



MULTIPLE INTELLIGENCE THEORY AS A PEDAGOGICAL PROCESS AND ITS RELEVANCE IN NEW EDUCATION POLICY 2020

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Abstract

The concept of Multiple Intelligences originates from psychology. The Multiple Intelligences Theory explains that the human Potentials are beyond the IQ score. Howard Gardner wanted to describe all the different aspects of human insight connected to the performance in specific areas. His theory implies that there are several intellectual abilities that influence our understanding, how people construct different ideas and things in their mind, and how people project them to show how they have understood the world. The core objectives of the holistic development of learners with the multi-disciplinary approach of education of NEP 2020 resonate with Gardner's 'Multiple intelligences' theory and its application in the educational field. This paper focuses on the importance of multiple intelligences theory by gardener and its relevance in NEP 2020, its emphasis on the pedagogical strategy in achieving the objectives of NPE 2020 and development of 21st century skills like, life skills, collaboration, information literacy, self-awareness, problem solving, communication skills, critical thinking, and creative thinking etc. MI theory and NEP 2020 emphasizes on child-centred pedagogy which will cater the needs of each individual, which are engaging and enjoyable. In the present context the multiple intelligence theory introduced by Howard Gardner in 1983 has come to greater relevance to achieve the various aims and objectives set by NEP2020.

***Index Terms* -Multiple intelligences, NEP 2020, Pedagogical, Relevance.**

Introduction

The term intelligence derived from the Latin term *interlegere*, which means to pick out or separate, Intelligence is considered to be a universal ability to gain and apply knowledge and skills. Intelligence has been defined in many different ways; intelligence is perhaps one of the most popular psychological terms used in everyday life. For a long time, the study of intelligence was restricted to the cognitive domain, it is now believed that intelligence is not a single unit or one dimensional rather has multiple dimensions or aspects.

Traditionally, psychologists have viewed that intelligence as a single entity that can be simply measured by IQ tests; they considered intelligence is the most difficult term to define. The first generation of psychologists of intelligence, such as Spearman (1927) and Terman (1975), believed that intelligence was best conceptualized as a single and general global capacity. They tried to show that a group of scores on tests reflected a single primary factor of general intelligence of critical thinking and problem-solving abilities.

The traditional way of measuring “intelligence” based only on IQ testing is considered limited nowadays. Instead, social scientists and psychoanalysts like Gardner (1993), have come up with multiple intelligences explanation for a varied kind of human potential, it is now believed that intelligence is not a single unit or one dimensional rather it has multiple dimensions or aspects. Each individual is unique, so *one standard size cannot fit all*. The one way of teaching methods or technique and pedagogy can only produce herds of “excellent sheep” without any originality and novelty. It must be realised that Multiple Intelligence education programmes are the most suitable for the present age as they are paving the way for inclusive education.

The NEP 2020 has reconfigured the whole structure, from 10+2 to a 5 + 3 + 3 + 4, curriculum and pedagogical approaches of school education, to make them receptive and suitable to the developmental needs and interests of different age groups and at different stages of their development. The policy targets producing engaged, creative, skilled and productive citizens for building an equitable, inclusive, and united society as envisaged by our Constitution.

The schools have to take teachers through a new practice of unlearning the age-old teaching process, to relearn the suggested practical learning approaches. New approaches that, encourages, observation, creativity, true learning, research and critical thinking by the learners and based on their previous knowledge to make connections and learn new knowledge. Teachers should be encouraged to reflect on their practices and do research, review and self-assessment and be motivated and on effective pedagogical process. It is in this context the multiple intelligence theory introduced by Howard Gardner in 1983 has come to greater relevance to achieve the various aims and objectives set by NEP2020. The theory talks about humans having the potential, for multiple intelligences and the need to use various approaches to teach any subject for effective teaching and learning outcomes.

Objectives of the study

1. To understand the concept of Multiple Intelligences Theory by Dr Howard Gardner (1983 & 1999) and NEP 2020.
2. To evaluate the MI Theory's relevance to NEP 2020 in achieving its main educational objectives.
3. To understand the MI theory based pedagogical strategies and approaches of teaching in achieving the 21st century life skills and educational objectives.

