
EXPLORING MULTIPLE INTELLIGENCE - BASED EDUCATION AT PRIVATE SCHOOLS IN KARACHI

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ABSTRACT

The current study focused to explore multiple intelligence-based education at private schools in Karachi. The study employed the qualitative research methodology to seek the in-depth knowledge of the issue. Primary and secondary teachers who are working in private schools in DHA Karachi were the population of our study. Convenient and purposive sampling was employed and 10 teachers were selected for the interviews. For data collection, a semi-structured questionnaire was prepared. The main findings of the study were the strategies to cater each intelligence and the barriers to promote Multiple Intelligence in classrooms. The research suggests that teachers should implement a mix of hands-on activities, visual-aids, group work and discussions to cater students of different intelligences. Overcoming these obstacles requires ongoing professional development, collaboration with educators, the allocation of adequate resources to support the execution of strategies that address the multiple intelligence of students.

KEYWORDS

Multiple Intelligence, professional development, collaboration

INTRODUCTION

This study is aimed to identify the idea of teaching techniques incorporating several intellect theories, educators should be aware of and cater to the various learning demands of students with various intelligences in order to produce more productive and interesting learning experiences. A person may have various intelligences, including verbal, logical, musical, visual, bodily-kinesthetic, interpersonal, and

intrapersonal ones, according to Howard Gardner's hypothesis of several intelligences, which initially came out in the 1980s. However, in most of the schools it is felt that curriculum is not designed in such a way that provide teachers the opportunities to incorporate the teaching methodologies based on multiple intelligence. Hence, it results in limited career choice and lack of achievement in professional life.

LITERATURE REVIEW

Thambu (2021) opines that multiple intelligences at school level are important to be identified as it removes the barriers of traditional teaching and learning styles. It also helps in recognizing the diverse range of talents and abilities which are hidden. Students who possess multiple intelligence are usually not catered according to their needs. By addressing these multiple intelligences, teachers can implement teaching strategies that caters every individual's needs.

Intelligence

According to Ferrero et al. (2021), there are many different ways to describe intelligence. It is thought to be the capacity for identifying or inventing solutions to issues, which entails learning new information, having the capacity to produce valuable goods and render valuable services, and having the biopsychological ability to process knowledge that can be engaged in a cultural environment to address concerns important to a culture. He further explains that most people believe there is just one intellect, and when they think of intelligence, they usually think of the Stanford Binet IQ test, which measures a person's IQ based on their chronological age and level of maturity.

Multiple Intelligence

The basis for Gardner's theory of many intelligences is the notion that intelligence may be characterized as the capacity to address problems and generate results in a number of ways (Gardner, 1983). With the use of this theory, student-centered learning, career education, and personalized teaching may all be theoretically supported. The development of entrepreneurial skills and multidimensional assessment are also supported by it (Gouws, 2007). Human learning and understanding, according to Gardner (1999), are dynamic, ever-evolving processes. The environment on which we live is changing quickly. The teaching strategies currently incorporating in the educational systems must be restructured. It is our responsibility as educators to think about the best way to teach our children. Because they have developed a core set of intelligences, humans are intelligent beings. Each person possesses a special blend of these intelligences, according to Gardner, with some people performing better than others in certain areas. The multiple intelligences idea places a strong emphasis on the significance of identifying and fostering each learner's unique skills and talents (Gardner, 1999).

People individually absorb knowledge and understand it in various ways. People have the opportunity to improve learning environments that concentrate on students' areas of strength while broadening their range of thinking by incorporating Howard Gardner's theory of multiple intelligences into our instructional tactics (Gardner, 2020). Gardner (1999), says that there have been few advances in perspectives on human intellect throughout numerous generations. This philosophy has been prevalent in general education (Stier et al., 2020). When psychometrics and behaviorism first emerged, it was first thought that intelligence was a single, hereditary property. The paradigm in which teachers still instruct kids is this style of thinking.

