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A Theoretical Review for School Ecology, An Evolving Construct

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ABSTRACT

Despite increasing emphasis on school environment research, numerous questions still remain unanswered. Some of these questions arise from the fact that the construct 'school environment' is studied in a simplistic manner. Acknowledgment of multiple simultaneously existing climates has not been widely perpetuated in school environment research. Researchers have also called for research on inter-climate relationships between these multiple climates. School ecology is an attempt to fill this gap. School ecology is taken as a multi-dimensional construct acknowledging the existence of multiple sub-environments in a school. School ecology understood as the holistic environment of a school comprises of multiple sub-environments namely-physical environment, academic environment, social environment, emotional environment, and moral environment. It also dwells into the interaction between these sub-climates. We conduct a review for school ecology and its individual components and present a model to understand school environment holistically.

Key words: School ecology, Ecological model, School climate, School environment.

INTRODUCTION

School environment is an evergreen area of research. It has continued to assume prime importance since the 1970s when research on 'school climate' initially took the stage. The 1980s saw a rise of interest in 'school culture'. However, even after three decades of research, there is still no consensus when it comes to defining school climate. A few have tried to distinguish between these constructs (see Denison (1996), Houtte, (2005), Macneil, Prater and Busch (2009), Hoy (1990)), however, there is no unanimity on the points of differences

as well. Since these issues have long been discussed, one thing is clear that school environment and its related terms and concepts are very important. They are seen to deeply impact school effectiveness and school improvement. A plethora of researches and literature reviews (Anderson (1982), Bonell et al. (2013), Goldberg et al. (2019), Johnson (2009), Kidger et al. (2012), Kutsyuruba et al. (2015), McEvoy & Welker (2000), Reaves et al. (2018), Steffgen et al. (2013), Thapa, (2013), Wang (2017)) have brought out the effect of school environment and relatedc onstructson a wide range of outcomes ranging from student-level outcomes to school-level outcomes.

The importance of school climate research is exponentially growing as the debate around it deepens and issues are raised. There are, however, two issues of school climate research that are the primary concerns for this paper. **One is the issue of molarity and specificity, and second is the existence of multiple simultaneous climates and study of their inter-relations**.

Issue of molarity and specificity: Far-reaching effects of issues of molar and specific climates is seen on school climate research. The molar approach sees the environment as a global construct, while specific climates or focused climates see the environment in light of a certain outcome variable. Specific climates examine a narrow manifestation of the environment as compared to the molar climate (Carr, Schmidt, Ford, DeShon, 2003). Thus, the molar climate is a global conceptualization of organizational climate and includes multiple general dimensions such as cooperation, support, peer relations. Examples of specific climates include service climate, justice climate, innovative climate. In terms of school climate, the specific climate has been studied from the perspective of health, leadership, school effectiveness, teacher's behavior and welfare, school safety, bullying. On one hand, reviews have advocated to move away from molar climate and study specific climate citing better conceptual clarity as a reason for the same (Schneider et al., 2013), others have advocated the study of molar climate as it provides a better and holistic understanding of the organization.

Issue of multiple climates: An organization is witness to several climates that exist simultaneously and interact with each other. Climate research does not take into account the interaction between multiple layers of environments existing in the school. They fail to address how these environments work in tandem. These ecological transactions are not addressed by climate and culture research. Researchers have called forthe study of simultaneously examining multiple(molar or focussed) climates andtheir inter-climate relations(Chan (2014), Grazia & Molinari (2020)).

The need for a study of interconnections that exist between environments was also expressed by Bronfenbrenner (1976) in his explanation of the ecology of education. He perceived learning to be a set of two functions. First was the relationship between learners and the environment in which they live. The second function would encompass the interconnections that exist between these environments itself. Thus, the scientific study of both these sets of relations as they affect learning constitutes the ecology of education.

School ecology is based on Bronfen brenner's theoretical framework and utilizes this *socio-ecological perspective and systems approach for its conceptualization.* The need for nested multi-level ecological structures put forward Chan (2014) is addressed through school ecology. School ecology limits its scope to study of various layers inside the school (Waters, Cross, Runions, 2009, Stivaros (2007)) unlike Bronfen brenner who presented an ecological framework capturing the different layers of the environment from the school, family, peers, to the larger social environment to understand the development of a child.

Studying the issues and developments in the field of school climate and school culture provides a pathway for the theoretical soundness of school ecology. After examining the need and theoretical basis for school ecology, we move forward to defining the construct.

Towards a definition of School ecology: Researchers who have worked on the construct of 'School Ecology' have defined it variedly. Theron (2015) defines school ecology as comprising of 'multiple school-related facets including pedagogical, extra-mural, relational, service-related, and physical/spatial aspects'. Wani (2016) defined school ecologyas students' perception of the total environment of the school. Waters et al. (2010) define school ecology as'the many domains of the whole-school by integrating organizational aspects of a school coupled with the interrelationships between students, staff, and parents'. Dawes et al. (2017) defined school ecology as a combined factor of social ecology and academic ecology. Jordon and Morell (2018) define school ecology as a combined perspective on school functioning. According to Thorkildsen, Reese, and Corsino (2002) school ecology is the 'culturally established social fields that are regulated by individual perceptions'. However, even amongst these variations, a commonality is reflected. This common link pertains to the idea of a holistic environment and multidimensionality of the construct. To define a construct holistically a certain degree of multidimensionality is necessary. While multidimensional constructs provide a holistic representation of complex phenomena, they have been critiqued for being conceptually ambiguous and confounding relationships between their dimensions and the constructs. Having said that, the utility of multidimensional constructs is undeniable in capturing the comprehensiveness of a construct. The paper proceeds with the view that school ecology is a multitude of school domains that interact with each other there of having a long-term effect on whole-school, it's functioning, and other outcomes. These sub-environments were identified from the literature. Individual searches on each sub-environment showed that these environments were considered to have significant effects on the school-level and student-level outcomes. Thus, *school ecology is a multi-dimensional construct defined as the total- environment of the school comprising of multiple sub-environments (physical, academic, social, emotional, moral) and their interaction with one another.* Another reason for conceptualization in this way is school ecology develops from the idea of all-round development for the children. Various agencies of the child – the physical, intellectual, emotional, and social are all important for overall development. School climate has been proven to have an effect on children, their learning, and their development. So, the classification of school environment into domains corresponding to each domain of development seems plausible. There have been researches on these specific climates of school

as discussed. But what lacks is a whole-school approach to studying these environments-integrating them and studying their interaction with each other.

METHOD

Search strategy

The literature was retrieved using online databases and library hand searches. Five electronic databases were searched for the shortlisted keywords (table 1). The search was conducted for (a) School ecology in general, (b) each of the five sub-environments of school ecology listed previously. In obtaining information, we did not include any date range because of the availability of limited studies on school ecology. Search terms to obtain literature included-numerous variations and combinations of- school ecology, school climate, school environment. Abstracts were then reviewed for streamlining and sorting out relevant research studies. Once no new articles were found, the search was concluded. Subsequent reference lists of the selected articles were also searched. Search for relevant studies was carried out in grey literature as well. This was done to avoid publication bias.

TABLE 1 : List of Keywords utilized in Literature search	
School ecology	Physical environment/ climate
School environment	Emotional environment/ climate
School climate	Social environment / climate
School culture	Moral environment / climate
	Academic environment/ climate

Inclusion and Exclusion strategy

Usage of the term 'school ecology' only once or twice in the entire research papers was a common phenomenon. It is a point worth mentioning that instances of these loose references of the term 'school ecology' were a common observation during the literature search. These papers did not provide a definition or explanation for what they specifically meant while using school ecology. Despite the scant and vague use of the term in the body of these articles, 'school ecology' was conveniently listed in their keyword section of some of these articles.

MODELS AND COMPONENTS OF SCHOOL ECOLOGY: MOVING TOWARDS A MODEL OF SCHOOL ECOLOGY

Perhaps one of the earliest models that brings the study of organizational context in a comprehensive way was *Tagiuriin 1968* (Field & Abelson, 1982). This model conceptualized organizational climate into four components namely- ecology, milieu, social climate, and school culture. Ecology here is one of the components in this model and is used to denote the physical and material elements of a school such as the design of buildings, size and age, state of décor, facilities, and technology in use. Tagiuri's approach is also one of the earliest

examples of studying school from a total environment approach by including the physical environment along with the psycho-social environment (Makewa et al. 2011).

Waters et al. (2009) also provide a comprehensive model to understand school ecology. School ecology is appropriated as the school's social ecology and combines Bronfen brenner's ecological framework. School ecology according to the researchers comprises two main components-interpersonal component, and organizational component. The interpersonal component takes into account the relationship among students, between staff and students, and among staff. In the organizational component, a combination of subfactors has been included namely- structural, built, and functional. Built refers to the physical environment of the school, structural component refers tothe size of classrooms, number of students, the structure of the school, leadership in the school. Lastly, the functional component includes students' involvement in decision making, clarity, and fairness of school rules and such.

Gordon (1982) elaborated on the 3 aspects of the school environment, namely - physical environment, social environment, cognitive environment, in order to understand the hidden curriculum. Social environment was defined as the relationship between the people in the school and the social structure that exists. Cognitive environment or symbolic environment refers to ideas, problems, and information a child gathers through three means- on his own, with discussion with his peers, and his teachers (*Zhang, 2009*).

The University of Michigan came out with *University Outreach and Engagement program (UOE)* in 2004 presentinga model for understanding the holistic school environment. They defined school environment as a combination of four aspects namely–physical environment, affective environment, social environment, and academic environment. A positive physical environment is seen as that which is welcoming and conducive to learning, where as a positive social environment is one that promotes communication and interaction. A congenial affective environment is one that promotes a sense of belonging and self-esteem, and a good academic environment is one that promotes learning and self-fulfillment (UOE, 2004).

Classification of school environment into different sub-environment and studying the interaction between them would constitute an ecological approach to studying school environment. The paper adapts from this model for classification of school ecology. The components are further elaborated ahead.

Physical Environment: Physical environment is an important sub-environment having an effect on other sub-environments. In a review, Drew (1971) presents a framework to understand physical environment on the basis of its behavioral and psychological effects on subjects. It elaborates on the behavioral effects of room size, color, crowding, furniture arrangements on locomotion, interaction, reading speed and intensity, among other behavioral responses. As for the psychological effects of physical environment, the review outlines researchers exploring the effect of physical environment on emotions, anxiety, stress and likewise. Thus, throwing some light onthe effect of physical environment on emotional, cognitive, and social environment. Jordon and Morell (2018) explain the effect of physical environment of the school on school ecology. They further elaborated that a look at some

components of physical environment, say the display board in the common space, or the policies, language used, evenmorning assembly or events held onthe campus can tell if they carry a message of inclusion. Researchers have also studied the effect of physical environment on emotions (Karmel (1965), Myers et. al (1968), Ali & Amin (2014)), learning (Guney & Al, 2012). According to UOE (2004), a positive physical environment is simply that is welcoming and conducive to learning. In addition to adapting this, we identified some sub-dimensions of physical environment including – range and adequacy of school facilities, cleanliness & attractiveness, and the quality of resources for positive school life.

*Emotional Environment***:** In terms of the school domain, emotional environment is defined as an environment that promotes a sense of belonging and self-esteem (National Centre for Community School (NCSS), n.d., UOE, 2004). Self-esteem is considered an important factor in the affective domain. Haddon et al. (2005) who developed an instrument to study the emotional environment of a school, defined emotional environment as comprising of awareness of one's own and others' emotions and talking about emotions. Roffey (2008) also studied emotional literacy in lieu of school wellbeing. Effect of school emotional climate has also been seen on student psychopathology, emotional intelligence, student's learning (Kuboja, Ngussa, 2015), feeling of security (Thivya & Francisca, 2016) among others outcome variables. School environment has also been found to affect the emotional health of students (Kidger et al., 2012). While studies in classroom emotional climate especially on academic achievement on students are abundant, research on emotional climate of the school is still lacking.

Social Environment: Social environment is perhaps the most researched component with research dating 1970s. The social-emotional environment used to be studied as a combined construct earlier. Though closely related and deeply impacting each-other they have different domains. With researchers focusing on importance of EQ, emotional awareness, and related concepts, emotional environment has been established a research area on its own. With this establishment, it is important to asses social environment without the emotional component. Researchers study the relationship of social aspect of the organizational lifeto individual meaning and organizational adaptation (Denison, 1996). Social environment looks into communication and interaction between school stakeholders. A positive social environment is taken as that which promotes communication and interaction (UOE, 2004). In addition to adapting this, we identified some sub-dimensions of social environment including- the sense of community it in stills in students, the social support it provides them, and the quality of interpersonal relations and communication it supports.

Moral Environment: NCSS (n.d.) developed a tool on similar lines and defined moral environment as that which promotes values, ethical behavior, and character building. Another group of researchers Høst et al. (1998) developed an instrument to assess the moral atmosphere of the school which comprised of standardized moral dilemmas, and a questionnaire on undesirable behavior at school which included questions on drug and alcohol use, teasing, truancy, stealing, fighting, vandalism. The paper adapts the latter's conceptualization for moral environment of school assessing the inculcation of values and undesirable behavior at school.

*Academic Environment***:** This is perhaps the most researched area of school environment and has a direct effect on student's learning. There are a plethora of researchers, literature reviews (Elken & Wollscheid, 2019), and meta-analyses (Karadag et al., 2016) which have explored the relationship between school environment and student learning outcomes including academic achievement. Academic environment has been studied for its effects on outcome variables from personal development of children to their psychosomatic and social well-being (Divaris et al., 2008). Our conceptualization is adapted from UOE (2004) where in an academic environment is that promotes learning and self-fulfillment. The sub-dimensions of academic environment identified include-Level of challenge, stimulation, and motivation it provides the learners, it's support for learning, and it's quality of being child-centered.

*Conclusion on Conceptual Models on School Ecology***:** School ecology adopts a socio-ecological perspective as it talks about the existence of multiple levels, multiple systems, and interaction between these systems. Based on the above discussion, our conceptualization of school ecology is diagrammatically represented in Figure 1.

Table 2: List of Components				
Physical Environment	**Social Environment**	**Academic Environment**	**Emotional Environment**	**Moral Environment**
1. Range of school facilities	1. Sense of community	1. Level of challenge	1. Emotional literacy	1. Inculcation of values
2. Adequacy of school facilities	2. Social support	2. Level of stimulation	2. Emotional awareness	2. Undesirable behavior in school
3. Cleanliness & Attractiveness	3. Quality of Interpersonal relations	3. Level of motivation	3. Sense of social-emotional security	
4. Quality of resources for positive school life	4. Quality of communication	4. Support for learning		
5. Related to science learning		5. Quality of being child- centred		

DISCUSSION AND CONCLUSION

This theoretical review contributes in at least three ways to the field of school environment. First, the model leads to a clearer picture of the nature of school ecology. Second, it offers pragmatic guidance to researchers regarding the matters of school environment. The review indicates the need for a more concerted focus on various environments in school ecology and their interaction with one another. The paper also provides a brief review of the outcome variables affecting school ecology and its constituent environments. The main aim of this paper was to propose a definitive conceptualization of school ecology. This review throws light on the importance of studies that look beyond individual environments and across multiple environments.

Figure 1 and table 2 present the components and sub-dimensions of school ecology and their interaction. We have expanded the concept of school ecologyto move beyond socio-emotional climate of the school to include other sub-climates – physical environment,

moral environment, academic environment. The identification of environments is embedded in the all-round development on the child which incorporates physical, emotional, cognitive aspects. This may be pointed out that the school is witness to many environments, which cannot be limited to the ones depicted in the graphical representation. Further research may incorporate more environments that come into play in the school ecology.