Signification of the Study:

NEP 2020 strongly advocated that education must be learner centric and holistic development of each learner should be the one of the main objectives of the new education system. MI theory-based pedagogical strategy and approach of teaching also emphasis modern education system and pedagogical process must incorporate varied methods of teaching which promotes holistic development of the learner in the sense of scholastic and non-scholastic ways.

This study presents the justification for developing the 21st century skills in learners, as well as teachers by adopting various MI based teaching learning strategies and approaches. Various studies of different researcher validated the significance and relevancy of Multiple Intelligence Theory in pedagogical process and its relevance in achieving the objectives of new education policy 2020.

Method of the Study:

Descriptive Analytical Method of research was applied for the present study, researcher has reviewed various relevant sources, Books, Journals, Articles, Research Paper Published, NEP 2020 policy reports, Multiple Intelligences Theory by Howard Gardner (1983 & 1999) etc., To describe various aspects of MI theory, and 21st century needs of the individual learner and modern pedagogical process suggested by the NEP 2020, where researcher tried to do detailed study and extract appropriate details and facts available in different sources available and put forwarded the suggestions which will be beneficial for the learners as well as the whole pedagogical process of education.

An overview, of Multiple Intelligences Theory by Dr Howard Gardner (1983 & 1999) and NEP 2020.

The concept of Multiple Intelligences originates from psychology. This theory helps us to understand the fact that an individual has multiple different kinds of strengths and weaknesses. It helps in understanding how children acquire different knowledge, how people construct different ideas and things in their mind, and how people project them to show how they have understood. If everyone has same kind of abilities then there would be a similar kind of intelligence, then a single method of teaching and testing would be fair. But when we

understand people have different kinds of intelligence and abilities, and we choose the single method of teaching and testing their abilities, it's an unfair education.

The theory of Multiple Intelligences proposed by Dr Howard Gardner a Professor at Harvard University in the year 1983 is psychological and educational. According to Gardner, intelligence is not a single entity rather there exist distinct types of intelligence in the human mind, Gardner's theory is a great contribution to classroom practices, in his concept intelligence is multidimensional. He has initially identified seven core intelligence in the book entitled, *Frames of mind*, later two more types of intelligence has been added in the theory of Multiple Intelligences in his book entitled, *Intelligence Reframed*, in 1999.

Gardner's Categories of Intelligences:

1. Verbal - Linguistic Intelligence: Persons high on this intelligence are word smart, e.g., poets, writers.
2. Logical-Mathematical Intelligence: Persons high on this intelligence are good at dealing with abstract reasoning and manipulation of symbols involved in numerical problems.e.g., mathematicians, scientists
3. Visual-Spatial Intelligence: A person high on this can easily represent the spatial world in the mind. e.g., Pilots, sailors, architects
4. Bodily - Kinaesthetic Intelligence: A person high on this intelligence can use the whole or portion of the body flexibly or creatively, e.g, dancers surgeons, craft making, athletics
5. Musical - Rhythmic Intelligence: Persons high on this intelligence are very sensitive to sound and vibrations and in creating new patterns of sound. E.g. Singers, musicians, composers, lyricists etc.
6. Interpersonal Intelligence: Persons high in this intelligence are good at understanding the motives, feelings and behaviours of other people. e.g., psychologists, and counsellors.
7. Intrapersonal Intelligence: Persons high on this intelligence has finer sensibilities regarding their identity, human existence and meaning of life. E.g. Philosophers, spiritual leaders.
8. Naturalistic Intelligence: Persons high on this intelligence are sensitive to the features of the natural world. E.g., Hunters, farmers, tourists.
9. Existential - Spiritual Intelligence: Persons high on this intelligence are good at understanding life, death, and the world around them. e.g., Psychology, theology, motivational speaker.