The educational establishment was questioned by Gardner's Multiple Intelligence Theory in 1983. Based on earlier research, Gardner named eight intelligences, each at the core of psychological information processing frameworks (Weller, 1996). Students can acquire and refine a range of intellectual abilities through instruction that is tailored to the many intelligences' idea. According to Gaffney (1995), instructors may motivate students more by providing them with meaningful learning opportunities. According to (Christodoulou, 2009), a student's multiple intelligences and learning preferences are assumed to impact their frame of reference, interests, objectives, and choices. The study's objective is to understand the relationships between distinct intelligences and learning styles.

The Eight Intelligences

According to Gaffney (1995), To comprehend how the Multiple Intelligence Theory and the creativity are used, one must first have a very basic comprehension of the concept of individual intelligence. (also known as Information handling by humans). Nothing much could change a person's innate level of intellect, which was fixed at birth and a product of genetics. Gaffney (1995) symbolically expresses this circumstance: "You could sculpt your clay to take on various forms if intellect were a blob of clay. The outcome can "look" different even though each of you have the same amount. There was no disputing the reality that you could only use that lump of clay and couldn't acquire any more" (Gaffney, 1995).

This was taken for granted for several decades and formed the basis for Binet's intelligence tests. Nevertheless, educational testing was far more successful at predicting a child's academic achievement than it was at forecasting their improvement in me. There would be a significant shift in educational thinking: Gaffney highlights the following four crucial general aspects of Mi theory: Each of the seven intelligences is present in every person; most individuals can grow each one to a higher level; these intelligences constantly interact in intricate ways; and there are several methods to be intelligent in each of these areas (Gaffney, 1995). With the contributions of eminent people, Gardner depicts high end-states of these seven intelligences in his 1993 book

Building Minds.

According to Popham (1999), using standardized achievement exams to determine the quality of education is like taking a thermometer and gauging the air temperature with it. Tablespoons are used for measuring, not for determining how hot or cold something is. According to Christodoulou (2009), It is believed that a student's many intelligences and learning preferences all impact their frame of reference, interests, ambitions, and decisions. The intelligences are categorized as follows:

1. Verbal-linguistic intelligence: the aptitude to communicate, write, or understand a linguistic.
2. Logical-mathematical intelligence: the capability to value and use logical, abstract, and numerical reasoning to solve problems.
3. Musical intelligence: the capacity to create, convey, and understand messages based on sound.
4. Spatial-visual intelligence: which is the skill to perceive, change, transform, and produce spatial and visual pictures.
5. Bodily-kinesthetic intelligence: the skill to use all or a portion of a person's body for solving problems and producing commodities.
6. Interpersonal intelligence: the aptitude to recognize, respect, and cope with other people's feelings, opinions, and objectives.
9. Intrapersonal intelligence: the capacity to reflect yourself, including your emotions, wants, strengths and weaknesses, and to use this knowledge successfully to live a better life.
8. Naturalist intelligence: the capability to recognize important aspects of the natural environment.

Ronald et al. (2001) states that as educational experts and authorities thought that pupils' multiple intelligences can be developed from early years and gradually promoted to subsequent stages, the development of multiple intellects used to be concentrated on preschools and primary schools. Multiple intelligences may improve instructors' understanding of pupils in high school and primary school based on the distribution of their intelligence. As an illustration, using multiple intelligences might be used to identify gifted children and then give them the proper opportunity for advancement. Moreover, different intelligences may be employed to assist struggling pupils and implement better teaching strategies.