With respect to the issue of multiple simultaneous climates discussed at the beginning of the paper, there is yet another perspective that can be incorporated in the conceptualization of school ecology. How students perceive their school environment would be different from how teachers perceive the school environment. Attempts to combine the perceptions with respect to school climate have been made earlier (Griffith, 2000). Such addition to the conceptualization of school ecology would bring about another level of depth to the construct.

In conclusion, School ecology is a comparatively new field of inquiry. School ecology is all-inclusive and includes school climate which encompasses the classroom environment and extends beyond it to include elements of the whole-school environment. It is not yet as evolved as school climate and school culture and lacks obvious depth in understanding. The intricacies and challenges of theorizing and assessing school ecology will take place through discussions over time. The interest and expertise of academicians are vital to understand the need for this construct and fill a vital gap in the existing research literature for school processes. But what is clear is school ecology provides a novel and promising approach to studying school processes from a whole-school perspective.

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Awareness of Skill India Initiative Pogramme among Secondary Level Students

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ABSTRACT

Now a days Skill development has become an important factor to cater the needs of poor by improving the opportunities leading to employability, increasing productivity and promotion to the sustainable development resulting into inclusive growth. In India there is a paradoxical situation due to massive privatization of education, where on the one hand, the educated youths are facing job crisis; on the other hand, there are a lot of industrial units which are in search of appropriately skilled manpower. Due to these conditions, the employment sector in India poses a significant challenge in terms of its existing structure which is further dominated by uneducated workers, increasing under employment, skill crisis and failing labor markets with strict labor institutions and laws. The skill India The present paper is an attempt by the researcher in order to explore the awareness of secondary level students regarding the skill India Initiative Programme.s a world leader in fighting against covid-19 and literature that predicts the outbreak of this disease.

Keywords: Skill-India Initiatives, Skill Development and Awareness.

INTRODUCTION

In present scenario in India, it has been seen that there is a lack of access to good quality vocational education and training resulting into low development of skills among the marginalized sections of Indian society; low level of skilled and productive employment leading to the significant level of poverty. The marginalized group here means the group which includes poor, unemployed youth, and the persons having disabilities. Here the point

to be mentioned is that there are migrant workers and women candidates which constitute the highest number of poor. There are so many major problems with the personnel who are supposed to be skilled:

❖ The first problem is related to those persons who comes under poor quality of labor force and have education just up to secondary level or the category of personnel having just minimum level of vocational training and got employment after that training.

❖ The secondary problem is related to the educated labor force who have proper education as per the requirement of their job profile but are not able to find work compatible with their qualification as they are not equipped with proper technical or soft skills.

Therefore from the above discussion it is clear that for having dynamic and inclusive economy, it is pertinent that everyone should have equal opportunities for universal prosperity, irrespective of their gender and other background variables. It has been observed that in spite of progress in last few decades, India has lowest female workforce representation as compare to other countries in the world. The above factors clearly responsible for the mismatch between the acquired skills that are currently visible in the educated/trained labor force on the one hand, and the type of skills that is actually in demand from employers on the other hand.

GOVERNMENT OF INDIA INITIATIVES UNDER SKILL INDIA CAMPAIGN

The Skill India campaign was launched by Govt. of India on July 15, 2015 aiming at to train more than 40 crores of people in India in different skills by 2022 for which a series of skill development initiatives were launched by Govt. of India aiming at skilling unemployed youth to make India the skill Capital of the world. Some of the initiatives in these initiatives have been described as under:

❖ Formation of **Ministry for Skill Development & Entrepreneurship (MSDE)** for the first time for the enhancement of employability among the youth through skill development.

❖ Establishment of **National Skill Development Corporation India (NSDC)** as a Public Private Partnership Company for catalyzing the skills landscape in India.

❖ Starting of **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** for providing industry-relevant skill training to Indian youths for securing a better livelihood.

❖ **Pradhan Mantri Kaushal Vikas Kendras:** Skill India Mission started for setting up of 432 **Pradhan Mantri Kaushal Kendra(s) (PMKKs)** in 415 districts across the country for training a minimum of one lakh candidates annually.

❖ **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)** under the Ministry of Rural Development, Government of India. This scheme aims to train rural poor youths for providing them with regular monthly wages jobs. It is a part of the **National Rural Livelihood Mission (NRLM) –** the Mission for poverty reduction called **Aajeevika**.

❖ **Indian Institute of Skills** is being planned at Kanpur by the Union Ministry of Skill Development and Entrepreneurship in partnership with Institute of Technical Education, Singapore and **National Apprentice Promotion Schemes and Drivers' Training Institutes** helps in apprenticeship training as it is an important tool for addressing skill mismatches.

❖ **UDAAN** is a Special Industry Initiative for Jammu & Kashmir in the nature of partnership between the corporate of India and Ministry of Home Affairs and implemented by **National Skill Development Corporation (NSDC)** aiming at to cover 40,000 youth of J&K over a period of five years.

❖ **Sector Skill Councils** have been set up as autonomous industry-led bodies by NSDC for creating the Occupational Standards and Qualification bodies, competency framework, conduct the Trainer Programs, carrying out skill gap studies and for certifying the curriculum aligned to National Occupational Standards developed by them. NSDC has 38 Sector Skill Councils (SSC).

❖ **Directorate General of Training (DGT), MSDE and National Institute of Open Schooling (NIOS)** have signed an agreement and launched Dual System of Training and Space based **Distance Learning Programme (SDLP)** for MSDE for meeting the aspirations of ITI qualified candidates for attaining higher academic qualification.

❖ **SANKALP (Skills Acquisition and Knowledge Awareness for Livelihood Promotion launched by MSDE):** The primary objectives of this project are to strengthen institutional mechanisms at both national and state levels for building a pool of quality trainers and assessors.

REVIEW OF THE RELATED LITERATURE

The following studies have been consulted and reviewed for the identification of research gaps in the field under investigation.

❖ **Kaur, J. and Dogra, M. (2018)** conducted a study in order to explore the skill development in Punjab. The study was aiming at in getting constructive feedback from the center heads of skill development centers and the challenges faced by them. It was found that the center heads believed that the skill development programs should be promoted by the government to ensure people take them seriously. The paper also revealed that the problems faced by the respective Centre heads in acquisition of students, retention of students, and realization of timely payment and support from the government.

❖ **Anita S. and Rinku S. (2016)** conducted a study for exploring the impact of re-Skill training towards Make in India Initiative. The study was carried out using exploratory factor analysis to identify the factors affecting employee's attitude towards re-skilling training programs in IT sector. There were some of the identified factors e.g. need orientation, appropriate are skill training, soft skill training, value addition, updated knowledge, and advance growth. The findings suggested attitude of employees is influenced by the factors tested.

- ❖ **Hazarika, S. (2016)** conducted a study titled as: Skill Development for Rural Entrepreneurship. The study was conducted on State Institute of Rural Development (SIRD), Assam for finding out the different skill development facilities provided by State Institute of Rural Development for rural entrepreneurship. The study further attempted to examine the motivational role of training provided by the institute in Assam. The paper discussed about various, infrastructural facilities like resource centre, Development and Management of Growth centre and common facility centre, resource centre in IT motivational infrastructure. The study revealed that due to lack of awareness growth of enterprise in Assam is comparatively low than other states.

- ❖ **Pandey, S. (2016)** conducted a study for Improvising the Skill Development & Employability Potential through Higher Education, Research & Innovations in India. Through this paper, the author attempted to study the policies framed for skill development and identifying the gap between the government and private programs. The paper discusses about the role of bringing the higher education system under the jurisdiction of NSDC, UGC and Make in India. In concluding remarks the author recommended the shift in the skill development sector, promotion to innovations, and improvement in training process.

- ❖ **Misra, S.K. (2015)** produced a paper titled as, "Skill Development: A Way to Leverage the Demographic Dividend in India." The objective of the study was to understand the present skill development policy through skill development schemes and further to finding out the way to produce world class skilled manpower. The present paper discussed about the policies of National skill development council, National Skill Development Coordination Board, and National Skill Development Agency. He concluded that existing skill development policy should be modified according to the need of the industry and global market.

NEED OF THE STUDY

Through the literature review there has been significant evidence of studies that have been conducted aiming at to understand the entire mechanism of skill promotion in India and in some studies, across countries and various states. Besides that there have been studies which have been conducted in the form of a survey while in few studies an attempt was made to understand the skill demand from the prospective of market's demand and supply status. Considering the awareness of Skill India Initiative a very few studies have been conducted using primary data to understand the challenges of Skill India initiative from the perspectives of teachers and students. Since there is a lack of awareness among students as well as teachers regarding the schemes launched by GOI under Skill India Initiatives. Therefore the present study is an attempt by the researchers to explore the level of awareness among secondary level students of Delhi regarding Skill India Initiatives Programme.

TITLE OF THE STUDY

The study has been titled as: **Awareness of Skill India Initiative Pogramme among Secondary Level Students.**

Operational Definitions of the Terms and Concepts Used: The following terms and concepts have been used and defined operationally as under.

- ❖ **Skill India Initiative:** The Skill India campaign that was launched by Govt. of India on July 15, 2015 and the series of skill development initiatives and schemes aiming at skilling unemployed youth to make India the skill Capital of the world.

- ❖ **Secondary Level Students:** For the present study the secondary level students means the students studying in class XI and XII in the schools of Directorate of Education, Delhi.

Objectives of the Study: The study has been conducted for the fulfillment of the following objectives.

- ❖ To study and describe the Awareness Level of Secondary Level students regarding Skill India Initiatives.

- ❖ To study and compare the Awareness Level of Secondary Level students regarding Skill India Initiatives with respect to their background variables i.e. gender, class, type of school, stream of study and location of school.

- ❖ To suggest measures for the improvement of Awareness Level of Secondary Level students regarding Skill India Initiatives.

HYPOTHESES OF THE STUDY

The following hypotheses have been formulated and tested using suitable statistical techniques.

- ❖ **Ho1:** There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their gender.

- ❖ **Ho2:** There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their class.

- ❖ **Ho3:** There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their type of school.

- ❖ **Ho4:** There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their stream of study.

- ❖ **Ho5:** There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to the location of school.

METHODOLOGY USED

The present study has been conducted using descriptive survey methodology of educational research.

- ❖ **Population and Sample:** The population for the present study comprised of all secondary level students studying in senior secondary schools under the jurisdiction of Directorate of Education, Delhi. Out of these schools five schools were selected using multi stage random sampling technique. The final sample consisted of five schools* twelve students

from each school i.e. sixty students selected from Zone-III of Directorate of Education, Delhi i.e. **(5 schools* 12 students = 60 students).**

❖ **Tools Used:** In order to obtain the desirable information from the secondary level students regarding their awareness of Skill India Initiatives a questionnaire cum rating scale was prepared and validated by the investigator themselves covering the various aspects of Skill India Initiatives. The final tool contained thirty items which were have to be rated by the respondents on a scale of 1 to 5. The content validity of the tool was ascertained through expert validation.

❖ **Statistical Techniques Used:** The data obtained from the respondents, with the help of the tool was analyzed using basic statistical techniques like mean, standard deviation and t-test.

Findings from the Study: After a careful analysis, the following findings from the study are being reported as under.

Table A: Description of Awareness of Skill India Initiatives among Secondary Level Students

Maximum	Minimum	Range	N	S.D.
148	60	88	60	23.35

Chart 1: Showing the Awareness of Skill India Initiatives among Secondary Level Students
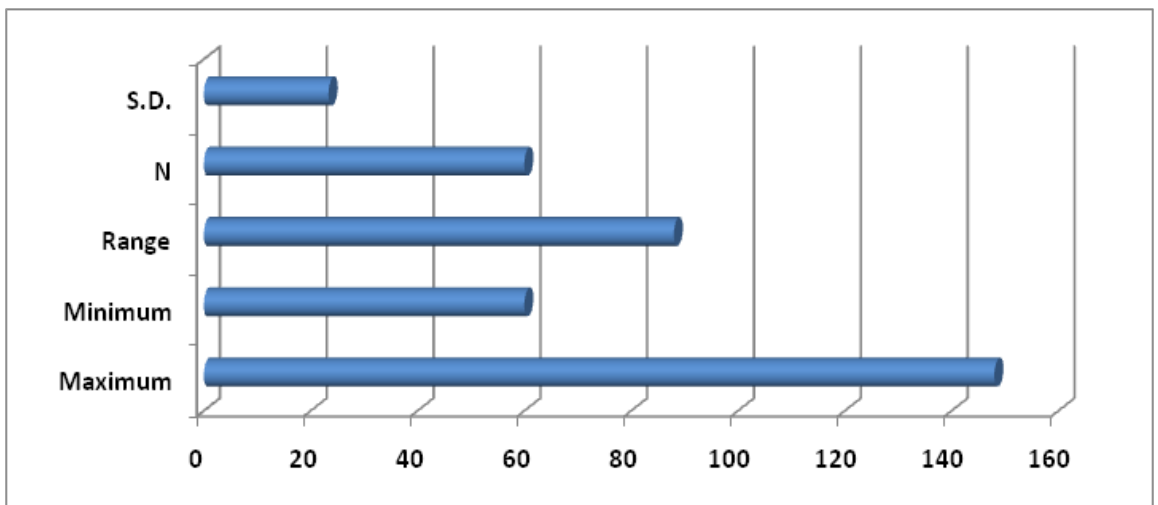
The table A and its associated chart reveal that maximum value of students' awareness of skill India Initiative program is 148 and minimum value for the same is 60. The range of the awareness scores is 88 with a standard deviation of 23.35.

Table B: Describing the Levels of Awareness of Skill India Initiatives among Secondary Level Students

Level (s)	Very High	High	Moderate	Low	Very Low
No. of Students	08	07	15	19	11
Percentage	13.33%	11.67%	25%	31.67%	18.33%

Chart 2: Showing the Levels of Awareness of Skill India Initiatives among Secondary Level Students
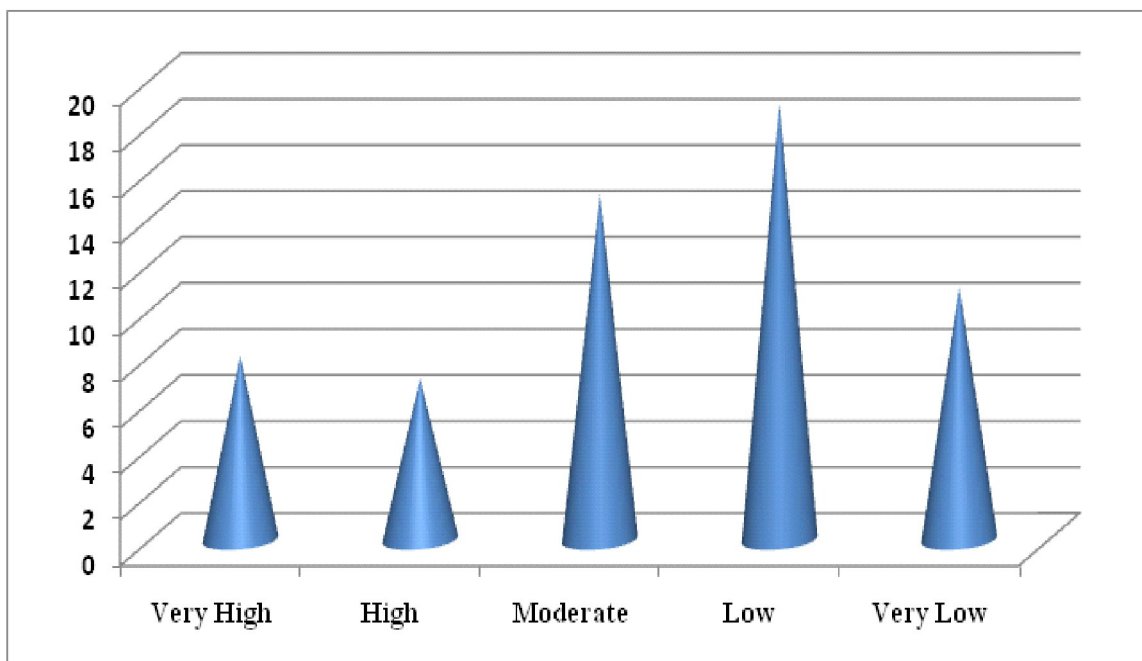
The table B and its associated chart 2 reveals that approximately 13.33% of the total secondary level students very high level of awareness of Skill India Initiative programme, 11.67% possess high level of awareness. While the rest 75% of the total secondary level students possess moderate to very low level of awareness.