Theory of Multiple Intelligences provides a theoretical foundation for recognizing the different abilities and talents of students. While all students may not be verbally or mathematically gifted, children may have expertise in other areas, such as music, spatial relations, or interpersonal knowledge.

National Education Policy 2020

The National Education Policy 2020, was approved by the Union Cabinet on 29th July 2020, the policy has the potential to bring significant transformational reforms in the Indian education system. Prime Minister Narendra Modi have belief in the NEP 2020 will be significant in making an 'Atma Nirbhar' (self-sufficient) India and

open up the Indian education to better universal exposure. Access, Equity, Quality, Affordability and Accountability are the foundational pillars of NEP 2020. The main purpose behind this curricular and pedagogical reconstruction is to move away from the rote learning to learn for real understanding. It attempts to give equal importance to all the stages of schooling by moulding each with an age appropriate curriculum, educational goals, pedagogy and child centred lesson planning. Curricular reforms from 10+2 to 5+3+3+4, accessibility, holistic development of learner, 21st century skills, flexibility in entry and exit and the choice of course and subjects, multilingualism, curricular integration, transforming assessment system, experiential learning, support for special talents, are few of the recommendation of NEP 2020.

Importance of MI Theory in Education

The Multiple Intelligence theory is significant to the educational community mainly because the educators are endeavouring every day in curriculum transaction inside the classroom, and to develop pedagogies that help children to learn holistically. In many studies, it was found that multiple intelligence-based teaching-learning methods help learners to increase and enhance their academic performances and achievement. As this saying goes appropriately correct here quoted by Albert Einstein, *“Everybody is a genius but if you judge a fish by its ability to climb a tree it will live its whole life believing that it is stupid.”* For this proper methodologies and approaches that define by multiple intelligences should be identified, recognized and help the learners to adopt appropriate learning methodologies for higher academic achievement. In this context, the development of the Multiple Intelligence theory was a blessing in disguise which validates the following aspects of the human mind

1. We do not possess the same kinds of abilities of mind.
2. Individual differences must be considered.
3. Education will work most effectively if these mental differences are taken into account rather than denied or ignored.
4. One type of education does not fit for all.
5. Education process must cater to the multiple needs of an individual.
6. One type of evaluation is not appropriate to judge the learners’ achievements, as an excellent or poor learner.

NEP 2020 was constructed based on the standard that education must not only develop, foundational intellectual capacities like linguistic and mathematical abilities but also places a great emphasis on the development of intellectual capacities such as critical thinking and problem solving and also cultural, social, moral and affective capacities and outlooks.

As many research findings resonate with this idea of NEP2020 and MI theory, **Ozdemir et al. (2006)** conducted a study on enhancing learning through Multiple Intelligences based teaching. This study investigated the difference between Multiple Intelligence Instruction (MII) and Traditionally Designed Science Instruction

(TDSI). MII group produced a significantly greater achievement in understanding scientific concepts and retention of knowledge.

In another study by, **Flower & Jennifer (2008)** they conducted a case study to observe the benefits of Multiple Intelligence based teaching and its effect on student learning. The results revealed that Multiple Intelligence teaching had a positive influence on students. Similarly, by **Marasigan (2009)** found in the study that, there exists a positive relationship between academic performance and multiple intelligences. A similar type of study was conducted by, **Shahzada, Alikhan, Islam & Faqir (2014)** on the Interrelation of Multiple Intelligence based teaching & their correlation with students' Academic Achievements.

NCERT, SCERT and several educational NGOs come up with findings that the current educational system stress memorization, which only helps learners to secure a good percentage of marks, but poor learning outcomes. Practical methods of teaching and learning have been developed from psychological theories and pragmatic philosophy of education given by John Dewey and William Kilpatrick is a revolution in contradiction of the old-style technique of teaching.