According to Popham (1985), although there are many other ways for students to learn, writing is essentially the only way they are evaluated. Nowadays, one of the only methods to evaluate kids is through standardized testing. Standardized tests have been criticized for not being the most accurate means of evaluating each student's capacity to exhibit particular talents. The multiple intelligences theory proposes eight different

teaching and learning styles. Teachers may guarantee that they utilize enough diversity in their activities in this respect by using their understanding of and use of the multiple intelligences to make sure that as much of a person's learning capacity is unleashed (Bas, 2008). According to Shore (2004), the teachers in Multiple Intelligence must provide instruction that is relevant to students from a range of backgrounds. By identifying students who excel in drawing, running fast, singing loud, interacting with others, having a strong sense of self awareness, and just collecting bugs, multiple intelligences enables educators to support every learner (Günüç, 2014).

Multiple Intelligence is specifically effective in relation to education and learner accomplishment since it aids in parents' and educators' understanding of education as a whole. Multiple Intelligences, according to Gardner (1994), encourages parents and educators to reevaluate their own beliefs and presumptions about student accomplishment and give other teaching methods a chance. This suggestion presents a compelling viewpoint on how to look at multiple intelligences in relation to primary pupil performance. In order to effectively teach students, it is crucial for classroom teachers to take their requirements into account. Too often, many intelligences are ignored in the classroom. The intellectual ability of a pupil is described by several intelligences. Instructors should prioritize abilities and interests of the students into their instruction. Students are unable to learn the content efficiently when they are not interested in the instructions (Günüç, 2014).

Curricular Activities

As indicated by the majority of a range of abilities experts, MI-based lessons have a considerable positive impact on students' learning, both within and outside of the classroom. Bas (2016) discovered that the academic success of pupils is significantly impacted by instruction based on the Many Intelligence hypothesis. The improvement of students' problem-solving skills is still a challenge for instructors and students, according to Jimenez (2020). Students who received education using a Teaching Method based on Many Intelligences outperformed those who received standard teaching, according to research by Thambu (2021). According to Naeini (2015) study, the program based on Many Intelligences significantly improved the respondents' speaking and listening abilities.

According to Kasmahsari (2015), learning occurs best when students may participate in activities that play to their strengths. Educators are aware of the variety of understanding pathways. Teachers in a Southeast Asian nation include numerous intelligence methodologies and aspects into their everyday lesson plans. Additionally, Naeini (2015) discovered that the multiple intelligence theory's incorporation can enhance learners' ability to listen. However, as educators incorporate all types of intellect rather than simply the most exceptional, the effect will be far more noticeable.

Last but not least, Bas and Beyhan (2010) demonstrated that project-based learning approaches backed by various intelligences produce more effective pupils. These pupils are also more motivated than those who receive an education through conventional teaching techniques.

Conventional education has been intellectually centered, concentrating on verbal and logical mathematical intelligences, and pupils who are not adept at it are overlooked and underutilized (Gardner, 1983). According to Gardner (2006), each person differs in their aptitudes, learning preferences, and areas of interest, and these variations must be valued and encouraged in educational settings. It would be necessary to create a new learning scenario if this were to be taken into consideration. While the educational standard need not be decreased, it may be changed to incorporate assessments for a wider range of students. The idea of multiple intelligences serves as a tool for teachers to reorganize the teaching-learning process so that students become active participants in learning via the use of activities that are suited for each student's level of intelligence. Learning via experience and active participation, as well as allocating teaching assignments in accordance with students' capacities, are both of the academic fields that the notion of numerous intelligences has the highest point. Gardner heavily relied on brain research and neuropsychology while proposing the aspects connected to the multiple intelligence theory and scientific evidences. Therefore, it is clear that the hypothesis is a terrific one. According to brain studies (Selçuk et al, 2003), each intelligence type is exclusively active in a specific mental area. According to the multiple intelligence's theory, each person has one or more mental spaces that are distinctively their own and that they learn best inside.