Table C: Differential Analysis of Levels of Awareness of Skill India Initiatives among Secondary Level Students with respect to their background variables

Variables	Groups	Mean	S.D.	S.E. of Difference	df	Significance
Gender	Male	30	106.83	5.78	58	0.01**
	Female	30	121.23			
Class	XI Class	30	105.40	5.64	58	0.00**
	XII Class	30	122.67			
Management	Govt.	30	113.67	6.08	58	0.90NS
	Private	30	114.40			
Stream	Science	30	116.03	6.05	58	0.51NS
	Non-sci.	30	112.03			
Location of School	Rural	32	111.40	6.05	58	0.35NS
	Urban	28	117.03			

*Significant at 0.05 Levels; **Significant at 0.01 Level; NS: Not Significant.

The table D shows the results regarding the testing of hypotheses formulated and tested using t-test with the help of the SPSSR.

Table D: Describing the Results related to the Hypotheses Formulated

S. No.	Hypotheses Tested	Results Obtained
Ho1	There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their gender.	**Significant at 0.05 Level**
Ho2	There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their class.	**Significant at 0.01 Level**
Ho3	There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their type of school.	**Not significant at any level**
Ho4	There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to their stream of study.	**Not significant at any level**
Ho5	There is no significant difference among secondary school students in terms of their awareness of Skill India Initiative with respect to the location of school.	**Not significant at any level**

CONCLUSION

On the basis of the analysis as described above it can be concluded that the level of awareness of Skill India Initiative Programme among secondary level school students is moderate to very low. Further there is a significant difference among secondary level students regarding Skill India Initiative Programme with respect their gender and class. But no such difference was observed with respect their stream, location and type of school. Further it is recommended that strenuous efforts should be made on behalf of the school authorities using suitable interventions for increasing the awareness among secondary school level students regarding skill India Initiative programs. Only then the fruitful results can be obtained from the schemes being launched by state and central governments under Skill India Initiatives.

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Development of Teacher Education in India:
An Elaborative Study

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ABSTRACT

The essence of life is education. The purpose of life is paved and nurtured by education alone. Centuries after century importance of education has never been ignored or undervalued. The burden of responsibility to bring societal change through education lies on the abled and efficient teachers of our country. Thus, providing quality teacher education is an integral part of every educational goal of any country. The ultimate aim of teacher education is to develop skill and competencies in the prospective teachers so that it enables them to meet the requirements of teaching profession and prepare them to meet future needs. The present scenario of teacher education prevailing in the country cannot be well understood without getting an insight into the historical context of teacher education. This paper highlights the journey of teacher education over the years and takes into account various efforts and recommendations made by the government and policy makers in improving quality of teacher education.

Keywords: Teacher Education, History of teacher education, National Education Policies, Committees/Commissions, Curriculum.

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INTRODUCTION

The National Council for Teacher Education defines teacher education as a "programme of education, research and training of persons to teach from pre- primary to higher education level'. The journey of teacher education dates back to ancient period and over the years it has undergone tremendous changes. The curriculum design and the objectives have been restructured and reviewed time and again to suit the demands and needs of the time. The history of teacher education can be broadly divided into-

- ❖ Ancient and Medieval period
- ❖ Buddhist period
- ❖ Muslim period
- ❖ British period
- ❖ Teacher Education in Independent India

TEACHER EDUCATION DURING VEDIC, BUDDHIST AND MUSLIM PERIOD

If we look at the history of Indian education we find that though the aim of education has changed with the gradual passage of time but in every period be it Vedic period or Post Vedic period, education played a vital pivotal role in framing of the society. During Vedic period the main aim of education was preaching of religion for the attainment of the "Absolute or Brahma". The transaction of Vedic knowledge and Vedic literature was carried on verbally by the Gurus. Education was free for all irrespective of their caste and social status. Method of teaching employed were mainly oral explanations, discussions, debates and storytelling. Some dedicated and good disciples got engaged into teaching and they practiced methods of teaching as taught by their respective Gurus. From time to time sharp and intelligent students were assigned with the duty to teach the class. In the post Vedic period though the duration of course was same as in Vedic period (12 years) but advancement were made in the methods of teaching

With the up rise of Buddhism, major breakthrough in education was witnessed. Though the major aim of Buddhist education was religion expansion yet it was collective rather than individual and democratic in his approach. The formal system of teacher's training somewhat emerged during Budhist period. Monastic system was an important feature of this era. The disciple were called 'saddhiviharika' and they were placed under the supervision and guidance of 'Upajjhaya'. In Buddhist period, only those people were eligible to teach who had worked 10 years as Monk and was of high moral and mental character.

With the advent of Muslim invaders the education system change drastically, it led to the introduction of Arabic literature and Persian teachings among the native Indians. A number of Madrassahs and Makhtabs were opened in different parts of the country that imparted knowledge, basically Islamic knowledge from Quranic verses. The teachings of grammar, philosophy, arithmetic, astronomy and politics were also included. The teachers who taught in Makhtabs were mostly, Maulvis while those imparting knowledge in Madrassahs were scholarly persons. The teaching method employed was lecture method. Good and experienced teachers identified intelligent and bright students and appointed them as tutors to look after the class in their absence. Thus, we find that even during medieval period monitorial system was in vogue and nothing specific model was adopted for future teacher preparation.

TEACHER EDUCATION DURING BRITISH RULE

With the coming up of Europeans in India establishment of East India Company, efforts were made to gain an insight into the actual scenario of education system. Sir Munro in his

minute of 1823 laid emphasis on teacher education. First Normal school was opened in Madras in June, 1826 with the finances of British Government. During its initial days, it prepared teachers for districts schools only but later this Normal school advanced to become Presidency College. This was followed by Normal schools in Bombay and Calcutta as well. In 1835, Macaulay's minute glorified the European literature over the Indian and Arabic literature with statement that "A single shelf of a good European library was worth the whole native literature of India and Arabia". Macaulay advocated towards making English as a medium of instruction and this was accepted by passing of resolution by Lord William Bentinck.

Wood's despatch (1854) which is also called as the Magna Charta of English education had great influence on the secondary education of India. This important educational document was released on 19th July, 1854. It gave valuable suggestions for the improvement of teacher education in India, as it advocated for granting allowances to those persons who has aptness for teaching and are devoted to this profession. It promoted spreading of European language with English as the medium of instruction. Lord Dalhousie, the then Governor-General of India worked towards implementation of Wood's Despatch which brought many normal schools in existence during that time.

Lord Stanley's despatch (1859) emphasized on teacher training and suggested that local teachers should be employed for Vernacular schools. In 1859, new grant-in-aid rule came up and provided salary grants to those teachers who had received teacher training certificate. **The Indian Education Commission/ Hunter commission** (1882) focused mainly on the improvement of primary education as very few students could make beyond that level.

The Calcutta University Commission, popularly called as Sadler Commission (1917) also focused basically on the improvement of Secondary Education and suggested for diversified curriculum along with establishment of Board of secondary Intermediate Education but it also took teacher education into consideration and as a result Education was incorporated as a subject at post graduate level. The recommendations of Sadler Commission had a curative effect on prevailing teacher training status. Mysore University started a faculty of Education in the year 1925.

It was *Hartog committee* (1929) that reviewed the position of teacher training and their service condition. It suggested that best students should be attracted to teaching profession and in order to do so the status of teachers need to be raised. There should be provision of refresher courses, periodic meetings and conferences for teachers undergoing training so that it could brighten up their lives as well as improve their work. This suggestion was for both primary and secondary teachers.

Abbot-Wood report (1936-37), this report is yet another such initiative that proved to be a landmark in the field of education. This report mainly advocated for vocational education but it also laid emphasis on teacher education. This report suggested that there should be three years of teacher training so that a pupil is able to pursue general education along with professional teacher training. A refresher course for teachers was also suggested by this report.

Sergeant Report, the Central Advisory Board of Education (CABE) presented post war educational development scheme in India. It made many suggestions regarding betterment of teacher education in India. As per its recommendations, suitable and abled boys and girls should opt for teaching profession. Along with that it also suggested for starting refresher courses and research program for teachers in order to make them more efficient. It suggested for two years training course for pre-primary and junior basic schools for students who completed their high schools and three year training course for senior basic schools. One year training program was for graduate students.

TEACHER EDUCATION OVER VIEW IN INDEPENDENT INDIA

University Education Commission (1948-49) – This commission was a pioneer in the new Independent India, it examined the prevailing teacher training courses critically and made a suggestion to make the course more flexible and it should be designed such that theory and practice should support each other. It should be able to meet the needs of the prevailing circumstances. It recommended that suitable schools should be attached to the training colleges, and more emphasis should be given to practice teaching. There was need to bring a uniformity in the course across the nation. This commission is given credit for replacing teacher training with 'teacher education'.

One major commission during post Independent time was *Secondary Education commission* (1952-53) whose chairman was Dr. S. Radhakrishnan. It laid down many recommendations with the sole purpose to strengthen the education system of India. It emphasized on raising the status of teachers by providing them with triple benefit scheme that could provide pension-cum-provident-cum-insurance. This commission emphasized that for the purpose of educational reconstruction, it is important that along with improving qualification of teachers, their professional training is equally important as they play a pivotal role in school as well as community.

Education Commission/Kothari Commission (1964-66) was set up because an upsurge of educational institutes led to gradual declination of the quality of education that needed to be addressed. This commission observed that for bringing qualitative improvement in education there is need of a sound professional programme for teachers. It suggested that teacher training institutions should not be isolated from Universities and schools rather it should be well integrated with them. This commission highlighted the flaws of education system prevailing at that time and also provided remedial measures to deal with it.

The Chattopadhyay Committee report (1983- 85). The Government of India in 1983 set up two National commission on teachers. The Chattopadhyay committee observed that, 'majority of our Teaching Colleges and Institutes are awefully inadequate'. 'If teacher education is to be made relevant to the roles and responsibilities of the new teacher then the minimum length of training should be of five years following the completeion of class XII'. It also stated that college of science and arts should start Education department so that students could opt for teacher education. This commission advocated for replacing practice teaching should be replaced by word 'Internship'.

National Policy of Education (NPE) was adopted by Lok Sabha on May 8, 1986. This policy brought about remarkable improvement in the field of teacher education as it led to the designing of National Curriculum Framework, the 10+2+3 structure of Education was implemented across the nation. This commission recommended that teacher education is a continuous process and it could be achieved with both pre-service and in-service teacher education and both these components of teacher education are inseparable from one another. Training schools were upgraded to District Institutes of Education and Training (DIETS), training colleges were upgraded into Colleges of Teacher Education (CTEs) and Institute of Advanced Studies in Education (IASES).

Yashpal Committee (1993), *learning without burden* emphasized on specialization of teacher education and recommended that teacher training curriculum should be designed as per the need of the school. It should be able to inculcate independent thinking and self-learning among the learners.

National Curriculum Framework (2005) – The Executive Committee of NCERT took the decision to review the NCFSE, 2000 in the light of the report, 'learning without burden (1993). For this purpose a National committee with 21 National Focus group was set up and it was chaired by Prof. Yash Pal. The key points with regard to teacher education made by NCF 2005 are summarized here:-

❖ The curriculum for teacher education should be made in child's context and there should be flexibility and diversity in its approach.

❖ Professionalization of teaching should be well reflected in policies made by the government with regard to recruitment, pre-service and in-service training of teachers.

❖ Teacher training curriculum should be structured such that teachers are able to construct a classroom culture that would provide inclusive environment to the children and it is able to address the issue of linkages between school and society.

❖ Language proficiency of teachers should be enhanced and there should be scope of critical thinking among teachers so that they are able to reflect on their experiences.

❖ NCF recommended that in-service teacher education curriculum should be restructured according to the actual needs of the teachers.

National Curriculum Framework for Teacher Education, *towards preparing professional and humane teachers* (2009). In the preface of this document it is mentioned that the guiding sources in the development of this document were; the National Curriculum Framework 2005 and the Right of Children to Free and Compulsory Education Act 2009. NCFTE was specifically designed keeping in view the scope for improvement of teacher education and to raise the prevailing status of teachers in the county. NCFTE states that quality of curriculum transaction in classroom is influenced by different parameters like the duration of the course, subject knowledge, pedagogical skills, commitment to the profession and sensitivity towards the problem of learners. The teacher education curriculum should be designed in a way that it is able to meet the needs of the school as with gradual change of time the expectation of

school from teachers also changes. NCF requires a teacher to be facilitator who helps the learner in knowledge construction. There is need of professional commitment of teachers towards teaching rather than attaining it as a guarantee for job. An overhauling increase in student intake did take toll on the quality of their education. Efforts were undertaken by NCTE and NAAC to foster quality education. It talks about the vision of teacher education, curricular areas of initial teacher education is dealt in detail along with recommendations for proper evaluation of developing teachers. NCFTE laid emphasis on the improvement of Pre-service teacher education and also suggested that in-service training programme also require major reforms and expansion.

National Education Policy 2020 – The National Education policy 2020 was approved by the Union cabinet of India on July 29th 2020. It outlines the vision of New Education system with focus on school education, higher education and teacher education. This policy replaces 34 year old National Education policy of 1986. A striking change made by this policy is restricting the already existing school curriculum. The new school structure would be 5+3+3+4.

Analysis of National Education Policy 2020 with respect to Teacher Education- This policy acknowledges that the quality of teacher education, its recruitment process, working condition are not at par with the desired goal. There is need of restoring the status of teachers by empowering them so that the best of the students aspire to take up teaching as their profession. It talks about strengthening of Teacher Eligibility Test both in terms of its content and pedagogy. Teachers will be given opportunity for continuous self- improvement by providing them with updated knowledge of innovative practices and advances in their profession. Each teacher would be expected to participate in at least 50 hours of continuous professional development (CPD) every year for their professional improvement. Teachers with outstanding performance need to be recognized and promoted along with a hike in their pays. NEP has given NCTE goal to develop National Professional Standards for Teachers (NPST) by the year 2022. NCTE would be restructured as Professional Standard Setting Body. The NPST would also help in redesigning of the pre-service teacher education programme. The aim is to again review and revise the professional standard in the year 2030 and thereafter this process of revising would be done at every ten years interval. NEP 2020 aims at moving teacher education into multidisciplinary colleges and universities by 2030 as there would be quality demand in content and pedagogy. By 2030 the minimum qualification of teacher educators will be a four year integrated B.Ed. degree. All B.Ed. programme will run with focus on inclusion of recent pedagogical techniques, multi-level teaching, learner centered and collaborative teaching, teaching children with disabilities and special needs. There would be emphasis on incorporating Fundamental rights as mentioned in the Indian constitution as an integral part of the curriculum, teachers should be prepared to bring about sustainable development and environmental awareness in learners as that would be the future demand. A teacher should be enriched with Indian traditional values, ethos as well as be well versed in the latest advances of educational practices .There would be provision of special shorter local teacher training programme and also shorter

post B.Ed. certificate programmes so that teacher can move to other specialized areas of teaching as per their interest. In order to restore the integrity and quality of the teacher education there would be stringent action taken against those Institutions/Colleges which do not meet with the set standard. In order to maintain uniform standard of teacher education all across the nation, there would be National eligibility test conducted for admission in pre-service teacher education programme. Outstanding experienced and retired teachers could also be employed to deliver long or short professional support to the colleges or universities.