NEP 2020 has emphasised to transform structure of education, and entire curricula. The change from memorisation to more real understanding and learning. Multidisciplinary approach and practical methods of instruction needs a change in approach to construction of curriculum to classroom tractions. It is in this context the theory of 'Multiple Intelligence' introduced by Howard Gardner in 1983 has come to greater relevance to NEP 2020. The theory talks in detail about human beings having various abilities as multiple intelligences and the need of several methods of teaching to any subject content for effective teaching learning is utmost essential. National Education Policy (NEP) 2020 mostly attempts to take care of these aspects of teaching learning process. This is essential to students, educators, experts, stakeholder and anybody who is related to education that Multiple Intelligence theory and its relevance in achieving the core educational objectives of National Education Policy 2020 is present need.

MI Theory Relevance to Achieve Educational Objectives of NEP 2020

The fundamental idea of teaching-learning made through the NEP 2020 resonates with Gardner's 'Multiple intelligences' theory and its application in education. According to Gardner, learning is a manifold process there is no any fixed one method of teaching or learning. The NEP 2020 recommendations and MI theory is quite relevant in achieving the various needs of learners. Both promotes the similar ideas that, education must cater the needs of each individual learner and stimulate the holistic development. MI theory and NEP 2020 policy emphasise on Individual differences-based education and challenge the 'one-size-fits-all' method of education. Rather it stresses on how each individual differs from one another and that there is no sense in teaching and assessing all students in the single way.

1. MI and Inclusive Education

It is essential to build an inclusive society through inclusive approach of education. According to sixth All India Educational survey NCERT 1998 about 200 million children aged 6 to 14 need special education. The National Education Policy, 2020 has aims to make India the global knowledge superpower ensuring equity and seeks Inclusive education. MHRD 2006 clearly stated that SSA will adopt *zero rejection policy*. NEP 2020 stated Indian Sign Language (ISL) will be standardized across the country and National and State curriculum materials developed, for use by students with hearing impairment, which promotes inclusive based education. . All languages will be taught enjoyably, with plenty of interactive exchange, with initial reading and consequently writing in the mother tongue in the early years. Under the ‘Ek Bharat Shrestha Bharat’ initiative. In this context the Educational Implications of multiple intelligence theory in education has tremendous opportunities. It can bridge the gap recognising that everyone has different abilities irrespective of seclusion of caste, linguistic minority and individual with disabilities and socially and economically deprived section of the society. The MI theory-based curriculum can create an inclusive education and it provides ample opportunities to learn and flourish in respective field of their choices (Murray & Moore, 2012).

2. MI Theory as a Tool to Achieve the Core Objectives of NEP 2020.

The National Educational Policy 2020 have emphasised transforming the entire curriculum and the structure of education, educators now have to learn new methods and techniques of teaching. There must be a change from watertight compartment discipline approaches to more multidisciplinary and practical methods of instruction. The teachers have to explore MI Theory as a tool that can make learners learn and succeed effortlessly and quickly. MI Theory is significant for educators to understand that all learners are smart and that they differ only in the way in which they are smart. Using MI based approaches and the strategies of teaching provide ample opportunities to teachers to grow professionally.

3. MI Theory Promotes Engaging and Enjoyable learning

Students learns fast and better when they learn anything enjoying and actively engaging themselves in learning activities. NEP 2020 also emphasises the active and fun based projects and engaging and enjoyable activities on teaching different subject contents. Integration of MI theory can fulfil the needs of various learner engaging learners in active and enjoyable learning (Ghaznavi, 2021).

4. Flexibility and Integrated Learning and NEP 2020

Theory fosters an idea of individual development in the classroom, encouraging atmosphere and providing flexibility for learners to choose their learning courses and programs, based on their strengths and intelligence, and thereby choose their subjects and discipline as per their aptitudes and interests. (Yavich & Rotnitsky, 2020) the study indicated that it is important to note that students' success at school is depend on catering the

all types of intelligences, such as linguistic, spatial, logical or reasoning, musical, and kinetic and others. NEP 2020 also, envisaged empowering students through integration in course choices and flexibility in subject choices as per their strengths and abilities.

