## **The Key To Classroom Variation – 4 MAT**

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## Abstract

All the persons present on this planet differs. They are not alike in respect of looks, intelligence, personality or attitude. So is true in a class comprising of a teacher and 30 or so varied minds. The individual differences among the learners accounts for such variations, including the variations in learning styles. So one such teaching model that takes into account these variations is the Four Mode Application Technique given by Bernice McCarthy. The 8 steps followed accumulate the different types of learners present under a single roof.

Key Terms: Learning Styles, 4 MAT, Individual Difference.

The words of Ignacio Estrada, "If the child can't learn the way we teach, maybe we should teach the way they learn...", has posed a mark of interrogation for the present scenario of classroom teaching today and raised a thought that are we teachers up to our jobs? In any classroom, the teaching learning process shall vary from person to person. On one hand, are the students who are eager recipients, while on the other we have the students who are passive reticent and calm listeners.

Now, what is it that makes one student to jump out of his bench to learn, while few others reflect and absorb so silently. These differences are on account of the psychological phenomenon, "Individual Differences". A person differing from others is understandable, but how and why a person differs is less clear and is therefore a subject of the study of individual differences (Revelle, 2000). The recognition of such individual differences is the toughest job that teacher faces in the classroom. It actually requires a strong instincts and in depth knowledge of traits of these specific differences. In the absence of these attributes the teacher shall fail to fulfil their job to their best as they shall be denying the students such an environment in which their learning can flourish to their best.

So, understanding the differences in the students' learning styles is crucial task for educators, so that they are in a position to implement the best of their practice strategies into their routine activities, curricula and evaluations. Psychologist David Kolb first outlined his theory of learning styles in 1984. He believed that our individual learning styles emerge due to our genetics, life experiences, and the demands of our current environment. Kolb's four learning styles are diverging, assimilating, and converging, accommodating.

The conception of the 4 MAT model is grounded in the work of David Kolb, in addition to John Dewey's experiential education that propounded that all learning required the transactional interaction between the individual and the environment and Carl Jung's theory of Individuation wherein, he emphasized understanding the psyche through exploring the world of dreams, art, mythology, world religion and philosophy. He cautioned that modern people rely too heavily on science and logic and would benefit from integrating spirituality and

appreciation of unconscious realm. The concept of Brain Hemisphericity also contributed in the framing of 4 MAT. Brain hemispheric dominance is the use of the different sides of the brain in learning and listening patterns that is to mean, the consistence of using one side of the brain over the other. Herrmann (1995) "Brain dominance was expressed in terms of how we prefer to learn, understand and express something." "The Four Mode Application Technique", by Bernice MaCarthy in 1972 resulted to be a learning model that addresses to all the learners at the same time. It helps teachers organizing their teaching, based on differences in the way people learn.

4MAT Teaching Model organize the cycle of Experiential Learning Theory by taking brain

dominancy into consideration. This is why it separated each quadrant of the cycle in two steps which includes activities suitable for the right and also the left brain thinking mode (McCarthy, 1990).

## **The Process of 4 MAT**

The eight steps involved in 4MAT Model include;



1. *Connect* (Capture students' attention)

Here the learner is engaged in a concrete experience which leads to a search of prior knowledge and prior experience.

2. *Explain/ Attend* (reflection and analysis of the experience in step 1)

It is designed to add process judgment to the perceptions and dialogue generated in step one. In this step, the teacher engages student's reflection upon their existing level of knowledge and experience.

3. *Image* (links the personal experience to the concept under study)

Learners are encouraged to symbolize, in as many modalities as feasible, their present state of understanding of the subject matter.

4. *Inform* (Give learners conceptual and factual information)

Here, the emphasis is given for the analysis of verifiable concepts, facts, generalizations and theories. The role of the teacher is to present information and experience in complete and systematic ways.

- Practice (Learners practice using information to see "how it works" in the real world)
  Students now take the lead to apply what has been taught. The teacher's role here is coaching and assisting
- 6. *Extend* (learners add something of themselves by extending what is learned)

In this learning set, the student tests the limits and contradictions of what he understood. The teacher's role is to encourage students to take the application of learned ideas to more sophisticated, personal levels.

- 7. *Refine* (learner uses the information in creative way) Learner here critically examine the place of the newly acquired knowledge and experience in his or her existing world view. Working alone or preferably in pairs and triads, learners in this learning set edit and refine what they have worked.
- 8. *Perform* (learners perform the original example of their learning)

Finally, the learner returns to the place where he/she began, the self, and integrates the learning experience into a slightly different, personally held world view.

Each quadrant of the 4MAT Wheel has two divisions; one of them belongs to left hemisphere of the brain that is dominant with regard to language and logical processing and the other one belongs to right hemisphere that handles spatial perceptions. So, amongst the 8 steps of the the wheel: Attend, Inform, Practice And Refine belongs to left hemisphere and Connect, Image, Extend and Perform belongs to right hemisphere of the brain.

The researches have supported the fact that, 4 MAT when applied in classrooms have actually generated the positive results. Bowers and Shane (1987) studied the Effect of the 4MAT Model on Achievement and Attitudes in Science. Significant differences favoring the 4MAT group were found for overall achievement and on critical thinking questions. Winkerson and White (1988) studied the effects of the 4MAT Model of Instruction on Students' Achievement, Retention, and Attitudes. Students' attitudes towards the instruction and behavior was more positive in the 4MAT group. Nancy and Bibbins (1993) studied the effects of the 4MAT Model of instruction on the attitudes and achievement of elementary children in music listening lessons and the 4MAT instructional model offers a viable approach for listening lessons. Tuba and Ovez (2012) explored the effectiveness of 4MAT model of teachings in overcoming learning difficulties in the perimeter and area of circle and perpendicular cylinder among the seventh year students. 4MAT Model based teaching was effective in overcoming these difficulties, whereas, traditional method was not effective in overcoming learning difficulties.

Thus, to conclude, based upon multiple schools of thought of psychology, the variations in classroom learning can well be addressed with the help of McCarthy's Four Mode Application Technique. It has the capacity to address the various learning styles in the classroom and break the humdrums of routine classroom teaching.

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