CONCLUSION

The journey of teacher education dates back to ancient period when Monitorial system of teacher training was practiced. Certain changes were seen in teacher education during Buddhist and Muslim period but still it was more or less based on Monitorial system, there wasn't a proper system to support formal training of teachers. With the colonial rule, advances were made in teacher education, English was introduced as a language to teach in school along with other modern subjects. Macaulay's minute and Wood's despatch were pioneer in igniting the journey towards formal teacher education. Normal schools started across India before Independence but the curriculum designed for school education and teacher education lacked virtues of Indian traditions/ethos and values. Since Independence, constant efforts have been made by the government and policy makers to raise the standard of teacher education through various recommendations and suggestions. The major contributors towards up gradation of teacher education are National Education policy of 1968 and 1986. From time to time Curriculum Framework have been designed to meet the needs and challenges of teacher education in India. The recent National Education Policy 2020 is anotherstepping stone towards betterment of teacher education in our country. But we must realize that the goals of the objectives set by National Education Policies would be attained successfully only with the joint effort of each and every stakeholders of this country, including the students, teachers, parents and the community. We all need to work together to raise the standard of our fraternity by committing ourselves wholeheartedly to this challenging profession.

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4

A Study of Self Efficacy of Adolescents in relation to Emotional Maturity

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ABSTRACT

This paper examines the relationship between emotional maturity and self-efficacy of adolescents. Data were collected from 89 students of both sexes, with an average of 17 years of age old selected from the 12th standard. A standardized questionnaire was used to measure self-efficacy and emotional maturity of adolescents. While administering the tests , one student was absent. Emotional Maturity scale could be administered on eighty eight students and Self efficacy scale was administered on eighty nine students. The data were analyzed using descriptive statistics. The Pearson correlation coefficient was used to determine the relationship between self-efficacy and emotional maturity. The analysis of the data indicated that students' level of self-efficacy is high and that students are extremely emotionally immature. Further there was no significant relationship found between self-efficacy and emotional maturity (r = -.19 at 0.05 level).

Keywords: Self-efficacy, Emotional maturity, Adolescents.

INTRODUCTION

Psychologist Albert Bandura has defined self- efficacy as one's belief in one's ability to succeed or to accomplish a task in a particular situation. The concept of Self-efficacy has its origins in social cognitive theory (Bandura, 1986) in which the roles of observational learning and social experience was emphasized in personality development. According to Bandura, Self-Efficacy plays a role in deciding how people feel, perceive and motivate themselves that in turn can affect on their actions and performance. Bandura also identified several sources of self-efficacy. The first and strongest source comes from mastery experiences, because success creates a strong belief in one's personal efficacy and its failures are undermining

it. The second explanation is based from modeling because observing people similar to one another succeed with concerted efforts increases one's beliefs that one also has similar potential and capabilities to be successful. Social persuasion is a third source to boost people's belief that they can succeed. Usually, students do better if they are convinced verbally that they have some skills and capabilities in a particular task and are likely to perform better than students who have self-doubt and concentrate on their personal shortcomings when faced with a new task. The last source of successful efficacy comes from individuals' positive appraisals and self-improvement because those who have positive self-efficacy can structure a situation which brings success and avoid situations in which they are ineffective.

Maturation means the ripening of a particular, innate response pattern. The concept of maturity has not received much explicit attention in the literature. Recent emphasis on the conflict between the regressive, dependent, versus the progressive, productive forces in the personality has directed interest towards the more detailed nature of maturity. According to Walter D. Smith (1974) Emotional Maturity is a process in which the individual continuously strives for a greater sense of emotional well-being. Emotional Maturity consists of five components namely, emotional stability, emotional progression, social adjustment, personality integration, and independence (Singh and Bhargva, 1993).

Today's children are tomorrow's citizens. To have stable crimeless and peaceful society, youth are of foremost importance who is going to be the torch bearers of a future nation and of a generation. So this class with remarkable physiological and psychological changes and marked for uniqueness is of great concern. It is very much true that their emotional maturity and high self efficacy is important of their personality. Adolescents with sound, balanced personality are better adjusted and can contribute to the society to the greater extent. Thus it is important to see that the adolescents should have high self confidence and self – efficacy through which they can manage their stress and immaturity. When adolescents were expected to have higher self – confidence and self efficacy as well as capacity to manage stress and challenges in their life, it is necessary that they should emotionally be matured enough.

For some ways the impact of schools is more important than that for the family, school life requires an environment of knowledge beyond the control of the home. Once a child goes into school, the child enters a world which is separated from the security (or overprotection or refusal) he receives at home. A child is put in the care of a strange person, a new parent at an age, who still needs person support. He is interested in a period of his growth with his peers where his social interaction with his age group is very important to him. The other attitudes towards him and the decisions he makes will have a significant impact on his increasing perception of himself.

In the present circumstances, youth as well as children produce many psychos–somatic issues such as anxiety, stress, frustrations and emotional turmoil in everyday life. Thus, the study of emotional life is now emerging as a descriptive science, comparable with anatomy. It deals with interplay of forces with intensities and quantities. Emotion is central to the life and emotional maturity of a person to lead a successful life. Keeping this in mind, the

present research was conducted on adolescents to study their level of emotional maturity and self-efficacy.

1. OBJECTIVES OF THE STUDY

The study has the following objectives:

- To study the self-efficacy of adolescents.
- To compare the self-efficacy scores of adolescent boys and girls.
- To study the emotional maturity of adolescents.
- To compare the emotional maturity scores of adolescent boys and girls.
- To study the relationship between self-efficacy and emotional maturity of adolescents.

2. METHOD

Sample

The sample for this study comprised 89 students of class 12th enrolled in the academic session 2018-19 from school located in South Delhi.

Tools used in the Study

The Self Efficacy Scale (SES): It was developed by Arun Kumar and Shruti Narain (2014). The SES has been selected because of (a) the reported validity and reliability (b) ease in administration and has self-reporting five points scale (c) its suitability to college youth as well as adolescents.

The Emotional Maturity Scale (EMS): It was developed by Yashvir Singh and Mahesh Bhargva (1993). The EMS was selected because of (a) its published validity and reliability (b) ease in administration and has self-reporting five point scale (c) its suitability to college youth as well as adolescents and (d) used in many studies on adolescents (Pastey & Aminbhavi, 2006).

Procedure

Before administering the tools, the necessary permission was sought from the Principals of the sample schools. Both the SES and The EMS were administered to the students during the last week of the session. The students were given ample time (about 2 hours) to answer all the questions in the tools.

3. RESULTS

A. Self-Efficacy of Adolescents

Students' scores on the SES were used both as a measure of self-efficacy and as a way of classifying them into different levels. On the basis of the range mentioned in the tool, the distribution of students in each group is shown in Table 1.

Table 1: Distribution of Adolescents by Self-Efficacy Level Based on SES Score

Self-Efficacy Levels	SES Scores	Number of Students		
		Boys n = 29	Girls n = 60	Total N = 89
i. High self-efficacy	85 and above	7 24.13%	12 20%	19 21.34%
ii. Average self-efficacy	74-84	13 44.82%	23 38.33%	36 40.44%
iii. Poor self-efficacy	73 or less	9 31.03%	24 40%	33 37.07%

Table 1 indicates that in total, 21% of the adolescents were in the category of high self-efficacy, and 41% average self-efficacy, and remaining 38% in poor self-efficacy.

❖ *Gender-based Distribution of Self-Efficacy of Adolescents*
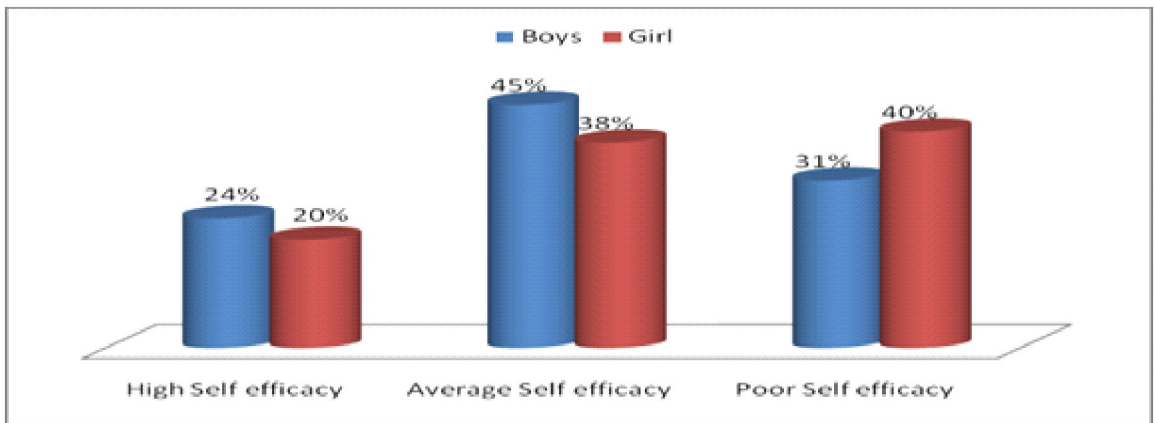
Figure 1: Gender wise distribution of self efficacy of adolescent

The gender-based distribution shows in Figure 1, that the difference was larger for 'poor self- efficacy' level. The majority of girls (40%) fell under poor self-efficacy level while at this level the numbers of boys was less (31%). There was also appreciably difference in distribution noted for 'average self-efficacy' level, where the boys and girls were 45% and 38%. For 'high self-efficacy' level, the distribution of boys and girls were 24% and 20%. In addition it was observed that 40% girls came under poor self efficacy level, while the percentage of boys for poor self-efficacy level was less i.e. 31%.

❖ *Comparison of Self-Efficacy of Adolescents Boys and Girls*

The descriptive statistics of Self-Efficacy score of adolescent boys and girls is shown in Table 2.

Table 2: Comparison of Mean Scores of Boys and Girls on Self-Efficacy (N=89)

S. No.	Dimension	Boys (n = 29)		Girls (n = 60)		Df	't' value
		Mean	SD	Mean	SD		
1.	Self-confidence	19.41	2.970	18.92	3.665	87	0.63 (NS)
2.	Efficacy expectation	17.34	3.165	18.07	3.344	87	0.97(NS)
3.	Positive attitude	18.45	2.995	17.80	3.318	87	0.89(NS)
4.	Outcome expectation	19.17	3.616	19.20	3.483	87	0.35(NS)
5.	Overall self-efficacy	74.45	10.717	75.76	10.119	87	0.55(NS)

NS = Not Significant

The hypothesis formulated was: There is no significant difference between the mean scores of boys and girls with respect to self efficacy.

Independent sample t-test was applied to find out the statistically difference in mean scores. After analysis, the mean scores of boys and girls with respect to self efficacy did not vary significantly and the hypothesis was retained.

B. Emotional Maturity of Adolescents

Students' scores obtained by the emotional maturity scale were used both as a measure of emotional maturity and as a way to classify them into different levels. Table 3 shows the distribution of students in each group based on the range listed.

Table 3: Distribution of Adolescents By Emotional Maturity Level Based on EMS Score

Emotional Maturity Levels	EMS Scores	Number of Students		
		Boys n = 37	Girls n = 51	Total N = 88
i. Extremely Emotionally Mature	50-80	4 (10.81%)	1 (1.96%)	5 (5.68%)
ii. Moderately Emotionally Mature	81-88	1 (2.70%)	5 (9.80%)	6 (6.81%)
iii. Emotionally Immature	89-106	8 (21.62%)	14 (27.45%)	22 (25%)
iv. Extremely Emotionally Immature	107-240	25 (67.56%)	31 (60.78%)	56 (63.63%)

The analysis revealed that 6% adolescents were in the level of extremely emotionally mature, (7% moderately mature and 24 % extremely immature) while majority of students (87%) were emotionally less immature (63% unstable and 24% extremely unstable). This indicates that the majority of 12th standard students are in emotionally less stable zone.

❖ *Gender-based Distribution of students on Emotional Maturity (EM)*

Figure 2: Distribution of boys and girls in percentage on five dimensions of EM
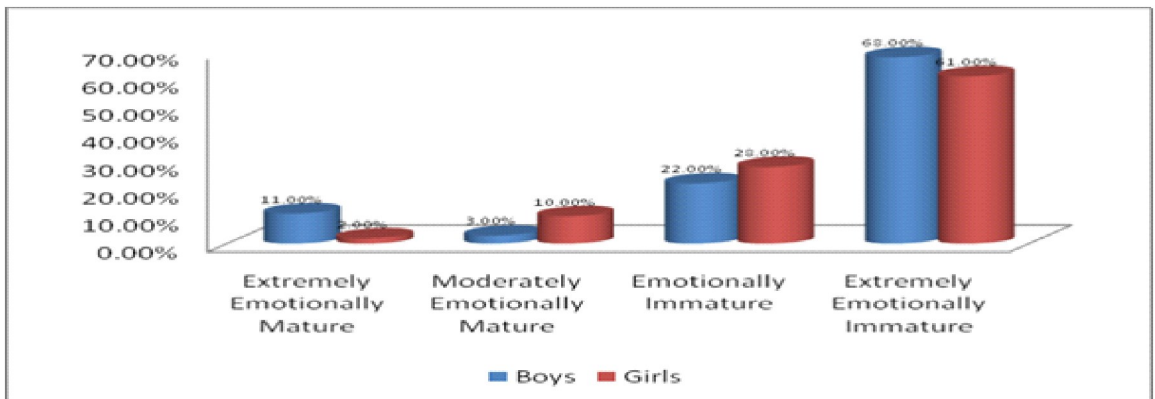
The gender wise distribution in the Figure 2, reveals that the difference is larger for 'extremely emotionally immature' level. The majority of boys (68%) come under extremely emotionally immature level while at this level the percentage of girls are less (61%). The appreciably difference in distribution can also be noticed for 'moderately stable' level where the percentage of boys and girls is 3% and 10% respectively. The differences of 9% and 6% in distribution of boys and girls can also be observed for 'extremely emotionally mature' and

'emotionally immature' levels. It can be observed that 90% boyss in total come under emotionally less stable zone (68% immature and 22% extremely immature) while the percentage of girls for an emotionally less stable zone are less i.e. 89% (61% immature and 28% extremely immature).

❖ *Comparison of Emotional Maturity of Adolescents Boys and Girls*

The descriptive statistics of emotional maturity score of adolescent boys and girls is shown in Table 4.