5. Individual Differences of Learners and NEP 2020

One of the objectives of NEP 2020 is also to recognise, identify, and strengthen the unique capabilities of each student. It emphasises multi-disciplinary approach of education, across the different streams of education and sports to make sure the unity and integrity of all knowledge development in both academic and non-academic domains. MI Theory-based education also emphasises on catering the needs of each individual, and provides diverse sets of learning opportunities. This is greatly required to deal with, the different students, who have different mental strengths and weaknesses. There exists a positive connection between improved academic achievement and various curricular activities encouraging the intellectual growth of an individual, (Fink & Ann 2008)

6. MI Based Teaching and Holistic Development by NEP 2020

NEP strongly emphasises the learner centric education and holistic development of each learner, catering the need of each and every student. MI theory also says students learn holistically the modern pedagogy should be based on the holistic pedagogical strategy and approach. The learners are diverse in talent and, holistic education can be only achieved when schools will begin to adopt MI Based teaching approaches as a way to overcome the difficulties which they encounter with their students as a result of their differences and their various needs. Holistic development in the sense of scholastic and non-scholastic ways. The personalised strategy of teaching, will promote holistic development of the learner.

7. Redefining NEP 2020 With MI Theory of Learning

NEP 2020 suggested experiential learning, with a relationship with a different subject, these objectives can be only achieved by innovative pedagogy based on MI theory. The visible paucities in the educational field have highlighted the need for other types of pedagogies that encourage students' wholesome development. Gardner's theory about multiple intelligences (MIs) has great potential that has not yet been realised in practice in school contexts. (Berrios, et.al.,2021) Both NEP 2020 and MI theory, supports the idea that learning is determined by the individual learner in multiple ways, Intelligence usually works together in complex ways, teachers need to match students' learning experiences with their respective intelligence preferences.

8. MI Theory and Development Of 21st Century Skills

NEP emphasises on the development of 21st century skills in the new generations like, life skills, collaboration, information literacy, self-awareness, problem solving, communication skills, critical thinking, and creative

thinking etc. which are very essential to survive in the present world. Using MI as a tool for planning effective lessons, for each learner, educators must focus on redesigning learning in order to develop 21st century skills and to deepen understanding of 21st century curricular goals (Markovi, 2019).

9. MI Theory and Learner Centric Pedagogy

NEP 2020 emphasis on recognising, identifying the unique potential of each learner, MI theory is learner centric and fosters the unique abilities of each individual learner It focuses on concentrating the learner's unique needs by understanding their strengths and abilities. (Kareepadath,2014) MI based curriculum and teaching strategies can cater the dominant unique intelligence of each learner. It helps in concentrating the learner's unique needs by understanding their strengths and abilities. (Armstrong, 2009) suggested several teaching learning strategies based on the nine multiple intelligences identified by the gardener. At the end of the research, MIT based education was determined to have a large effect size on students' academic achievement levels. (Bas, 2016).

10. MI Theory Teaching Approaches and Development of Resilience and Realization of Self

Being resilient is one of the essential aspects of education today. It was suggested by NEP 2020 that, educational leader must design such curriculum which will fulfil this objective, that assists in the development of resilience and intrapersonal and liberation of self realisation. Parker (2016) conducted a study to find the relation between resilience, intrapersonal intelligence, liberation of self-realisation and academic achievement. The study found that learner can develop resilience and strengthen interpersonal intelligence and can develop intrinsic self-realization with help of MI theory strategies and teaching approach.

Conclusion

In view of NEP 2020 innovative approaches in the 21st century education, educators need to focus on redesigning learning in order to develop 21st century skills and the understanding of 21st century curricular goals. Multiple intelligence theory has enormous potentialities in terms of pedagogical implications in the light of NPE 2020. The effective planning of lessons and well-planned teaching approaches and learning opportunities based on MI theory can cater the present needs of the society, and highly appropriate in in achieving the educational aims of NEP 2020. The 21st century skills development of the learners, following the experiential in approach and promoting the holistic development of the learners should be focused while formulating the curriculum. Using Multiple Intelligence theory as a tool, teaching can be made easier and more purposeful in nurturing multiple intelligences and developing the potential of each learner. The theory of multiple intelligences has been incorporated by the education and researchers globally. The extensive modifications that the NEP 2020 is making in our educational areas can be effective only with proper planning and training is given to the educational organizations and educators. This theory should be considered while planning the curriculum and pedagogy. Sufficient study has been conducted to understand the influence of