According to Morris (2023), knowledge may be accessed via a variety of learning contexts, and it can affect how appealing and interesting a topic is. The creation of an active learning environment for pupils is greatly aided by scientific education that is based on the many intelligence's idea. The primary tenet of the many intelligence's idea is that each student has a unique range of intelligence. It is essential to apply teaching strategies and approaches based on the multiple intelligence hypothesis to make sure that students can connect the material they have learned. The theory's most significant effect on the teaching process is to boost instructors' creativity while coming up with lesson plans. Since educators and organizers inevitably broaden their toolset of techniques and tactics when they create tasks for every intellectual kind, often disclose unique and cutting-edge techniques. Cooperation amongst the instructors, whose subject-matter specialties are radically unlike from one another, is conceivable as many intelligence kinds are utilized in classroom activities throughout that procedure. For instance, while organizing a musical intelligence exercise, one must consult with the music teacher and ask for their guidance (Demirel, 2000).

Relevance of Howard Gardner's multiple intelligence theory in today's teaching

Numerous effects of Gardner's idea of various intelligences on educators, some of which are out of a teacher's control. All intelligences ought to be treated equally because they are all a component of the human being, according to Brualdi (1996). Yet there is a basic issue here. In some ways, teachers depend on society to equip them with a moral code. The curriculum offers a structure for what should be taught and frequently establishes time restrictions for when it should be taught. As a result, teachers in many schools find it difficult to completely apply the multiple intelligence hypothesis since entrance exams for universities and other levels of schools rely heavily on examinations based on logical, mathematical, and verbal-linguistic skills. This is more challenging in certain nations than others. For instance, in the United Kingdom, the government establishes the national curriculum and even creates lesson plans to support instructors. In Thailand, however, a curriculum that has been authorized by the government's Department of Education may be used in schools, and the way that lessons are taught may be quite flexible. Despite the fact that language and arithmetic have traditionally received greater attention in school, Brualdi (1996) suggests that we may have lost out on a number of talented singers, dancers, and painters whose intelligences were underappreciated and neglected by the state system. In other cases, individuals with abilities and aptitude in other disciplines may have been denied access to an education that would have enhanced their traits, while struggling students in school might just be misinterpreted. Academic achievement is typically what characterizes the achievement of a school, despite the fact that instructors should consider all forms of intelligence to be equally essential. While they are evaluated on standards that are highly controversial, this may be difficult for certain intellectual institutions to do, particularly in the beginning.

According to Brualdi (1996), another significant implication of the idea is that given the same importance of all intelligences, a wider variety should be taught. In order to attain a better balance, this would suggest that the curriculum has to be revised. Again, a teacher will find this to be quite challenging, and it truly pertains to people who decide on the curricula for schools. Without political backing, properly implementing the multiple intelligence hypothesis in countries with mandatory curricula would prove to be exceedingly challenging. Hence, there is little chance of achieving a scenario in which all intelligences are taken into account equally without a genuine shift in the direction of the curriculum. There are ways to include certain multiple intelligence strategies into the classroom despite this prejudice, though.

Intelligence Testing

The Intelligence Quotient Test, or IQ Test, is the most widely used intelligence assessment tool. The relationship between mental and chronological ages is theoretically represented by the IQ test. The main areas of emphasis on this test are "

logic and language recall, arithmetic reasoning, and understanding of logical progressions" (Gardner, 1999). The 18-word intelligence vocabulary has come to replace this score, which was once considered to be the key indicator of intellect. Based on this subjective test, a person may be judged to have inferior intellect if they performed brilliantly in fields like physics, literature, or music but had a low IQ. The IQ test has declined in popularity over time, but it is still the most commonly accepted indicator of intellect. IQ testing is the most prevalent method of determining intelligence (Nagdy, 2016). The most frequent terminology used to describe a person's "intelligence" globally is their IQ score. Even though this may not be the best indicator of a person's true IQ, the reason this test is still the most frequently accepted is because of its familiarity and recognition.

According to Gardner (2008), a school that includes the spirit of MI theory should have the following three basic elements:

1. Pupils are given the chance to participate in activities that span a variety of intelligences or domains.
2. Teachers have a solid understanding of their pupils, particularly their abilities and passions.
3. Students participate in the curriculum development process (Multiple Intelligence Institute, 2008).