Table 4: Comparison of Mean Scores of Boys And Girls on EM (88)

S. No	Dimension	Boys (n =37)		Girls (n = 51)		Df	*t*-value
		Mean	SD	Mean	SD		
1.	Emotional Stability	20.36	5.69	26.31	6.519	86	1.08(NS)
2.	Emotional Progression	20.54	6.33	27.63	8.523	86	0.377(NS)
3.	Social Adjustment	19.00	7.39	23.49	7.532	86	0.88(NS)
4.	Personality Integration	17.79	5.59	23.45	8.568	86	0.18(NS)
5.	Independence	17.69	5.22	19.35	6.327	86	1.48(NS)
6.	Overall emotional maturity	95.38	24.32	120.24	29.23	86	1.26(NS)

NS= Not significant

The hypothesis formulated was: There is no significant difference between the mean scores of boys and girls with respect to emotional maturity. Independent sample t-test was applied to find out the statistically difference in mean scores.

After analysis, the mean scores of boys and girls with respect to emotional maturity did not vary significantly and the hypothesis was retained.

C. Relationship between Self-Efficacy Scores (SES) and Emotional Maturity scores (EMS) of Adolescents

The correlation between SES and EMS was shown in Table 5.

Table 5: Correlation Coefficient between Self-Efficacy and Emotional Maturity Scores

Variables	Mean	SD	No.	r value
EMS	124.11	34.01	88	-.19(NS)
SES	74.88	70.45	89	

Correlation at the 0.05level (2-tailed), NS= not significant

The null hypothesis stated: there is no significant relationship between self efficacy and emotional maturity of class 12th adolescents, was tested. Table 5 shows the negative but not significant correlation between self efficacy and emotional maturity scores. The correlation between self efficacy and emotional maturity was not found to be significant at 0.05 level ($r = -.19$, $p > .05$). Hence, the null hypothesis was held.

4. DISCUSSION

About 41% adolescents were found to be average self efficacy level, indicating that the majority of 12th standard adolescents were in 'average self efficacy level'. Girls scored high on self efficacy compared to boys. Boys and girls of 12th standard did not differ significantly from each other in their self efficacy ($t = 0.55$, $df = 86$, $p > 0.05$). Emotional maturity analysis showed that the majority of adolescents (87%) were emotionally immature (63% unstable and 24% extremely unstable). This showed that the majority of 12th standard adolescents were in emotionally less stable level. In addition, there was also a significant difference observed in two dimensions of emotional maturity, namely- emotional instability and emotional regression. In addition, girls and boys of 12th standard did not differ significantly from each other in the EM ($t = 1.26$, $df = 87$, $p > 0.05$). Further, there was no significant relationship found between self –efficacy and emotional maturity.

It can be concluded that the experience of mastery is the most important factor determining a person's self-efficacy. High Self-efficacy can affect motivation in both positive and negative ways.

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Education for Sustainable Development

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ABSTRACT

Education for sustainable development provides an exciting vision of an inter-disciplinary and learner centred way to empower students to advance a pro-social and environmental agenda in their organisations, communities and personal lives. The United Nations advocates that all learners will have the knowledge and skills needed to promote sustainable development. The objective of this paper is, therefore, to emphasize the impact of intentional development of education and education for sustainable development. It promotes the development of the knowledge, skills, understanding, values and actions required to create a sustainable world. This ensures environmental protections and conservation, promotes social equity and encourages economic sustainability.

Keywords: Sustainable, Interdisciplinary, Curriculum, Resources.

INTRODUCTION

MEANING

Education for sustainable development was a United Nations program that defined as education that encourages changes in knowledge, skills, values and attitudes to enable a more sustainable.

The sustainable development has been derived from Brundtland's our common future 1987 report of the world commission on environment and development "sustainable development is the development that meets the needs of the present without comprising the ability of future generation to meet their own needs."

UNESCO, 2014

Education for sustainable development allows every human being to acquire the knowledge, skill, attitudes and values necessary to shape a sustainable future.

NEED

Securing economic development, social equity and justice, and environmental protection is the goal of sustainable development. Although these three factors can work in harmony, they are often found to conflict with one another. The aim of sustainable development is to balance our economic, environmental and social needs, allowing prosperity for now and future generation, sustainable development consist of a long-term, integrated approached to developing and achieving a healthy community by jointly addressing economic, environmental, and social issues, whilst avoiding the our conception of key natural sources.

Sustainable development encourages us to conserve and enhance our resources base, by gradually changing the ways in which we develop and use technologies. Countries must be allowed to meet their basic needs of employment, food, energy, water and sanitation. if this is to be done in a sustainability mane than there is a Definite need for a sustainability level of population economic growth should be supported and developing nations should be allowed a growth of equal quality to the developed nations.

The continuous increase in population and rapid development in the last century have imposed excessive demand on natural resources. There is a need to maintain a balance between the environment and development.

The need is to increase the production that is essential but at the same time to protect the environment and conserve the resources for future generation. This can be achieved by sustainable development, Conservation, sustainability and biological diversities' all inter related. Sustainable development aims at harmony of man with nature and the practices that reduce dependence or use of natural resources. It can be achieved by various means like.

- Planting of more trees.
- Having more green grassy patches interspersed between concrete buildings.

ROLE OF THE SCHOOL

In order to help Students, develop knowledge, skills attitudes and values relevant to conservation and sustainable development schools have to take up new roles and responsibility. Teachers are expected to be not only the dispenser of knowledge, information, but also managers of teaching learning situations. The entire school organization management and also classroom organization have also to be suitably changed to meet the new challenges of environment concerns and sustainable development.

The school is expected to discharge the following functions in relation to the conservation issues and sustainable development.

1. Developing awareness about environmental issues.
2. Organizing 'Awareness campaigns'.
3. Organizing 'Population days and environmental days.
4. Organizing conferences group discussions and seminars.
5. Arranging lectures of expert on environmental issues.

ROLE OF THE TEACHERS

All Teachers in the school are expected to play a significant role in environmental conservation and sustainable development as these issues are closely related to national development.

1. Utilize current theories of knowledge attitude and behavior relationship in selecting developing and implementing a balanced curriculum which maximizes the probability to derived behavior change in learners.
2. Effectively evaluate environmental education curricular methods and Learners achievement in both cognitive and effective domains.

Education for sustainable development is an educational approach that includes key sustainable development issues in teaching and learning. ESD is the goal to motivate and empower learners to assess and change behaviors and take action for sustainability. Central to this is enabling learners to connect local realities to the global context encouraging critical thinking, future scenario building and collaborative design making. A component to ESD is education for sustainable lifestyles, which pays attention to how our daily choices are linked to the health of our community, the resilience of our local ecosystem and the global challenges use face today. Preparing students to engage in lifelong learning and transformative change, and to actively engage with sustainable development through their lives. Most often curriculum focuses on subjects like mathematics, science, history and languages leaving little time to learn about sustainability and it impact on all dimensions of life.

Anne Edwards (2017) suggest, that to include sustainability into education, one must expand conventional subject teaching by centering conceptions "matters of concern".

Integrating education for sustainable Lifestyles in to current curriculum:

1. Develop a vision of what takes of graduates your university or college wants to create.
2. Develop an action with clear project, responsibilities and a budget to realize innovative educational initiatives.

Develop the local Community to more Sustainable:

1. Organize a sustainability day for students and local citizens, involving initiatives and organization in the city.
2. Empowers students to run workshops on sustainability topics for children in school or kinder garden.

Take campus operation as a living laboratory for learners to learn about sustainability:

1. Use the campus and buildings as a living laboratory for students doing course projections sustainability issues at the university itself.
2. Realize sustainability projects on campus and have students study their implementation and impacts as part of course work.

SUSTAINABLE DEVELOPMENT PROJECT IDEAS TO ENGAGE STUDENTS

- **SDG poster campaign:** Run workshop in which Students develop poster on the SDGs – one poster per SDG. The posters could portray facts explain what each SDG is or how they are relevant for students and staff.
- **SDG art exhibition:** Engage student to produce art, such as photographs, paintings or sculptures that symbolize the 17 SDGs.
- **Lecture Series:** Organize a lecture series the invite speakers to present on 4-6 sustainable development goals.
- **SDG Day:** Find out which students' groups are active on the SDGs. Then invite this student group to organize a whole day programme with different activities. On the sustainable development goals.
- **Quiz:** Preparing a cool quiz with different questions on issues related to the SDGs.

17- SUSTAINABLE DEVELOPMENT GOALS (2015 – 2030)

a. End poverty
b. End hunger
c. Ensure inclusive and equitable quality education.
d. Achieve gender equality
e. Reduce inequality within and among countries
f. Ensure healthy lives and promote wellbeing.
g. Ensure availability and sustainable management of water and sanitation for all.
h. Ensure access to affordable, reliable sustainable and modern energy for all.
i. Promote sustained, inclusive and sustainable economic growth, full and adductive employment and decent work for all.
j. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
k. Make cities and human settlements inclusive, safe, relevant and sustainable.
l. Ensure sustainable consumption and production patterns.
m. Take urgent action to combat climate change and its impacts.
n. Conserves and sustainability use the oceans seas and marine resources sustainability development.

o. Protect, restore and terrestrial ecosystems, sustainability manage forest, combat desertification and hall and reverse land degradation, and halt biodiversity loss.

p. Promote peaceful and inclusive societies for sustainability development provide access to justice for all effectives, accountable and inclusive institution at all levels.

q. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

PEDAGOGICAL APPROACHES IN ESD

There is no 'correct' pedagogy for sustainability education, but there is a broad concern that it requires a shift towards active, participation, and experiment learning methods that engage the learners and make a real difference to their understanding, thinking and ability to act.

We've identified five pedagogic aliments that cover a host of pedagogical approaches or methods that staff of Plymouth might use to bring these elements in to the learning environment.

1. *Critical Reflection* – including the more traditional lecture, but also newer approaches such as reflexive accounts, learning journals, and discussion group.

2. *Systemic thinking and analysis* – the use of real-world case studies and critical incident, project based learning, stimulus activities, and the use of the campus as a learning resource.

3. *Participating learning* – with emphasis on group learning, developing dialogue, experimental learning, and action research and developing case studies with local community groups and business.

4. *Thinking creativity for future scenarios* – by using role play, real world inquiry future visioning problem-based learning, and providing space for emergency.

5. *Collaborative learning* – including contributions from guest speakers, work based learning interdisciplinary/multidisciplinary working, and collaborative learning and co inquiry.

CONCLUSION

We as individuals living in a world where the population is growing and the natural resources are limited need to learn to line sustainability. The global problems the world is facing related to the atmosphere, population, poverty, human rights and developments are becoming more complex today. Therefore, education for sustainable development is mandatory at the elementary level or college level. So, essential planning and strategies to be college level implemented in school's curriculum, in order solve these global issues to words a batter sustainable environment. Government need to take some steps seriously and make some policy which should be sticks followed in our society.

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6

New Education Policy - 2020: An Analytical Perspective

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ABSTRACT

As children are the future of tomorrow's world thus, in order to prepare children to face the world and to build sustainable tomorrow, after 34 years Government of India formulated new education policy taking pandemic corona into consideration. Reducing GDP of the country further adds the concern to make necessary changes in old education policy. Drafting committee gave the final draft to union cabinet for its approval and it was accepted and approved on 29th July' 2020. New policy is formulated by committee headed by Dr. Kasturirangan, former chairman of Indian Space Research Organization (ISRO). New education policy not only work on primary level but it also made certain changes in higher education. Thus it has equally impacted both school and colleges. This policy was formulated with main aim of globalizing the Indian education so that our children can compete with foreign students and also to attract foreign students to join Indian universities. It also aims at giving equal weightage to each regional language thus showing unity in diversity. This papers focuses on aims and vision of new educational policy, changes made at school and higher level and merits of the policy. This papers also aims to compare old and new policy.

Keywords: New Education Policy, Covid-19, School Education, Early Childhood Care and Education, Higher Education, Globalization.

INTRODUCTION

Education is the root for overall development of individual. For development of country it is need of an hour to educate its people. Thus Government of India formulated the New Education Policy to promote education amongst people. The policy focuses on elementary

education to colleges in both rural and urban India. The first NPE was proclaimed by the Government of India by Prime Minister Indira Gandhi in 1968, the second by Prime Minister Rajiv Gandhi in 1986, and the third by Prime Minister Narendra Modi in 2020.

Committee under former Cabinet Secretary T. S. R. Subramanian started the consultation process for the New Education Policy in January, 2015. On the basis of the committee report, in June 2017, panel led by former Indian Space Research Organisation (ISRO) chief Krishnaswamy Kasturirangan submitted the draft NEP in 2019 which was later released by Ministry of Human Resource Development, followed by a number of public consultations. Draft consists of 484 pages. Ministry took suggestions from Over two lakh suggestions from 2.5 lakh gram panchayats, 6,600 blocks, 6,000 Urban Local Bodies (ULBs), 676 districts.

The National Education Policy (NEP), 2020 was formulated by government of India on 29th July, 2020. The policy focuses on both education at primary and higher level. It takes into consideration the current situation of pandemic COVID-19 and try to change mode of education which was offline earlier to online mode of education by introducing many applications and software. It made multidisciplinary approach to education. Thus education is not online limited to score good marks but also provide students to follow their interest by allowing students to choose variety of subjects not only at higher level but also at elementary level. Thus education is not classifies into three streams- science, commerce and humanities. It also provides various vocational courses to students thus further focusing on agenda of "atamnirbhar bharat". Education takes a big loop from being teacher centred to student centred. Students were forgetting there regional language, in order to keep them connected to their rootsand considering the power of language equal importance is to regional language thus, introducing a multilinguistic approach towards education. Further various changes were made in 10+12 structure of school education by introducing new curriculum. This policy also tried to internationalize the education by promoting India as global study destination.

VISION OF THE POLICY

1. To make India a global superpower, there is transformation of education system from sustainable India into equitable and vibrant knowledge society by ensuring higher education to all.

2. Changes in curriculum and pedagogy must be made in such a way that it shows certain respect towards the fundamental rights and constitutional values, thus creating awareness about one's role and responsibilities as a citizen of the nation.

3. One should be proud of being Indian not only in thoughts but also in knowledge, skills, responsibilities, sustainable development and living, therefore becoming a true global citizen.

I. CHANGES IN SCHOOL EDUCATION

The earlier 10+2 structure of school education is restructured and modified into 5+3+3+4. As earlier structure do not include 3 years of age as class 1 begins at age 6, this new structure

include age 3-18 with an aim of promoting overall learning, development, and wellbeing of students.
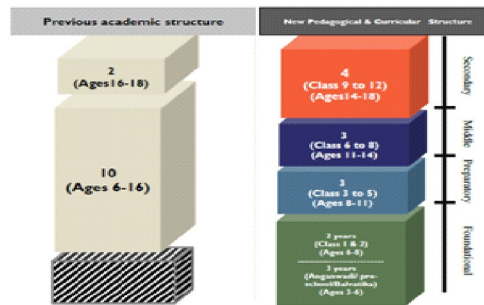

Figure 1. Showing previous and new structure of education [2].

1. EARLY CHILDHOOD CARE AND EDUCATION (ECCE)

As 85% of brain's development occurs before age of 6, thus in order to ensure proper brain development and growth special attention should be given to students before age of 6. The ministry of HRD, Women and Child Development (WCD), Health and Family Welfare (HFW), and Tribal Affairs jointly worked to introduce ECCE in pedagogy and curriculum. As many socio economic sections are distant from ECCE thus, government took various steps to enlighten them with importance of ECCE and also to provide various privileges granted by them.