multiple intelligences and learning. (Greenberg et al. 2020). Multiple intelligence theory helps in enhancing academic achievement. (Advan & Hema ,2016), (Abdi et al., 2013). Individuals should be encouraged to use their preferred intelligence in real learning and focusing on conceptual learning was advocated by NEP 2020 rather than rote learning. Instructional activities should be identified by a teacher before applying any teaching methods, because different methods appeal to different forms of intelligence. Assessment of learning should measure multiple forms of intelligence considering the individual differences of the learner. This advocacy could be achieved by adopting the strategies of MI theory in the learning process. The 21st century educators need to create a proper learning environment, where all the learners need to engaged in the learning process actively, and the teacher acts as a guide and a facilitator. Integration of this theory can fulfil the aim of engaging active learner in learning. Ghaznavi, (2021) This can help to develop a sense of accomplishment and self-confidence in the students. MI Approaches in teaching will allows a wider range of students to successfully participate in classroom learning. This outlook presents the rationale for developing the 21st century skills in learners, along with developing 21st century skills in teachers.

NEP 2020 urges educators to take a greater dynamic role in studying and exploring effective educational methods and techniques, to ensure that students are provided with holistic learning experiences with a multi-disciplinary approach of education that caters to their individual needs. The theory of multiple intelligences has to be incorporated and should be considered while planning the curriculum and pedagogy.

References

1. Abdallah, S (2008). Multiple ways to be smart: Gardener's Theory of Multiple Intelligences and its educational implications in English teaching and oral communication. Retrieved on 22. 12 .2020 <https://files.eric.ed.gov/fulltext/ED502634.pdf>
2. Abdi, Ali & laee, Susan & ahmadyan, Hamze. (2013). The Effect of Teaching Strategy Based on Multiple Intelligences on Students' Academic Achievement in Science Course. Universal Journal of Educational Research. 1. 281-284. [10.13189/ujer.2013.010401](https://doi.org/10.13189/ujer.2013.010401).
3. Armstrong, T. (2000). Multiple intelligences in the classroom. Washington DC: Association of School Curriculum Development
4. Bas, G. (2016). The effect of multiple intelligences theory-based education on academic achievement: A meta-analytic review. Educational Sciences: Theory & Practice, 16, 1833–1864.1 <https://doi.org/10.12738/estp.2016.6.0015> Vol. 16 No. 6 (2016)
5. Be a teacher (2020). NEP 2020 somewhat affirms multiple intelligence theory but are all schools and teachers ready for it (2020). Retrieved from <https://beteacher.betechie.in/nep-2020>
6. Berrios Aguayo, B., & Arazola Ruano, C., & Pantoja Vallejo, A., (2021). Multiple intelligences: Educational and cognitive development with a guiding focus. South African Journal of Education. 41. 1-15. [10.15700/saje.v41n2a1828](https://doi.org/10.15700/saje.v41n2a1828)
7. Cherry, K. (2018) Gardner's Theory of Multiple Intelligences Retrieved from <https://www.verywellmind.com/gardners-theory-of-multiple-intelligences-2795161>
8. Fink, & Ann, L. (2008). Teaching and assessing using multiple intelligences theory: A classroom-based action research study. Dissertation Abstracts International, 69 (12), 827A.

