A Study on Multiple Intelligences Based Pedagogy for Effective Learning Outcomes at Secondary Level

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Abstract

It is a universal truth that every child is unique, not even twins are alike because God doesn'trepeat his creation. Yet, our education system is such, in which offers similar ways of teaching and learning irrespective of ascribed and achieved leaning inclinations. Another point is that we all are the creation of God and God doesn't create waste. Even then the outcome of our education system classifies students in failures, average and bright. The theory of Multiple Intelligences classifies students in eight ways and assumes that every child is unique and productive. But this assumption can be met only if each child is taught as per his or her inclination and inherited strength. This paper suggests different teaching learning strategies as per the multiple intelligences of the learners. Although there are eight intelligence (Gardiner,1999), this paper entitled –Multiple Intelligences Based Pedagogy for Effective Learning Outcomes ― suggests teaching strategies for learners with linguistic intelligence, spatial intelligence, bodily kinesthetic intelligence etc. Besides, the outcome of the study will provide bases to government/policy makers for policy formation, decision making and forward planning, curriculum developers for incorporating appropriate pedagogy in curriculum, teachers in planning their learning experiences, and creating cohesive yet diverse classroom environment, researchers in exploring individual potential of learners and provide bases for their development, parents in nurturing their children in accordance with the natural tendencies.

Keywords: Intelligence, Multiple Intelligence, Pedagogy, and Learning Outcomes

Introduction

Gardner (1999) emphasized on _diversity of students'intelligence and acknowledged that every child possesses inborn creativity, but many children lose interests in learning due to rigid educational curriculum that is only focused on verbal/linguistic and Logical Mathematical intelligence. In order to develop each child's uniqueness, educators should beable to look at the inner world of children. Teachers need to be aware of these differences. Insensitivity of teachers and trainers toward these unique ways of thinking and learning may end up students being labelled as underachievers. To understand these diversities of students, Gardner (1993) identified seven different intelligences or seven different ways that a person can learn. They were 1 to 7 in the listgiven below. Later, Dr. Gardner (1999) proposed two more different intelligences to account for a broader range of human potential in children and adults. Following intelligences were suggested by Gardner.

1. Linguistic intelligence

2. Logical-Mathematical intelligence

3. Spatial intelligence

4. Bodily-Kinesthetic intelligence

5. Musical intelligence

6. Interpersonal intelligence

7. Intrapersonal intelligence

8. Naturalist intelligence

9. Existential and Moral intelligences (half)

The first eight intelligences were confirmed on following criteria whereas ninth one was discarded in absence of sufficient evidence based on the criteria given below.

Criteria of the Multiple Intelligence

1. Potential isolation by brain damage

2. Existence of savants, prodigies, and other exceptional individuals

3. An identifiable core set of operations-basic kind of information-processing operations or mechanisms that deal with one specific kind of input

4. A distinctive developmental history, along with a definite set of _end-state' performances

5. An evolutionary history and evolutionary plausibility

6. Support from experimental and psychological tasks

7. Support from psychometric findings

8. Susceptibility to encoding from a symbol system.

Armstrong (2003), recommended that ―Through creating educational experiences based on natural talents and gifts, teachers are more likely to increase opportunities whereby students can become actively engaged in learning experiences that are pleasurable, heightened or magnified. Such experiences can be highly motivational. This study will help students to learn more comfortably, reduce stress of learning and examination, reduce time, money and efforts wasted over irrelevant courses & classes, improve relationship with parents, teachers, friends and other children, develop confidence, identify his/her inborn talents and weaknesses, choose the right career path or course to study and develop his or her core competencies. If a teacher is having difficulty to teach a student, this theory suggests several other ways to teach, to facilitate effective learning at all the levels of school teaching. For example, if you are teaching or learning about the law of demand and supply in economics, you might read about it (linguistic), study mathematical formula that expresses it (logical-mathematical), examine a graphic chart that illustrates the principle (Spatial), examine the law in terms of your own body (e.g. when you supply your body with lots of food, the hunger demand goes down and vice versa), when there is very little supply, your stomach's demand for food goes up and you get hungry (Bodily kinesthetic) and/or write or find an existing song that demonstrates the law. Thus, this study opens a new arena of understanding regarding learners and teaching learning.