As ECCE focuses on age group prior to age 6, it ensures proper education among students of those age by using languages, numbers, counting, colours, shapes, indoor and outdoor play, puzzles and logical thinking, problem-solving, drawing, painting and other visual art, craft, drama and puppetry, music and movement. This results in physical and motor development, cognitive development, socio-emotional-ethical development, cultural/artistic development, and the development of communication and early language, literacy, and numeracy of students. As India has its great culture and storytelling history, ECCE is also done by use of Indian culture and traditions which further enlighten students about the culture.

NCERT developed a National Curricular and Pedagogical Framework for Early Childhood Care and Education (NCPFECCE) for children up to the age of 8. It is divided into 2 parts a sub-framework for 0-3 year-olds, and a sub-framework for 3-8 year-olds.

A special attention is given to socially disadvantage section of society by working on institutions like (a) stand-alone Anganwadis; (b) Anganwadis co-located with primary schools; (c) pre-primary schools/sections covering at least age 5 to 6 years co-located with existing primary schools; and (d) stand-alone pre-schools.

Work on grass root level is done in aganawa is by focusing on strengthening there infrastructure, play equipment, and well-trained Anganwadi workers/teachers. Every Anganwadi will have a well-ventilated, well-designed, child-friendly and well-constructed

building with an enriched learning environment. For ensuring smooth transitions between anganwadis and primary school Children in Anganwadi Centres shall take activity-filled tours - and meet the teachers and students of their local primary schools. It is said that students below to the age of 5 will go to a "Preparatory Class" or "Balavatika" (that is, before Class 1), which has an ECCE-qualified teacher. The learning will be based primarily on play-based learning. Main focus is given to developing cognitive, affective, and psychomotor abilities and early literacy and numeracy. The midday meal programme shall also be extended to the Preparatory Classes in primary schools [2]. Health check-ups are available in the Anganwadi system shall also be made available to Preparatory Class students of Anganwadi as well as of primary schools.

2. LITERACY AND FOUNDATION

In order to lead a meaningful life one should be able to read and should be able to simple addition and subtraction so that he can do normal day to day odds with ease. But major portion of our country is still not able to these simple calculations this further adds the need to make necessary changes in education. National Mission on Foundational Literacy and Numeracy will be set up by the Ministry of Human Resource Development (MHRD). The highest priority of the education system will be to achieve universal foundational literacy and numeracy in primary school by 2025. If most basic learning requirement (i.e., reading, writing, and arithmetic at the foundational level) is first achieved then only other implementations of policy will make sense to students. Thus priority should be given to basic learning.

In order to ensure basic learning, teacher vacancies will be filled at the earliest, in a time-bound manner - especially in disadvantaged areas and areas with large pupil-to-teacher ratios or high rates of illiteracy. Local teachers or those with familiarity with local languages will be employed.

More focus will be given to foundational literacy and numeracy - and generally, on reading, writing, speaking, counting, arithmetic, and mathematical thinking - throughout the preparatory and middle school curriculum, with a robust system of continuous formative/adaptive assessment to track and thereby individualize and ensure each student's learning.

3. ENSURING EDUCATION AT ALL LEVELS

It has been seen that number of students attending school up to class 8th is more whereas number of individuals attending class 9th -12th decreases drastically so in order to reduce the number of drop outs, various initiatives will be taken by government.

The two main initiatives are- first is to provide proper infrastructure so that students feel safe and engage themselves in education. Secondly, government schools will be re-established, with ensuring proper and safe infrastructure. Also new schools will be reopen in remote areas with trained teachers in order to provide access to all individuals to education.

Counsellors and social workers will work at grass root level and enlighten parents and students with importance of education in order to lead successful life thus encouraging students to attend school.

Special attention will be given to socially disadvantage group by providing both formal and non-formal modes of education. Open and Distance Learning (ODL) Programmes offered by the National Institute of Open Schooling (NIOS) and State Open Schools will be expanded and strengthened for meeting the learning needs of young people in India who are not able to attend a physical school. NIOS and State Open Schools will offer the following programmes in addition to the present programmes: A, B and C levels that are equivalent to Grades 3, 5, and 8 of the formal school system; secondary education programmes that are equivalent to Grades 10 and 12; vocational education courses/programmes; and adult literacy and life-enrichment programmes. States will be encouraged to develop these offerings in regional languages by establishing new/strengthening existing State Institutes of Open Schooling (SIOS) [2]

One-on-one tutoring; the teaching of literacy and holding of extra-help sessions; teaching support and guidance for educators; career guidance and mentoring to students will be provided in order to enhance learning. For this purpose proper records of literate volunteers, retired scientists/government/semi government employees, alumni, and educators will be created.

4. CURRICULUM AND PEDAGOGY OF SCHOOL

➢ *Re-structuring of school curriculum*

With the aim of better cognitive development of student's school curriculum is restructured into 5+3+3+4 design, corresponding to age groups 3-8, 8-11, 11-14, and 14-18 years, respectively. Upto 3 years is considered as foundational stage (anganwadi/pre-school) + 2 years in primary school in Grades 1-2; both together covering ages 3-8), Preparatory Stage (Grades 3-5, covering ages 8-11), Middle Stage (Grades 6-8, covering ages 11-14), and Secondary Stage (Grades 9-12 in two phases, i.e., 9 and 10 in the first and 11 and 12 in the second, covering ages 14-18).

Education is very flexible in foundational stage mainly play/activity based learning is preferred. The Preparatory Stage will comprise three years of education building on the play, discovery, and activity-based pedagogical and curricular style of the Foundational Stage, and will also begin to incorporate some light text books as well as aspects of more formal but interactive classroom learning, in order to lay a solid groundwork across subjects, including reading, writing, speaking, physical education, art, languages, science, and mathematics. The Middle Stage will comprise three years of education, building on the pedagogical and curricular style of the Preparatory Stage, but with the introduction of subject teachers for learning and discussion of the more abstract concepts in each subject that students will be ready for at this stage across the sciences, mathematics, arts, social sciences, and humanities. Experiential learning within each subject, and explorations of relations among different subjects, will be encouraged and emphasized despite the introduction of more specialized subjects and subject teachers. The Secondary Stage will comprise of four

years of multidisciplinary study, building on the subject-oriented pedagogical and curricular style of the Middle Stage, but with greater depth, greater critical thinking, greater attention to life aspirations, and greater flexibility and student choice of subjects. In particular students would continue to have the option of exiting after Grade 10 and re-entering in the next phase to pursue vocational or any other courses available in Grades 11-12, including at a more specialized school, if so desired [2].

➤ *Promoting Holistic Development*

The aim of education is not only to enhance cognitive development but also building character and creating holistic and well-rounded individuals equipped with the key 21st century skills. In order to prevent rote learning and also to prepare students for better tomorrow there will be shift from teacher centre to student centred education. Certain values and skills are integrated at each level of learning. NCERT aims at identifying those skills and including them in curriculum.

➤ *Reduction in curriculum*

In order to more focus on critical skills, enhancing holistic approach there will be significant reduction in syllabus so that students instead of studying only to get good marks they more focuses on learning something new and education is not teacher centred but student centred. Students will gives there inputs and there will be proper interaction between teachers and students instead of lecture mode learning.

➤ *Experiential learning and integration of other subjects*

Education is not only limited to learn about one particular subject but there will be proper integration of other subjects like art, sports in every other subject. Experiential methods like hands-on learning, arts-integrated and sports-integrated education, and story-telling-based pedagogy are adopted for competency based learning.

➤ *Flexibility in course choices*

There will be no separation like science, humanities and commerce, students will be given full flexibility to choose subjects depending upon there will and what career plan they want to develop. Vocational skills and art which were earlier place as co-curricular activities will be given equal importance and students can choose any of them like science, humanities etc. This further provides holistic approach towards curriculum and presents an example of gradual transition from teacher centred to student centred education.

➤ *Power of Language- Multilingualism*

As student of age 2-8 has high grasping skills, he adopts language spoken with him very fast thus it will be made compulsory in both government and non-government schools to teach mother language till class 5th, preferably till class 8th. In most of the cases mother language and local language is same. Teachers should be bilingual and readily use student's mother tongue for communication. Books should be available in all languages mentioned in Eighth Schedule of the Constitution of India. Three language system will be introduced with Sanskrit being most common language used. Between grades 6th -8th various project

activity will be introduced among students under 'Ek Bharat Shrestha Bharat'. This will help to promote unity among diversity. This will also fill the sense of respect towards other cultures of the country.

➢ *Liberty in textbooks*

Further in order to prevent rote learning there will be transformation in books. Books will inculcate local content which will grasp student's attention and makes learning more interesting. Books will be available in different regional languages further showing unity in diversity. If states makes their own textbook, then they have to follow framework provided by NCERT only. Different books will be available for one particular subject giving teachers a liberty to choose book according to their own pedagogy or style of teaching.

➢ *Change in Assessment process*

In order to prevent rote learning and promote true meaning of education some changes will be made in assessment methods. Instead of summative assessment there will be formative assessment and competency methods so that instead of running behind marks students more focus on gaining knowledge.

Progress report will not only bases on the marks scored but it will focus on assessing skills and overall development of a child. Regular parent teacher meeting will be held so that parents are in the loop and know how their child is performing, which skill he possess as it will help to shape his future.

10th and 12th board exams will still be there but there pattern will be significantly changed to abolish coaching culture as it increases pressure on students. Students will be given two chances to give the boards- one main and other improvement if any needed. Further board will be in 2 stages- first one will be entirely objective while other one have some descriptive questions too.

To track the progress throughout the school years not only in 10th and 12th, all students will take school examinations in Grades 3, 5, and 8.

The Grade 3 examination, in particular, would test basic literacy, numeracy, and other foundational skills. The results of school examinations will be used only for developmental purposes of the school education system, including for public disclosure by schools of their overall (anonymised) student outcomes, and for continuous monitoring and improvement of the schooling system [2].

A body under MHRD -PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development), National Assessment Centre will be setup. that fulfils the basic objectives of setting norms, standards, and guidelines for student assessment and evaluation for all recognized school boards of India, guiding the State Achievement Survey (SAS) and undertaking the National Achievement Survey (NAS), monitoring achievement of learning outcomes in the country, and encouraging and helping school boards to shift their assessment patterns towards meeting the skill requirements of the 21st century in consonance with the stated objectives of this Policy. This Centre will also advise school boards regarding new assessment patterns and latest researches, promote collaborations

between school boards. It will also become an instrument for the sharing of best practices among school boards, and for ensuring equivalence of academic standards among learners across all school boards.

➢ *Identifying and Supporting Hidden talents of students*

Some students are gift of god they possess some hidden talents thus, teachers should try to identify and encourage those students. Topic-centred and Project-based Clubs and Circles will be encouraged and supported at the levels of schools, school complexes, districts, and beyond. Examples include Science Circles, Math Circles, Music & Dance Performance Circles, Chess Circles, Poetry Circles, Language Circles, Drama Circles, Debate Circles, Sports Circles, Eco-Clubs, Health & Well-being Clubs/ Yoga Clubs etc. schools should start many summer programmes to encourage such talents.

Olympiads and certain competitive exams should be conducted along with collaboration with other institutions this will help to identify hidden talent among students and prepare them for higher competitive exams.

5. TEACHERS

➢ **Recruitment**

As teachers shape the tomorrow's future they play most important role in the society so more focus will be given to pay the respect they deserve in order to encourage more individuals to enter this noble cause.

Many incentives will be provided to teachers specially to local teachers. Incentives like local housing near the school, increased housing allowances will be given.

Teachers will not be transferred without any immediate circumstances as students see their teachers as their role models so it will be very difficult to adjust with new teacher so frequently. Further transfer will be fully online in order to have transparency in the process.

Teachers have to cleat teacher eligibility test (TET), Teachers will recruited dependent on the marks scored in the test. But recruitment will not solely based on the test score, but it will also be dependent on the interviews, there subject knowledge and interaction with students. Teachers knowing local languages will be given more preference as they can interact with students more appropriately.

Technology-based comprehensive teacher-requirement will be done by the states. Information about all the vacancies will be given through online mode for better accessibility.

➢ **Work Culture**

Teachers, Principal and other staff should work as a whole unit for growth of the institutions.

Teachers will be given full liberty to conduct teaching in their own way. For this purpose teachers should be provided with all the means required like infrastructure, technology etc. Positive and stress free work environment will be created to ensure growth of teachers.

➤ **Continuous Professional Development (CPD)**

There will be many programmes and prospects for growth of teachers. They will be enrolled in various training in order to adopt to new means and teaching aids of education. Most of them will be conducted through online mode. It will be made compulsory for teachers to take CPD programmes for 50 hours each year.

Similarly in order to improve their leadership skills and management principal will also take these programmes for better running the institution as teachers look up to principal for their responsibility.

➤ **Career Management and Progression (CMP)**

Promotions will be given to teachers in terms of increased salary, permanent jobs and certain more incentives for their outstanding performance. These promotions will be given to teachers of all stages further stating that each stage hold equal importance and this also ensures high quality teachers at each stage.

➤ **Professional Standards for Teachers**

In order to acknowledge teachers with their role, a proper guiding set of National Professional Standards for Teachers (NPST) will be developed by 2022, by the National Council for Teacher Education in its restructured new form as a Professional Standard Setting Body (PSSB) under the General Education Council (GEC), in consultation with NCERT, SCERTs, teachers from across levels and regions, expert organizations in teacher preparation and development, expert bodies in vocational education, and higher education institutions.

➤ **Special Teachers**

In order to not only have subject-teaching knowledge and understanding of subject-related aims of education, but also the relevant skills for understanding of special requirements of children, teachers excelling in this field is required for teaching to students with special needs. Such teachers will be offered as certificate courses, in the pre-service as well as in-service mode, either full time or as part-time/blended courses - again, necessarily, at multidisciplinary colleges or universities.

➤ **Teacher Education**

Minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree that teaches a range of knowledge content and pedagogy and includes strong practicum training in the form of student-teaching at local schools. The 2-year B.Ed. programmes will also be offered, by the same multidisciplinary institutions offering the 4-year integrated B.Ed., and will be intended only for those who have already obtained Bachelor's Degrees in other specialized subjects. These B.Ed. programmes may also be suitably adapted as 1-year B.Ed. programmes, and will be offered only to those who have completed the equivalent of 4-year multidisciplinary Bachelor 's Degrees or who have obtained a Master's degree in a specialty and wish to become a subject teacher in that specialty. All such B.Ed. degrees would be offered only by accredited multidisciplinary higher education institutions offering 4-year integrated B.Ed. programmes. Multidisciplinary higher education institutions offering the

4-year in-class integrated B.Ed. programme and having accreditation for ODL may also offer high-quality B.Ed. programmes in blended or ODL mode to students in remote or difficult-to-access locations and also to in-service teachers who are aiming to enhance their qualification, with suitable robust arrangements for mentoring and for the practicum-training and student-teaching components of the program. All B.Ed. programmes will include training in time-tested as well as the most recent techniques in pedagogy, including pedagogy with respect to foundational literacy and numeracy, multi-level teaching and evaluation, teaching children with disabilities, teaching children with special interests or talents, use of educational technology, and learner-cantered and collaborative learning. All B.Ed. programmes will include strong practicum training in the form of in-classroom teaching at local schools. All B.Ed. programmes will also emphasize the practice of the Fundamental Duties (Article 51A) of the Indian Constitution along with other Constitutional provisions while teaching any subject or performing any activity. It will also appropriately integrate environmental awareness and sensitivity towards its conservation and sustainable development, so that environment education becomes an integral part of school curricula [2].

