ROLE OF MULTIPLE INTELLIGENCE IN DEVELOPING POSITIVE ATTITUDE TOWARDS MATHEMATICS

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ABSTRACT

"Anything that is worth teaching can be presented in many different ways. These multiple ways can make use of our multiple intelligences".

A small change in the mind can make a large difference in anyone's attitude. Intelligence is considered as very important ability of an individual. Gardner has propounded the theory of Intelligence and came up with eight independent types of intelligence that grow and develop. These intelligences have scope of developing like or dislike towards any activity. When coming to academics we can corelate those intelligences with the different subjects that are dealt. As we know Mathematics plays a vital role in anyone's life because it is very much related to our daily life. It deals with so many problems. Problem solving is one of the main activities in dealing with Mathematics. So Problem solving is considered as heart of the Mathematics learning which can be influenced by intelligence. Logical- Mathematical, visual-spatial and intrapersonal intelligence have possible effects in problem solving. By developing these intelligences problem solving ability can be improved with which the student develops positive attitude towards Mathematics.

Key Words: Multiple Intelligence, Attitude, Mathematics, Attitude towards Mathematics, Correlation between Multiple Intelligence and Mathematics.

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INTRODUCTION

Each individual is unique. We all have different abilities and physical features in the same way we differ in all aspects in our IQ also. When a child learns to play piano then the child is learning many skills. With the abilities received in learning piano the child can enhance in his or her academic skills and life skills.

Life skills mean those essential skills developed through a higher order thinking, that enable a person to perform effectively in his or her life, and thus become a socially acceptable and successful person. Majorly these life skills consists of communication, creativity, critical thinking, Information gathering, Empathy, and there are so many sub skills, social norms and so on. Developing of these skills in students from childhood must be taught to student teacher in their education process. The total history and future of the society or country is hidden in the four walls in the name of the class room. So teacher education must equip the teachers with skills to develop lesson plans focusing on the development of life skills and with the aid of multiple intelligence. By analysis of multiple intelligence the attitude of a student can be

found and properly guided towards mathematics.

MULTIPLE INTELLIGENCE:

Gardner has identified eight intelligence. These are in a culture are valued as having the ability to solve problem or to create a product in a particular way. The intelligence are like the talents and gifts in that there are many combinations possible. Intelligence can also be strengthened and how readily the improvement occurs depends upon the individual.

TYPES OF MULTIPLE INTELLIGENCES:

Linguistic

The ability to use language to describe events, to build trust and report, to develop logical arguments and use rhetoric.

Logical – Mathematical

The ability to use numbers to compute and describe the mathematical concepts, to make conjecture, to apply mathematics in personal daily life, to prepare patterns, logic aesthetics of mathematics, and to solve problems in design and modeling.

Naturalist:

The ability to recognize and classify plants, minerals and animals including rocks and grass and all varieties of flora and fauna.

Intrapersonal:

The ability to access one's own strength, weakness, talents and interests and use them to ser goals to understand and develop.

ATTITUDE:

Your Attitude, not your aptitude, will determine your altitude.

……..Zig Ziglar

Attitude can be defined as a learned evaluative response involving affective, cognitive and behavioral tendencies towards specific objects, persons or issues, which is relatively enduring and influences behavior in a known way. Simply it is a preconceived notion about people or objects that influences an individual response in a known way. An Attitude refers to beliefs about persons, things and events. It is generally agreed that attitudes are more susceptible to change than are values. It is generally agreed that attitudes are more susceptible to change. Sometimes we can say that attitude brings us rewards or helps in avoiding punishments.

MATHEMATICS:

National Curriculum Framework (NCF-2005) stated, "Access to quality Mathematics education is every child's right and it should be affordable and enjoyable to every child."

According to International Dictionary of Education, "Mathematics is a science of magnitude and number. Mathematics is the process of defining ideas, words, which we have to use to describe the world, understanding the simple universal rules which have been discovered by those before us, connecting facts, events and learning logical methods of combining the simple rules to understand and predict complex phenomena." The word 'MATHEMATICS' is used in two distinct and different senses, i.e. one as a method used to solve the problems of quantity, space, order etc. and the second as a set of laws or generalizations of truth, that are discovered.

Different dictionaries and mathematicians defined mathematics differently. Some of the definitions are given below:

- **According to Oxford Dictionary**, "Mathematics is the science of measurement, quantity and magnitude."
- **According to Locke**, "Mathematics is the way to settle in the mind of children a habit of reasoning."
- **According to Bacon**, "Mathematics is the gate way and key to all Sciences."
- **According to Gauss**, "Mathematics is the queen of Sciences and Arithmetic is the queen of all Mathematics."

In life adolescence stage is a period where there is a need for transition into adult stage takes place, the problems which occur during this stage should be properly handled otherwise those problems will show their impact in long term process in that individual, thus there is need to study at this stage. Students' attitude towards Mathematics and their Multiple

Intelligence plays an important role, so the present study focused on the correlation between Attitudes towards Mathematics of students specifically related to their Multiple Intelligence.

ATTITUDE TOWARDS MATHEMATICS:

Attitude towards Mathematics is an aggregated measure of liking and disliking of Mathematics subject by students. Many students start their early stage with a positive attitude towards mathematics but this become less positive during the school years with the increase of the difficultly level in problems. To solve this type of problems students need more analyzing power with thinking capability so this increases pressure among the student so they won't show more interest among these sums so children feel more difficult in mathematics subject when compared with all other subjects.

During the past decades tremendous efforts are being made in Mathematics text books and learning material has been produced. Emphasis was given to understandings, pupil's involvement and discovery call for more thinking such as problem solving and problem creating with their own abilities.

CORRELATION BETWEEN MULTIPLE INTELLIGENCE AND ATTITUDE TOWARDS MATHEMATICS:

Multiple intelligence abilities come under interdisciplinary education as it seeks to explore broad concepts or ideas across many disciplines, for the purpose of better understanding both concepts and their applications and meanings in various disciplines. So to focus on the analysis of finding multiple intelligence in the education system is important.

A strong education system is necessary precondition to underpinning India's efforts to enhance further the productivity and efficiency of its economy. India also possesses a large pool of highly educated and vocationally qualified people who are making their mark domestically and globally in science, engineering, IT, and research and development. But they make up only a small fraction of the population. To create a sustained cadre of "Knowledge workers," India will need to develop a more relevant educational system and reorient classroom teaching and learning objectives starting from primary school. The new system would focus on learning rather than on schooling and promote creativity. It would also improve the quality of education and provide opportunities for lifelong learning. All these are possible only with the help of developing positive attitude among the students. These students should have that zeal to develop their skills with their innovative thoughts. This can be done through the teachers, by knowing the students intelligence.

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