9. Flower, B., & Jennifer (2008). A case-study on the perceived benefits of multiple intelligence instruction: Examining its impact on student learning. *Dissertation Abstracts International*, 69 (03), 878 A.
10. Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
11. Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century*. New York: Basic Books.
12. Ghaznavi, N., Narafshan, M. H., Tajadini, M., & Caputi, M. (2021) The Implementation of a Multiple Intelligences Teaching Approach: Classroom engagement and physically disabled learners, *Cogent Psychology*, 8:1, DOI: 10.1080/23311908.2021.1880258
13. Greenberg, K., & Zheng, Robert & Maloy., Isabelle. (2020). Understanding the Role of Digital Technology in Multiple Intelligence Education: A Meta-Analysis. 10.4018/978-1-7998-0249-5.ch004.retrieved from on 27th February <https://www.researchgate.net/publication/338303266>
14. Kolb, Alice Y. and Kolb, David A., (2017) "Experiential Learning Theory as a Guide for Experiential Educators in Higher Education," *Experiential Learning & Teaching in Higher Education*: Vol. 1: No. 1, Article 7. Available at: <https://nsuworks.nova.edu/elthe/vol1/iss1/7>
15. Marasigan, A. C., (2009). The multiple intelligences and academic performance of the high school students of Olivarez College: A basis for a proposed teacher improvement program. Retrieved on January 23, 2019, from: <http://www.olivarezcollege.edu.ph/research/researches/GraduateSchool/8.pdf>.
16. Medhat Fam, Ed. D. Education implications of Multiple Intelligences. Retrieved from https://www.academia.edu/37425844/Education_implications_of_Multiple_in_Iligences
17. Neethu, S & Rajan, S., (2015). Spiritual Wellbeing and Job Satisfaction in Teachers Who Adopt Multiple Intelligence Methods In The Inclusive Class Rooms. *Periyar University Journal of Psychology*. 2.
18. Saphia, L., (2014) Extent of Realization of Naturalistic Intrapersonal and Bodily Kinesthetic Dimensions of Multiple Intelligences in Relation To Achievement of Students In Biology At Higher Secondary Stage. https://shodhganga.inflibnet.ac.in/bitstream/10603/93429/6/06_chapter2.pdf
19. Shahzada, G., Khan Umar, A, & Islam Fakhr ul et, al (2014). Interrelation of Multiple Intelligences and their Correlation with Students' Academic Achievements: A Case Study of Southern Region, Khyber Pakhtunkhwa, *FWU Journal of Social Sciences*, Winter 2014, Vol.8, No.2, 59-64. <http://sbbwu.edu.pk/journal/FWUJournal,Winter%202014%20Vol.8,No.2/8.%20Final%20Interrelation%20of%20Multiple%20Intelligences.pdf>
20. Ozdemir, P., et al. (2006). Enhancing learning through multiple intelligences. *Journal of Biological Education*, 40 (2), 74-78.
21. Pratima, Devi A., Panda, Nath B., (2022). Multiple Intelligence Theory as a Pedagogical Process and its Relevance in NEP 2020. *EDUTRACKS*, Vol. 21 NO. 8., Neelkamal Publication Pvt. Ltd.,
22. UK Essays. (November 2018). Application of Multiple Intelligence Theory in the Classroom. Retrieved from <https://www.ukessays.com/essays/education/application-of-multiple-intelligence-theory-in-the-classroom.php?vref=1>
23. V, Advani, G, Hema (2016), Effect of Interpersonal Intelligence Based Teaching Strategies on Students Academic Achievement, *International Journal of Indian Psychology*, Volume 3 (4), DIP: 18.01.203/20160304, DOI: 10.25215/0304.203

24. Vukadin D. M., Marković S. N., (2019). Developing 21st century skills through theme-based instruction and by applying multiple intelligence theory: teacher competencies. *УЗДАНИЦА*; 2019, XVI/2; стр. 235–251
25. Wilson, S. D. (2018). Implementing Co-Creation and Multiple Intelligence Practices to Transform the Classroom Experience. *Contemporary Issues in Education Research (CIER)*, 11(4), 127–132. <https://doi.org/10.19030/cier.v11i4.10206>
26. Yavich, R., & Rotnitsky, I. (2020). Multiple intelligences and success in school studies. *International Journal of Higher Education*, 9(6), 107–117. <https://doi.org/10.5430/ijhe.v9n6p107>