Gardner (1983) claimed that expertise in particular areas is more important than having rudimentary knowledge across a wide range of topics. He cited other nations that have adopted the idea of mastery and used it in a student apprenticeship program. Students may truly develop their abilities and expand their knowledge by participating in an apprenticeship-style program. He argued that instructors still need to assist pupils in comprehending the reasons behind events and how they apply to their daily lives, even if an apprentice program is not instituted. Students will better grasp not just the truth of the world, but also the reality of their own lives, by activating background information, creating personal and real-world connections, and applying knowledge.

Multiple Intelligence and Different Learning Styles

The degree of motivation, the methods used in teaching and learning, the way in which each student reacts to different learning settings, and the methods used in the classroom vary across the board. Learning how people learn from their environments is becoming increasingly important to educators across all subject areas. Teaching methods, student academic progress, and learning outcomes are all impacted by how well students are learning (Jena, 2018).

Teachers see varied learning preferences in their students in accordance with Gardner's many theories of intelligence. Individually student utilizes according to their dominant intelligence and chosen learning style, individuals apply what they have learnt in the

classroom. Gardner's multiple intelligences hypothesis (MI) states that integrating dominant intelligences with learning styles enhances students' learning processes (Sener & Cokcaliskan, 2018). The multiple intelligence hypothesis places a strong focus on active learning, both as a methodology and as a process. According to Calik and Birgil (2013), educating may help pupils enhance their strengths and strengths by employing their chosen education method.

Students with various linguistic and mathematical intelligences struggle academically because the inclusion of extra intelligences in the curriculum prevents them from realizing their potential. Additionally, sometimes their skills and talents are kept a secret (Campbell et al., 1996). Students may create a customized educational experience and showcase their skills, skills, when teaching and learning work together, the principle of multiple intelligences is applied to both the learning process and the learning result. (Berrington, 2004).

Multiple Intelligence and Assessment

Berrington (2004) opines that in most of the education systems the assessment is done only on the basis of two intelligences; verbal or linguistic and logical or mathematical. The academic ability of a child is also determined on the basis of the above two mentioned intelligences (Tsai, 2016). Students with different intelligences other than linguistic and mathematical usually fail or secure lower marks in their academics due to which their abilities and talents remain undisclosed (Campbell et al., 1996). Gouws (2007), states that now a days, teachers want to teach children according to their intelligence other than only focusing on verbal and logical intelligence. In order to apply teaching methodologies in the classroom that incorporate multiple intelligence theory, the teacher should consider adaptability of children's differences.

Several Intellect and Profession Options

Children with many intelligence possess exceptional talents and professional opportunities (Armstrong, 2009). According to Lenaghan (2000) as cited by Shiruffudin (2010), the interpersonal intelligence provides children the opportunity to create their career as an educator, communal speaker and leader. Information technology professionals and media professionals need to have good communication skills which leads to verbal intelligence. A sports person whether on a field or a commentator does not require to have high IQ but he or she should be an expert sportsperson, skilled and well-informed of athletic (Reggio, Murphy, & Pirozzolo, 2002). Consequently, students should take some extra-curricular classes according to their interest along with the academics (Armstrong, 2012; Kerka, 2012). Armstrong (2006), states that musically intelligent person should polish his or her musical skills in order to persue the career in music industry. Bodily kinesthetic- intelligent student should focus on gymnastics and drawings. Whereas, the mathematical or logical

intelligent students use reasoning, critical thinking, problem solving skills to polish their intelligence in an individual way. Students with visual intelligence are more interested in creating 3D models, solving jigsaw puzzles and understanding charts and graphs (Kariuki, 2011). Students with naturalistic intelligence have innate love for nature due to which they enjoy spending time in botanical gardens, they work for nature conservation and show interest in environmentally friendly courses such as geography, zoology and botany. Intrapersonal intelligence among students make them understand reflect themselves, including their emotions, wants, strengths and weaknesses, and to use this knowledge successfully to live a better life (Wilson, 2012).