6. LEARNING FOR ALL

Government will come up with many programmes ensuring education not only in rural and urban areas, but to also promote education among tribal communities. As it is a well-known fact 'Badega India jab Padega India'. Government will also aim to provide many incentives to those who take up higher education like scholarships etc.

7. ACCREDITATION FOR SCHOOL EDUCATION

With the aim to empower schools and teachers with trust, enabling them to strive for excellence and perform at their very best certain regulatory system has been set up which is being handled by single body, i.e., the Department of School Education.

The key principles and recommendations of this Policy regarding the State school education system, the independent responsibilities within that system, and the approach to its regulation are as follows:

(a) The Department of School Education, which is the apex state-level body in school education, will be responsible for overall monitoring and policy making for continual improvement of the public education system; it will not be involved with the provision and operation of schools or with the regulation of schools, in order to ensure due focus on the improvement of public schools and to eliminate conflict of interests [2].

(b) The educational operations and service provision for the public schooling system of the whole State will be handled by the Directorate of School Education (including the offices of the DEO and BEO, etc.); it will work independently to implement policies regarding educational operations and provision [2].

(c) An effective quality self-regulation or accreditation system will be instituted for all stages of education including pre-school education - private, public, and philanthropic - to ensure compliance with essential quality standards. To ensure that all schools follow

certain minimal professional and quality standards, States/UTs will set up an independent, State-wide, body called the State School Standards Authority (SSSA). The SSSA will establish a minimal set of standards based on basic parameters (namely, safety, security, basic infrastructure, number of teachers across subjects and grades, financial probity, and sound processes of governance), which shall be followed by all schools. The framework for these parameters will be created by the SCERT in consultation with various stakeholders, especially teachers and schools. Transparent public self-disclosure of all the basic regulatory information, as laid down by the SSSA, will be used extensively for public oversight and accountability. The dimensions on which information has to be self-disclosed, and the format of disclosure will be decided by the SSSA in accordance with global best practices for standard-setting for schools. This information will have to be made available and kept updated and accurate by all schools, on the aforementioned public website maintained by the SSSA and on the schools' websites. Any complaints or grievances from stakeholders or others arising out of the information placed in the public domain shall be adjudicated by the SSSA. Feedback from randomly selected students will be solicited online to ensure valuable input at regular intervals. Technology will be employed suitably to ensure efficiency and transparency in all work of the SSSA. This will bring down significantly the heavy load of regulatory mandates currently borne by schools [2].

(d) Academic matters, including academic standards and curricula in the State will be led by the SCERT (with close consultation and collaboration with the NCERT), which will be reinvigorated as an institution. The SCERT will develop a School Quality Assessment and Accreditation Framework (SQAAF) through wide consultations with all stakeholders. The SCERT will also lead a "change management process" for the reinvigoration of CRCs, BRCs, and DIETs which must change the capacity and work culture of these institutions in 3 years, developing them into vibrant institutions of excellence. Meanwhile, certification of competencies of students at the school [2].

II. CHANGES IN HIGHER EDUCATION

Changes in education policy were not only made in school education, but there will be certain changes on college or higher education too. These changes are as follows-

- There will be transaction from earlier 'right to education' to ideas of 'Kothari commission.' According to this, those students who are eligible and lie under certain guidelines will be granted admission in college.

- In order to globalize the education, foreign universities will now be allowed to set up their campuses within the country only. In this way students will get opportunity to interact with foreign universities within their own country only.

- Students will also be allowed to do various vocational courses. This will led to integration of various subjects and opens up new job opportunities. This will further bring out multidisciplinary approach of learning and offers students flexibility to choose subjects.

- There will be a single common test to get admission in various universities this will further reduce student's pressure to prepare for variety of exams. It will also reduce the cost of filling various entrance forms.

- A great initiative taken by government is Academic Bank of Credit (ABC). ABC will be established. In this bank credit earned by students through various courses will be saved. Also if student leave the course in between due to some reasons, they can come back years later and continue again, credits scored earlier will still be saved.

- There will be a single large body- higher education commission of India (HECI). It will look into all matters of education other than legal and medical education.

- As we know there is no age of learning, thus if anyone wishes to learn in adult age for this purposes online courses, apps, online books, TV channels will be available. Also adult education centres will be developed to look into this matter.

- HECI will have 4 verticals-
    a) National Higher Education Regulatory Council (NHER)
    b) Higher Education Grants Council (HEGC)
    c) National Accreditation Council (NAC)
    d) General Education Council (GEC)

- HECI will not have financial powers, it cannot pass any bill. All financial powers will be under Ministry of Education earlier known as MHRD.

- The most important feature of NEP is "empowerment and autonomy to innovate". According to this, all degree granting colleges and university will convert into Research Incentive University. More focus will be given to research oriented learning.

- All common entrance test will be conducted by a single organisation- "NTA- National Test Agency".

- Any undergraduate course will be for 3 or 4 years. If student leaves course after 2 years then a diploma will be given, if leaves after 3 years then degree will be given. Where as in case of vocational and professional course, if a student leave after 1 year then a certificate will be given.

- According to NEP, institutions will have freedom to start PG courses. Those who have done 4 years of graduation will have PG course for 1 year and those who have done 3 years of graduation, for them PG course will be for 2 years.

III. COMPARISON OF OLD AND NEW EDUCATION POLICY

S.NO.	NEP, 1986	NEP, 2020
1.	Focus on overall development on student.	Have multidisciplinary approach
2.	10+2 structure of education	5+3+3+4 structure of education
3.	Education starts at the age of 6	Education starts at the age of 3
4.	Separate entrance exam	One common entrance exam
5.	Undergraduate course was for 3 years	Any undergraduate course will be for 3 or 4 years. If student leaves course after 2 years then a diploma will be given, if leaves after 3 years then degree will be given. Where as in case of vocational and professional course, if a student leave after 1 year then a certificate will be given
6.	PG course was for 3 years.	- Those who have done 4 years of graduation will have PG course for 1 year and those who have done 3 years of graduation, for them PG course will be for 2 years.
7.	Classroom teaching	More research oriented teaching
8.	Freedom to choose subject only across their area of study.	Freedom to choose subject outside their area of study.
9.	One year of M.Phill was there	M.Phill is removed.
10.	Grade accreditation model	Binary accreditation model
11.	CBCS	STEAM and competency based credit system
12.	Currently, 2 years of b.ed	4 years of integrated b.ed
13.	2 years of higher secondary level education.	4 years of higher secondary level education.
14.	No involvement of foreign universities.	Foreign universities are allowed to setup campus with the country.

IV. MERITS OF NEW EDUCATION POLICY

- Have multidisciplinary approach towards education
- More students centred
- Research oriented
- Gives freedom to students
- Focuses more on knowledge rather than on marks
- Also works for growth of teachers
- Leads to globalization of education

CONCLUSION

Education is basic necessity if we want any country to progress. Education should not only focus on scoring good marks but should focus on gaining knowledge. This new education policy take into consideration this aspect and focus on multidisciplinary approach of education by giving students freedom to choose subjects not only from their area of study but from outside the area of study too, thus further promoting holistic approach of learning.It also focuses on globalizing the education by allowing foreign universities to set up campuses with the country as a result of which students didn't have to leave there country and can also attain high standard education. To develop sense of unity in diversity and respect for each language, new NEP made 3 language learning criteria compulsory. This policy also works for growth of teachers by enrolling them in various programmes, opening various vacancies, granting promotions and incentives. Change in education policy is drastic step taken by government which will not only open new opportunities of career for students but also leads to overall growth of the nation.

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7

Education Integrated with Digital Tecnology

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ABSTRACT

In the modern age, technology has move into everycorner of human life. The technological encouragement has continue unprecedented in the last few decades and has its footprints in every sector of the society. Even the education sector has not remained untouched by the tremendous technological developments. Technology has proved to bridge the gap between traditional teaching and technology integrated education.The numerous educational websites, mobile applications, YouTube videos, blogs, and more have provide to change the learning process in a multidimensional manner.

With the spread of the covid-19, countries are implementing emergency plans to slow down and limit the spread of the virus - and prepare for a possible longer term disruption of school and university attendance. Every week of school closure will imply a massive loss in the development of human capital with significant long-term economic and social implications. While this is a strong stress test for education systems, this is also an opportunity to develop alternative education opportunities. India, which is hit by the corona virus, is already well advanced in providing a large share of its students with access to online learning opportunities. Most emergency plans include: information and training about the technology ; training for teachers and school principals to work remotely ; the deployment of online classes at scale ; and the setting and training of task forces of counsellor and teachers to support parents and students. Many responses already involve the closure of educational establishments, either nation-wide , regionally , or in a targeted way.

The real power of interactive technologies is that they let us learn in ways that aren't otherwise possible or practical."

- David Lassner

Keywords: Technology, Education.

ONLINE EDUCATIONAL PLATFORMS

In the environment of necessary closures, various forms of online education and education resources should be pull together. Country should use their existing online distance courses whenever possible, encourage education technology companies to make their resources freely available, radiate the modes of delivery depending on age and capacity, and encourage teacher cooperation. While education institutions are largely used to delivering online courses and have a rich bank of online materials, this is less systematically true in primary and secondary education.

DISTANCE LEARNING PLATFORMS

Distance online platforms may already have curriculum courses and resources in different digital format (text, video lectures, etc.), normally with a reserve of related exercises. Teachers can select lectures and exercises, their students should watch and do, and teach them through messages and synchronous classes. Where platforms do not exist, open educational resources could be used.

VIRTUAL CLASSROOMS

Teachers can remotely teach their students while they are at home, using various platforms Some "virtual classroom" services already exist within country and have been deployed in the circumstance of the corona crisis.

PARTNER WITH PRIVATE EDUCATIONAL PLATFORMS

One difficulty with existing resources is that their massive use is not always possible simultaneously. Some private sector platforms have already made their resources and services freely available.

MUTUALISE EXISTING ONLINE EDUCATIONAL RESOURCES

While countries and sometimes regions within countries have different curriculum, they tend to teach similar subjects and could consider translating and using digital resources aligned with their curriculum.

APPROPRIATE USE OF ALL ELECTRONIC MEANS

Some older electronic means such as streaming lessons on TV is more appropriate for very young students or in some contexts where infrastructure lags behind.

DIGITAL LEARNING OPPORTUNITIES

Country may facilitate teachers with online teacher training resources on how to teach online but also with online collaborative platforms that allow them to share their resources and give and receive equal feedback.

Living in the 21st century, we can not escape the purview of technology. Technology has invested in our lives in a million different ways. We are dependent upon it to fulfill every single noticeable and unnoticeable need of ours. We can not think of our lives without technology. We can not recall a single day where we haven't used technology in some signifier.

If technology has riddle each and every aspect of our life, why should we leave education out of it? In this speedily changing world, education too cannot outflow the effect of technology. The presence of internet itself has revolutionized the process through we access and circularize information.Educational apps to online courses, technology has changed the face of education today. Here's a list of ways through which technology has affected the education.

GLOBAL PLATFORM

Now education assisted by technology has crossed borders and continents. Several institutions are now offering online courses that can be accessed by students across the world. Video conferences and applications like Skype have created a global platform of teachers and students who can share knowledge in an effortless and accessible manner.

EXPEDITIOUS ASSESSMENT

Mostly institutions have now digitized their assessment process.E-assessments are flexible and unbiased. Students can take an online test, based on his or her availabilitythat allow them to immediately assess their knowledge. This has particularly helped students who pursue distance or correspondence courses. Removing the human element, e-assessments are unbiased and more trustworthy than conventional tests.

STUDENT-TEACHER INTERACTION

All the teachers are now using technological aids to interact with their students. Teachers remain in constant touch with their students through e-mails and other services like dropbox that allows teachers to upload and share content with a large number of students.

ACCESS TO INFORMATION

Information is now in the palm of our hand. No longer confined to textbooks, anyone can now have access to a ambit of information within seconds.

E-BOOKS

Online libraries and e-books are now in trend. Google has been working with publishers and libraries to create a unique online library that is comprehensive, versatile and virtual. Features like Google Books, provide clipping of a large number of e-books, thus bringing together new books and publishers to the readers. Publishers and readers can now discover each other with the help of internet.

VIDEO GAMES

Video games can bring behavioral changes in the students by making them more goal-oriented. Gaming models not only provide a wide range of information but also initiate students to be problem-solvers. While solving hypothetical problems, students are allowed to orchestrate their skills while simultaneously acquiring information. Video games, when played under proper guidance can indeed be a great source of education and entertainment.

MULTIMEDIA

Technology and media have positively impacted the field of education. Use of animation, videos, multimedia aids has transformed traditional learning methods by making it more engaging, fun and entertaining.

MOBILE APPLICATIONS

Mobile learning is the latest incarnation of modern education. A large number of mobile applications have already become popular means of education because of their innovative take on traditional learning methods.

STUDENTS' DIVERSITY

An mixture of various educational tools, audio/visual information and animations, e-learning modules appeal to students with different learning styles. Some students do not respond to classroom learning which has often been termed as 'boring'. Such students are effectively lured into studying through digital aids which provide a perfect combination of fun and learning.

STUDENTS WITH SPECIAL NEEDS

It has been observed that students with special needs do not respond to traditional classroom environment. Keeping them in mind, a number of mobile applications have come up in the market that want to initiate such students into the mainstream by facilitating and enabling them with digital educational aids. Computer technology and e-learning activities have greatly helped in bridging the gap between differently-abled students and the regular ones by making education more accessible.

IMPUDENT SIDE OF TECHNOLOGY

Technology has its own share of benefits to extend to the education, there is also another side to the coin. The widespread use of technology in education is surely benefiting the students, but if we see, the spreading technology, in a way, is also apply an unprecedented pressure and stress on the young minds. Students these days are getting addicted to using technology for even the minutest of things, which is negatively impacting their potential and capabilities. Students prefer using the readily available material on the internet instead of referring to the standard books from distinguished authors. The information overload on the internet may create confusion among the students regarding what to refer to, thereby leading to confusion. This is where, the parents and teachers, should step in to help the students understand and utilize digital technology in the correct manner. Enable the students to recognize the true potential of the digital technology, Smart Classes help to make the classroom teaching much smarter, efficient, and interesting.

ADVANTAGES AND DISADVANTAGES OF TECHNOLOGY IN EDUCATION

The modern education has taken several steps forward in its development of the learning environment in the past few years. We have seen many benefits in this setting are due to the introduction of new technology for students. Instead of having a single computer for a class to use or a laboratory environment for the entire school placed in one room, we can now help students learn at their table or desk with items issued to them directly. Development of the Internet has helped us to include more technological access to information in the modern education. Now students get to play interactive learning games, compete against other students, and have their educational statistics tracked in real-time data to know where their point of focus should be. Introducing technology to students in a classroom setting can certainly help the educational environment, but it also requires equal access for all students to ensure that everyone receives the same opportunities to success. That is why each school district, teacher, and parent should periodically review the advantages and disadvantages of technology in education settings.

ADVANTAGES OF TECHNOLOGY IN EDUCATION

➢ **Technology helps students to stay motivated during the learning process**

Most students don't like to go to school if they feel like they are wasting their time. When there is technology allowed in the classroom, then teachers have an opportunity to let students work with stride which suits them the best without disturbing others. They can look up additional information about a subject they are learning about that day, play educational games that reinforce the lesson. Technology options allow students to see how well they are doing compared to the average of all users, it gives them a chance to push harder for themselves and their education.

