)LITERATURE REVIEW

i)Brain storming technique:

It has been developed by Osborn

in 1963.He mention the storming of a creative problem in front of the learners. He emphasizes the importance of divergent thinking in this technique.

Accordind to **Osborn**-" *Brain storming is using the brain to storm a creative problem and to do so in a commando fashion, with each stormier audaciously attacking a same objective. The crux of brain storming technique lies in the fact that the exercise generates a wide spectrum of solutions as the participants explore along new and possible fruitful lines of thought".*

As my study is based on the brain storming technique so I found this literature as a very useful for my execution".

ii)Theory of multiple intelligence: This model was proposed by **Howard Gardner** in 1983. This theory differentiates intelligence into specific modalities rather than seeing intelligence as dominated by a single general ability. He choose eight abilities :-

1 musical-rhythmic and harmonic- this area has to do with sensitivity to sounds, rhythms ,tones and music.

2)Visual-spatial- This area deals with spatial judgment and the ability to visualize with the mind's eye.

3)Logico-mathematical- this area has to do with the logic, abstractions, reasoning, numbers and critical thinking.

4)Bodily-kinesthetic- this area deals with control of one's bodily motions and capacity to handle object skillfully.

5)Interpersonal- this area characterized by sensitivity to other's moods, feelings,temperaments, ability to work in a group.

6)Intrapersonal- This area has to do with introspective and self reflective capabilities.

7)Naturalistic- ability to identify and distinguish among different types available in nature.

8)Verbal-linguistic- it refers to an individual;s ability to analyze information and produce work that involves oral, speeches etc.

In my study I had used logico-mathematical, spatial and naturalist modalities during execution.

4)TOOLS AND TECHNIQUES

To conduct my action research I had used observation as a tool and brain storming technique according to the requirement of my study.

5) DATA ANALYSIS AND INTERPRETATION:

In this action research a Qualitative Analysis was used for data analysis.

One day there was my plenary session for ignou's B.Ed. students (in-service teachers) on the topic – " Item analysis for Achievement test". Initially I had tested the entry level behavior of the learners . From that I found that majority of the learners were uncomfortable towards the statistical procedures because they do not having the mathematical background. Then I apply the brain storming technique systematically; firstly I asked them to use your real life experience that how you make your Achievement test paper while considering the individual differences in your class? Huge responses were elicited from them. Here I apply naturalist(one of the mode of intelligence given by Gardner 1983) and its brain-based approach to use real life scenarios or allow students to apply the environmental examples to the content (Jensen 2000) ; I asked them to do item analysis of your test paper by considering the marksheet of your class, by whom you will get to know how effectively you have prepared your achievement test. All the learners at that time seems to be very interested in knowing their self assessment. Then I apply logico-mathematical (mode of intelligence given by Gardner 1983) and its brain-based approach to break problem-solving task into smaller components and give students a time to systematically test solutions (Jensen 2000) .

I guide them to first calculate the item difficulty level and then item discrimination power of your own paper. Then I asked to tabularize your data and allow them to map out their data (Spatial: mode of intelligence given by Gardner 1983) .Here I perceived that the learners shows great enthusiasm in the topic and at last they succeed in getting their self assessment.

Similar technique I used on Pre-service teachers (regular B.Ed students) by asking them to take an example whatever you gained during your teaching practices. I found that pre-service teachers are less efficient in handling the data as compared to the in-service teachers ,may be because they have less experienced than in-service teachers . Jean Piaget (1964) argued that the learners learn through experience and that quality instruction involves providing students with holistic interaction with their surroundings. From that I infer that there is an need to introduce the pre-service teachers with the concepts of brain-based learning and their classroom practices.

6) CONCLUSION:-

From findings ,I conclude that brain –based learning has many implications for changing classroom dynamics that many researcher believes that brain- based learning is the best method to improve the academic achievement of the learners (Linda Davis 2004 , Jensen 2008, Rahmi 2001) , decrease off- task behavior and make the learner attentive in learning process (Dunn and Dunn 1992) and improve the overall classroom environment (shalini

yadav 2000). From all these studies I infer that it is a very effective teaching strategy that our pre- service teacher should be aware about that .

Davis Wacob (2012) suggested that in order to make an effective teachers, they must understand and accommodate the ' organ of learning' or the brain. He suggested in his study that teacher's conscious awareness and beliefs should match with their instructional practices , strengthening the need to increase teacher's awareness of brain-based learning practices.

7) IMPLICATIONS FOR FUTURE TEACHERS:

Through all this study I have perceived that there is the need to introduce our future teachers with the basic concepts of brain-based learning and their successful implementation in the classroom practices. According to me the concept of brain –based learning should be include in the pedagogical course of B.Ed, so that they can become an effective future teachers. As Jensen rightly remarked that an effective teachers teaches with the brain in mind.

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