As the literature review of the current study reveals that there are multiple intelligences present among students and the teachers try to implement teaching methodologies which cater the needs of children having multiple intelligence but the traditional curriculum being followed in our schools which mainly focusses on linguistic and logical intelligence only (Gouws, 2007). Moreover, our examination system is based on standardized testing criteria which seems focusing mainly on reading and writing for 3-hours examination, so the question arises how are students with multiple intelligences taught and assessed in such education system.

RESEARCH OBJECTIVES

1. This study aims to seek the teaching methodology based on multiple intelligence at private schools in DHA Karachi.
2. To unfold the barriers faced by the teachers to practice the teaching methodologies based on multiple intelligences.

RESEARCH QUESTIONS

1. What are the teaching methodologies, curricular and co-curricular activities and assessment systems based on Multiple Intelligence (MI) being used at private schools in Karachi?
2. What obstacles do exist in implementing the multiple intelligences-based strategies in schools?

RESEARCH METHODOLOGY

The current study has employed the qualitative research design for an in-depth data on this important issue. Semi-structured questionnaire was prepared to collect the relevant data. Detailed individual interviews were conducted to seek the barriers and challenges faced by the teachers in implementing multiple intelligence based teaching strategies. To comprehend perceptions, suggestions or practices the alphabetic data was collected and evaluated. The findings would be used to generate new notion for the study.

Population

A population is the group of individuals containing common characteristics or features (Thomas, 2020). Primary and secondary school teachers who are working in private schools in DHA Karachi were the population for this study.

Sampling

Sternberg and Kibelsbeck (2021) described that sampling is a method of selecting a subsection of the population to make the interpretations from them. This method is also considered as time-saving and cost-effective and hence used in various research designs. Convenient and purposive sampling technique was used for data collection.

Sample size

It is not possible to examine the whole population; hence we take a small part of the population to conduct a survey. That small part of the population is called sample (Hayes, 2021). Initially 10 teachers who are working in private schools were interviewed in detail. The interviews were recorded, transcribed and analyzed for themes and sub-themes. More interviews were decided to be conducted as per the research requirements.

Research Tool

A semi-structured questionnaire was prepared for the interviews of teachers. The first question was to check the understanding of teachers about multiple intelligences. The second question explored teacher's perception about the belief that every student possesses multiple intelligences. If so, please give explanation. The third question was devised to identify the teaching methodologies to observe the different intelligences of the students. The fourth question was created to understand how the teachers incorporate the concept of multiple intelligences into their teaching methods and classroom activities.

The fifth question was developed to know what strategies were being used by the teachers to cater to the different intelligences of their students. The sixth question was planned to discover the teachers' opinion about the benefits of teaching with multiple intelligences. The seventh question was derived to ask teachers if they had noticed any changes in their students' academic performance or attitudes towards learning since they began incorporating multiple intelligences into their teaching methods. The eighth question sought the challenges faced by the teachers when incorporating the concept of multiple intelligences into their teaching methods. The ninth question was formed to identify how do teachers assess the progress of their students in each intelligence area. The tenth question was developed to know whether teachers' feel that there is a need of any specific resources or training that would be helpful in further incorporating multiple intelligences into their teaching methods.

Data Collection

The method of collecting and examining exact facts from several sources to discover responses for the problem statement, is known as data collection (Hasnidar et al., 2020). The individual interviews of the teachers were conducted for about seventy minutes as an average. The interviews were recorded, transcribed and analyzed for themes and sub-themes.