Knowing Multiple Intelligences Learners

❖ Linguistic Intelligence: Linguistically Intelligent learners are called as ―WORD' SMART They enjoy expressing themselves orally and in writing and love play, jokes, riddles and stories.
❖ Visual-Spatial Intelligence: Visual-spatially Intelligent learners are called as ―PICTURE SMART. They tend to think in pictures and mental images and enjoy illustrations, charts and maps.
❖ Bodily -Kinesthetic Intelligence: Bodily-kinesthetically intelligent learners are called as

    ―BODY SMART‖. They experience learning best through various movements, including mimicking, dancing and role play etc.
❖ Logical Mathematical Intelligence: Logical-mathematically intelligent learners are called as ―NUMBER /REASONING SMART‖. They display an aptitude for numbers, reasoning, logic and problem solving etc.
❖ Musical Intelligence: Musically Intelligent learners are called as ―MUSIC SMART‖. They respond to music and learn best through songs, patterns, rhythms and musical expression.

❖ Intrapersonal Intelligence: Intrapersonal Intelligent learners are called as ―SELF SMART". They are reflective, analytical and intuitive about self and how and what they learn.
❖ Interpersonal Intelligence: Interpersonal Intelligent learners are called as ―PEOPLE SMART‖. They like

to interact with others and learn best in groups or with a partner.

❖ Naturalist Intelligence: Naturalistically Intelligent learners are called as ―NATURESMART‖. They love the outdoors and enjoy classifying and categorizing activities. PEDAGOGY FOR STUDENTS WITH LINGUISTIC INTELLIGENCE

In order to draw effective learning outcomes, it is essential to teach learners as per the very nature of their intelligences. Hence, this paper suggests following teaching strategies to teach the students with linguistic intelligence, visual- spatial intelligence and bodily kinesthetic intelligence.

(i) Linguistic Intelligence based teaching strategies

a. Storytelling: Storytelling has traditionally been seen as entertainment for children in the classroom and outside as well. It can be used to translate concepts, ideas, and instructional goals to the students with the help of converting them into stories. Teacher may visualize the story at firstand then practice telling it to a mirror in the beginning.

(b)Journal Writing: Journal writing refers to making an ongoing written records of related aspects, specific area or domain. It can be writing on specific (i.e. related to certain subject or aspect) as well as general (i.e. whatever feeling do occur irrespective of subject and whenever they take place)domain. This journal work can be kept entirely private, shared only between teacher and student, or regularly read to the class. This strategy is heavily useful to the students with interpersonal intelligence as they work individually and use the journal to reflect upon their lives. This strategy also is the way to teach the students with spatial intelligence by allowing drawings, sketches, photos, dialogues, and other nonverbal data

©*One minute paper: the main point of today‗s lecture in one sentence. This will demonstrate thinking skills, observation skills, analytical abilities, alertness in classand finally contribute in learning.*
(d)Publishing: **In** traditional classrooms, students complete papers that are given graded, and then often thrown away. Many students exposed to this kind of routine begin to see writing as the boring process of fulfilling an assignment. This work can also be published in many forms such as they can submit their writing to a class or school newspaper, a city newspaper, a children‗s magazine, or some other publishing source that accepts student work. By providing students with opportunities topublish and distribute their work, teacher can make this point in a strong way. Students‗writing can also be published using desktop publishing software such as Microsoft Publisher, Print Shop, or Print Explosion and then bound in book form and made available in a special section of the class or school library. After publication, encourage interaction between the authors and the readers. When children see that others care enough about their writing to reproduce it, discuss it,and even argue about it, they become linguistically empowered and are motivated to continue developing their writing craft.

(II) Visual-Spatial Intelligence based teaching strategies:
(a)Visualization: One of the easiest ways to help students translate book and lecture material into pictures and images is to have them close their eyes and picture whatever is being studied. An application of this strategy involves having students create their own ―inner blackboard‖ (or movie or video screen) in their mind‗s eye. They can then place on this mental blackboard any material they need to remember: spelling words, math formulas, history facts, or other data.

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