DATA ANALYSIS AND FINDINGS

Data analysis is the procedure of reviewing, examining and transcribing the data to discover beneficial information that can be used to draw logical conclusions (Asmorowati et al., 2021). Qualitative research techniques were used for data analysis. At first, the data were recorded and transcribed. The data were analyzed for finding themes and sub-themes. Qualitative research techniques will be used for data analysis.

The data was collected and transcribed for themes and sub-themes. The interviewees discussed different things in detail and the following themes and sub-themes emerged:

Every individual is different

One of the teachers said, *“Every child possesses a unique ability, strength or hidden talent.” Sometimes there are more than one type of intelligences found in a child. If a child is fluent in linguistics but it is not necessary, that same child has a good understanding of mathematics”.*

Identify children’s intelligence through their interest

A teacher shared, *“there are different types of children in every classroom. But the role of a teacher is to identify their interest and cater them according to their needs.”* She also shared her personal experiences by discussing some of the cases in her class like she said that some children have strong command on mathematics so they answer mental math questions quickly but some children sometimes struggle in solving word problems because they cannot comprehend it properly due to their linguistic issue. On the other hand, there are some children who always try to escape from language, mathematics or other theory classes but when it comes to art and craft then they are the best ones who create marvelous work in this field. Same happens with the children who are interested in sports, they never focus on studies but on sports, they prove themselves as the best athletes. It reveals that every child is unique and has a different strength which require different teaching strategies.

Diagnostic Test

Another teacher informed that at her school, in the beginning of the academic year a diagnostic test has been taken which is based on Mathematics, English and Urdu. In order to check child’s interest and his progress in each subject. She also mentioned,

“There is a lack in this system because we have some students who are not good in all of these subjects. Although they have interest in arts, music or sports.” There is a need to design a curriculum in such a way that would diagnose every child’s interest and needs; and teach accordingly.

Strategies to cater each intelligence

Most of the teachers emphasized on planning a lesson that caters every child’s needs. One of the teachers shared, *“The lesson plan is divided into four parts, so I try to inculcate such activities which cater at least three to four intelligences. For example: I plan group work or group discussions for children who possess interpersonal intelligence. I also plan nature walk or field trips for children who possess naturalistic intelligence. Show and talk activities are planned for children who possess linguistic intelligence.”* It shows that lesson planning is an important component of teaching methodology which covers the strategies that caters students with different intelligences.

Barriers to promote MI in classroom

One of the teachers expresses about the difficulties or barriers in inculcating with the vision of MI, *“It is very difficult to cater each intelligence in 40- or 45-minutes lesson. So, they try to use teaching strategies in their lessons which cater the types of intelligences own by most of the students in their class.”* It means that time is an important constraint in implementing the teaching techniques for the teachers to deal with students having multiple intelligence. Some activities can be:

- a) Video watch activity: In every class there is a large number of spatial or visual learners so video watch activity helps them understand the concept easily.
- b) Differentiated Task: It helps different intelligences like project work can be assigned to a group of students in which each student will have the opportunity to choose task according to his/her interest. Although after doing much effort there are still some intelligences which remains unfocussed for the whole week as we have limited time and we have to cover the syllabus with in the given time period.

Curriculum that caters MI

Curriculum is the backbone of all teaching and learning activities at any level and educational institute. It provides opportunities to teachers and learners to achieve the targeted levels. It is not about just a course but all curricular and co-curricular activities for learners. On asking about curriculum one of the teachers shared the difficulties regarding her course, *“I am teaching my students about 21st-century skills but when I try to implement those 4C’s (Communication, Collaboration, Critical Thinking, Creativity) in my classrooms then I realize that the curriculum is designed according to old school teaching style. Where I have to complete the syllabus before exams because exam is based on standardized testing in which each child will be assessed on*

the same specific intelligences.” Most of the teachers mentioned that the curriculum is not mainly designed as per the idea of MI. She further shared that the loop holes present in the curriculum where the teachers want to focus on MI but when they try to implement such activities which cater MI then the curriculum does not support such activities.

Assessment system to assess each type of intelligence

Assessment system is very important to ensure the achievement of learning objectives in any curriculum. A teacher explained, *“I use different AFL’s (Assessment for Learning) tools to check student’s understanding according to their intelligence but it is only for Formative or day to day assessments. But I do not have any Summative Assessment (Mid-term or Final-term exams) criteria to assess students with multiple intelligence.”* It shows that there is a need of an assessment system through which teachers can assess students according to their intelligences so that they do not have to give the same standardized exam for their promotion to the next class.

Professional Development and Counselling

Almost all the teachers mentioned, *“Emphasis on child’s Multiple Intelligence helps them in deciding their path through which they can make up their minds and choose their future profession from a young age. Due to which their vision will be clear and they will try to work hard to achieve their aim.”* Some of the teachers also suggested that the career counsellors should be appointed in schools to guide children about the choice of their career according to their intelligences.

Lack of awareness about new emerging professions

One of the teachers highlighted a very important point which has to be discussed, *“There are students who have good music sense and they want to become musicians. Some have strong interpersonal intelligence and they want to become anchors or news caster. Some are good in sketching or painting and they want to pursue their careers in that field. Such students should be counselled, trained and groomed for their specific goals as per their intelligence. A school should provide them the opportunities to practice their talents.*

Apart from this, some parents also pressurize their children to divert their interest and choose some other careers due to status symbol or they want their children to take over their own family business. In such cases, parental counselling should also be done by the school to create awareness about the new emerging talent and professions.” It reveals that parental counselling is also very important to promote the talent of the students with multiple intelligence so that they can flourish and hence become a productive citizen of the country.

Teacher Training to implement MI

Almost all the teachers agreed when I asked them about the teacher training to implement the concept of MI in their classrooms. One of the teachers says, *“We know what is MI but we all need training to learn more about how to implement it effectively in our classrooms to achieve desired results from the students of multiple intelligence.”*

DISCUSSION

According to the findings, I concluded that most of the teachers are very well-aware of Multiple Intelligence but the curriculum of school often fails to provide teachers the opportunities to practice teaching methodologies that incorporate multiple intelligence. Overcoming these obstacles requires ongoing professional development, collaboration with educators, the allocation of adequate resources to support the execution of strategies that address the multiple intelligence of students.

RECOMMENDATIONS

The government, specially the education department should design the whole curriculum based on multiple intelligence among students so that more focused, well trained and groomed youth may be prepared for different fields.

Schools should understand that intelligence is not limited to logical or linguistics but every individual possess different ability such as interpersonal, intrapersonal, naturalistic, spatial, musical and kinesthetic. These intelligences should be recognized by the school and catered through different teaching strategies.

Schools should adopt the curriculum designed according to multiple intelligences. Teachers should be allowed to implement the teaching methodology that caters the needs of each student of different intelligences. Teachers should implement a mix of hands-on activities, visual-aids, group work and discussions to cater students of different intelligences.

After school, courses should be designed according to the students' interest. So that, students can choose any course of their interest that can be helpful in choosing their future profession.

Schools should emphasize on sports activities and should organize sports' events to encourage students who possess bodily-kinesthetic intelligence.

Career counsellors should be assigned in every school that provides career counselling for the students to make a better choice for their future occupation.

Teachers should be given the instructions to assess students beyond the traditional assessment techniques. Assessment methods should be implemented that caters multiple intelligence which includes portfolios, project-based evaluation, performance-based assessment and self-assessment.

Schools should promote the inclusive environment in which students with different

and diverse intelligence and ability should be respected by the other students and teachers.

Parents should be trained to deal with students of diverse intelligences. Schools should organize workshops to educate parents by providing them guidance on how they enhance their child's multiple intelligences at home.

Schools should provide workshops and resources to the teachers to identify students' multiple intelligences and how to cater them accordingly in the classrooms.

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