➢ **Technology promote more communication between teachers and parents**

When there is technology in the classroom, then there are more opportunities for parents and teachers to connect with each other. Using a blog for the classroom can help parents get to see what their children are learning each day. Apps and software options allow teachers to instantly report on a child's behavior to let parents know in real-time what is happening throughout the day. There are options for chat boxes, instant messaging, and other forms of communication as well.

➢ **Technology options in the classroom are very affordable**

Although the cost of having technology in the classroom can be significant if you are introducing new options to an entire district, the cost of student computers, tablets, and class essentials is minimal. There are several grants available on local, state, and national levels that help to offset these costs to local taxpayers.

The Internet is the first technology since the printing press which could lower the cost of a great education and, in doing so, make the cost-benefit analysis much easier for most students.

➢ **Technology creates new ways to learn**

There are three critical forms of intelligence that we see in children today: emotional, creative, and instructional. The traditional classroom environment, which typically encourages lecture-based lessons, focuses more on the latter option. When students have access to technology today, then those who surpass outside of the standard learning setup can still achieve their full potential. Technology allows children to embrace their curiosity in multiple ways. They can try new things without embarrassment because their tech access gives them a level of anonymity. This process allows kids to work, through trial-and error if they wish, to see if a different strategy helps them to learn more effectively.

➢ **Technology allow students access to data from a single point**

Technology allowstudents to access every item they need for a project or any other purpose from a central resource. Instead of spending all of that time searching for something specific or waiting for your library to order it, you can run a few queries on searching engines and find what you need.

➢ **Technology gives us better access to behavioral data on students**

The various apps, software choices, and technological platforms collect data on students that can show attendance patterns, learning issues in specific subjects, and how they react in particular situations. This information leads to the creation of a profile where teachers, schools, and parents can work together to identify places where additional learning may be necessary. Technology can even help a school district find their highly capable students to keep pushing them toward more challenging work so that they remain engaged with the learning environment.

➢ **Technology helps to prepare students for their future world**

Even if there are warnings from medical providers about the amount of screen time that students receive in their classroom environment, the reality of the modern educational system is that we must have technology exposure now to prepare our children for the world they will face as adults. This sector will continue to evolve. If they are not prepared to use these items today, then tomorrow could be a struggle for them.

➢ **Technology allows for the teaching of needed vocational skills**

Introducing technology to students from an early age, we can teach them the critical vocational skills that are necessary for success in a digital world. That is why writing continues to be a top priority in the early grades, formatting guidelines and software use after, and knowing how to research efficiently is approached as an essential skill.

➢ **Technology encourages collaboration**

Students retain very little of the information they receive when a teacher lectures from a textbook. When there are interactive lessons on a chalkboard or whiteboard, students can remember about 20% of what they were taught. If a teacher encourages a small group discussion, that percentage can quadruple. Technology gives us an easy way to develop

collaboration skills for students using online tools that encourage them to work together in safe ways.

> **Technology encourages students to stay engaged with their learning environment**

Students get bored very easily when they feel like they already know what is being taught in their classroom. Some children will transform into mentors or leaders in this situation to help their fellow students, but there are many more who disengage because they lack stimulation. By introducing technology to the classroom, there are fewer places where repetitive learning must take place. Teachers can introduce new subjects, try new techniques, or use different projects to encourage ongoing learning, which creates more overall engagement.

> **Technology improve credibility into Teachers**

Teachers are sometimes hesitant to use technology in the classroom because they are unsure of what a student might have at home. Giving homework assignments that require computer access to a student without that technology at home would be a waste of time. There can also be pushback from parents who are uncomfortable giving their kids additional screen time for learning.

LIST OF THE DISADVANTAGES OF TECHNOLOGY IN EDUCATION

> **Technology distracting to students**

When students play video games, they can find themselves reacting with addiction-like behaviors. Their focus is on the entertainment they receive more than anything else. If the educational environment uses reward-based games to encourage learning, then the child might be more concerned with what they receive through the software or app instead of what they are learning. Teachers must set and enforce healthy boundaries when using technology in the classroom to ensure healthy results are possible.

> **Technology can make it easier to cheat**

Remember the TV shows and movies where students would break into a teacher's classroom, steal the answer key to a test, and then write down everything on their wrist, shoe, or a slip of paper. Now a student can send themselves a text with that information. There must also be strict rules in place about the use of technology during quizzes or tests when an exact measurement of student knowledge is needed to evaluate their overall progress.

> **Using tech can cause some students to disconnect from the classroom**

Interacting online with others is a different experience than when you collaborate over the Internet with someone. Being behind a screen provides you with a layer of anonymity that you don't receive with a face-to-face conversation. Learning how to work with one another using technology is an essential skill, but it cannot be the other option that teachers introduce to their classroom. We must encourage social interactions that accurately communicate thoughts, feelings, or emotions so that when a students is offline, they can still make a better life for themselves.

➢ **Students may not know the difference between reliable and unreliable resources**

There is a lot of information on the Internet today that is fake or exaggerated in some way, but it disguise as being real. Up to half of the traffic on YouTube each year are bots that disguise as people. Not only is the content sometimes fake, but then also the users might not be real too. Teachers must show students how to access real information, show them how to verify its validity, and then encourage them to use it appropriately.

➢ **Technology is a resource that not all families can afford**

Whether technology is in the classroom or at home, there is the issue of affordability to worry about in today's world. Some households cannot afford to purchase computers for their kids to manage their school work. There are school districts that don't have enough money to pay their salaries each year, much less add new tech components for learning. When we express having technology in the classroom, then we place those at the lowest end of the wage scale at a significant disadvantage.

➢ **Technologies could replace the teacher in some classrooms**

Interactive learning lessons are so effective today that the software or app can become the teacher instead of having someone present to help a student. One of the best examples of this potential disadvantage is ABC Mouse, which provides clear instructions to students as young as 3 so that they can start learning when they are ready. New tech automates the learning process while adapting to changing student needs.

➢ **There are privacy concerns to consider with technology in the classroom**

When we introduce technology to the classroom, we are placing the identity of our children at risk every day. Even when apps, computers, mobile devices, and operating systems have advanced privacy filters that reduce the threat of identity loss, there is no way to guarantee that all risks are gone unless the equipment never goes online. If we take this step, then we end up losing many of the advantages of having technology in the classroom in the first place.

➢ **Technology could create medical problems for some students**

Eye strain occurs when you look at a computer screen for too long. Symptoms of this issue include back pain, eye pain, and neck pain, feelings of tiredness, blurred vision, and problems with focus. Continuous heavy computer usage may lead to issues with early myopia. The impact of this health issue is cumulative, which means the time they spend in front of a phone, tablet, and television can contribute to eye health issues as well.

➢ **Students often lose trail of time when using technology in the classroom**

Although students can adapt to changing environments without much of a second thought, their idea of normal is often defined by what they experience in the classroom. Teachers and schools have as much, if not more, time with students than their parents throughout the day, which means the classroom becomes an influential part of life for each student. Encouraging the use of tech might help to create more learning opportunities, but it can also lead to a lifestyle that is more sedentary. When students sit for too long during the day,

then they face the same health challenges that adults do when not getting enough exercise. There can be problems with obesity, hyperactivity, muscle fatigue, sleeping problems, and metabolism issues with prolonged sitting.

➤ **Many classrooms place limits on technology access**

Because of the awareness that schools have with the potential disadvantages that technology can cause in the classroom, there are limits placed on the use of items under the guise of student's protection. Although firewalls and site blockers can prevent most dangerous content from reaching the eyes of students, it is not unusual to see this issue taken a step further by restricting computer work to word processing and basic research. Students come home with assignments to use tech of their own, at a library, or through a loan program to place this responsibility on the parents instead.

➤ **Technology can create dependencies for information recall**

Having access to a treasure-trove of resources is wonderful, but it can also create a dependency because of its presence. If we do not teach students how to recall info by themselves without the use of a smart device or computer, then the next generation of students may be unable to function unless there is technology for them to access.

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A Study on Relationship between Emotional Intelligence and Academic Achievement among Senior Secondary School Students

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ABSTRACT

The purpose of this study is to examine the relationship between emotional intelligence and academic achievement among senior secondary school students. Emotional intelligence was measured by using emotional intelligence scale developed by Bhardwaj and Sharma (1995) while previous year grades were used to measure academic achievement level of students. 60 students from Delhi government schools were selected using multistage sampling. T- test was used to compare the level of emotional intelligence among boys and girls and chi-square test was used to investigate the relationship between emotional intelligence and academic achievement. It was found that there exists significant relationship between emotional intelligence and academic achievement. So the educators, policy makers and teachers should endeavor to develop the ways through which emotional intelligence level of students can be raised as it was already proven to helpful in other fields of life as well.

Keywords: Emotional intelligence, Academic achievement, Senior secondary school students.

INTRODUCTION

In this fast developing world, we have moved towards more developed goals in education as well. These goals are not restricted to only cognitive domain in teaching learning process but we have started focusing on each domain equally. With development we have new challenges also in our society like as there is rapid globalization and urbanization with

breaking up of joint family and traditional support system. hence in present scenario, the responsibilities of educational institutions become bigger. The purpose of education is to develop whole personality of a child. It is seen from reports that in recent years, Indian students are suffering from mental health issues. Since mental health includes emotional well-being so this become reasonable to study the emotional intelligence level of students. Schultz and Sophia (2012) in their article titled *emotional intelligence as a factor in mental health* explained how emotional intelligence affect mental health of an individual. The notion of Emotional intelligence broadens the concept of intelligence beyond intellectual domain and considers that intelligence includes emotions. The term emotional intelligence is coined by psychologist John Mayer and Peter Salovey in the early 1990's. they defined emotional intelligence as "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to regulate emotions reflectively so as to promote emotional and intellectual growth". The term become widely popular after the publication of Daniel Goleman's best seller book *emotional intelligence; why it matters more than IQ?* According to Goleman Emotional intelligence plays a very significant role in human life, 80 percent success of an adult depend on this. Goleman (1995) suggest that emotional intelligence consist of five parts; knowing your emotions, managing our own emotions, motivating ourselves, handling relationship and recognizing and influencing others emotions.

In 1996, Dr. Reuven Bar-On explained that Emotional Intelligence reflects our ability to deal successfully with other people and with our feelings. He developed the Bar-On EQ-I, and this inventory is the first scientifically developed and validated measure of emotional intelligence that reflects one's ability to deal with daily environmental challenges and helps for one's success in professional and personal life. Bar-On Emotional Quotient Inventory (EQ-I) was published by Multi-Health Systems in 1996. This test covers five areas: intrapersonal, interpersonal, adaptability, stress management and general mood.

There were different definitions and models developed by the researchers to explain the concept of emotional intelligence but the common thing is its importance in every field. Emotionally intelligence person is considered to be more efficient and has more personal and social skills. In 1997, Ediger stressed upon the importance of emotions, values and feelings for one's well-being and achievement. Elias (2001) mentioned that emotional and social skills should be taught at schools as these skills are positively related to academic achievement not only for current year but the years follows as well. According to Nelson and Low (2003) "emotional intelligence is the single most important variable in personal achievement, career success, leadership and life satisfaction. They feel that an emotionally fit person is capable to identify, understand, experience, and express human emotions in a healthy and productive ways".

Emotions are involved in everything we do; judgement, actions and decision. Most researchers showed that emotions are constructive and do contribute to enhance better decision making and mental health as well. Since emotional intelligence has such numerous educational and social implications so using this information to study its relationship with academic achievement seems rational.

OBJECTIVES

❖   To determine the level of emotional intelligence of senior secondary school students.

❖   To compare the level of emotional intelligence of senior secondary school students on the basis of gender.

❖   To explore the relationship between emotional intelligence and academic achievement of senior secondary school students.

HYPOTHESIS

The following null hypothesis will be tested:

❖   There is no significant difference in the level of emotional intelligence of senior secondary school boys and girls.

❖   There is no significant relationship between emotional intelligence and academic achievement of senior secondary school students.

DESIGN OF THE STUDY

This study is quantitative in nature.

Sample

The procedure adopted to select the sample were as follows:

Four 4 government schools (2 boys and 2 girls) were selected from north east and south zone in Delhi using convenient method of sampling. Among various sections of class 12th one section was chosen and then 15 students were selected randomly from chosen section of class 12th in each school. So the sample was selected as follows:

Table

Schools	Students
Two govt. boys senior secondary schools	15+15= 30
Two govt. girls senior secondary schools	15+15=30
total	60

TOOLS EMPLOYED FOR DATA COLLECTION

The following tools were employed for data collection

Emotional intelligence scale developed by Bhardwaj and Sharma (1995) is used to ascertain the level of emotional intelligence among senior secondary school students. it is five point based scale ranges from strongly disagree to strongly agree. There are total 30 items in scale measuring emotional competency in five areas; adequate depth of feeling, adequate expression

and control of emotions, Ability to function with emotions, Ability to cope up with problem emotion, Encouragement of positive emotions. Each area has six items to measure it.

Academic achievement of students was measured by previous year progress report of students. A separate achievement sheet was used to record the marks of students.

ADMINISTRATION OF THE TOOL

The investigator visited the schools personally for the administration of the tools. To collect relevant data, permission was sought from the principals of selected schools and dates of test administration in each school were confirmed. On the day of administration, an hour before recess was arranged for administration of test, students were given brief orientation, regarding the purpose of the study. Participants were then distributed the Emotional Competency scale (developed by Bhardwaj and Sharma,1995) and achievement sheet, Instructions were read to the children and they were encouraged to ask questions, if they had any doubt. When it was ascertained that all the subjects had followed the instructions fully, they were asked to complete the measures. Response sheets were collected and responses of students were secured under supervision.

ANALYSIS AND INTERPRETATION

Level of Emotional intelligence of Senior Secondary School students

Table 1.1

Level of Emotional Intelligence of Senior Secondary School Students

VARIABLE	N	MEAN	SD
Emotional Intelligence	60	53.63	11.06

From Table 1.1, it may be perceived that the mean value of Emotional intelligence of Senior Secondary School students is 53.63 the standard deviation is 11.06 It may be inferred that Senior Secondary School students have average level of Emotional intelligence and the higher value of SD indicates that data points are spread out over a wider range of value.

This reflects that some students of Senior Secondary Schools are not fully aware, about how they feel from inter-personal point of view. They lack the competency in skills like clarity of thinking, decision-making, self-control and self-motivation, which are required in being emotionally intelligent while some students have developed these skills fully and are competent.

To develop further insight into the level of Emotional Intelligence of Senior Secondary School students, Emotional Intelligence wise distribution of Senior Secondary School students. The calculated values are shown in table - 1.2

Table 1.2 Emotional Intelligence Wise Distribution of Senior Secondary School Students

SCORES	LEVEL	NUMBER OF STUDENTS	PERCENTAGE OF STUDENTS	CUMULATIVE PERCENT FREQUENCY
70 AND ABOVE	Highly competent	5	8.33	100
60- 69	Competent	15	25	91.67
40- 59	Average	34	56.67	66.67
30-39	Competent	5	8.33	10
29 AND BELOW	Highly incompetent	1	1.67	1.67

From table 1.2, it may be perceived Majority of students i.e. 56.67 per cent scored in the range of 40-59 indicating thereby average level of Senior Secondary School students in Emotional Intelligence. It is also reflected from the mean value of Emotional Intelligence in class XII students i.e. 53.63 (as given in table 1.1). Hence it can be said that Senior Secondary School students have average level of Emotional Intelligence.

Graphical representation of Emotional Intelligence wise distribution of Senior Secondary Schools students is given in figure 1
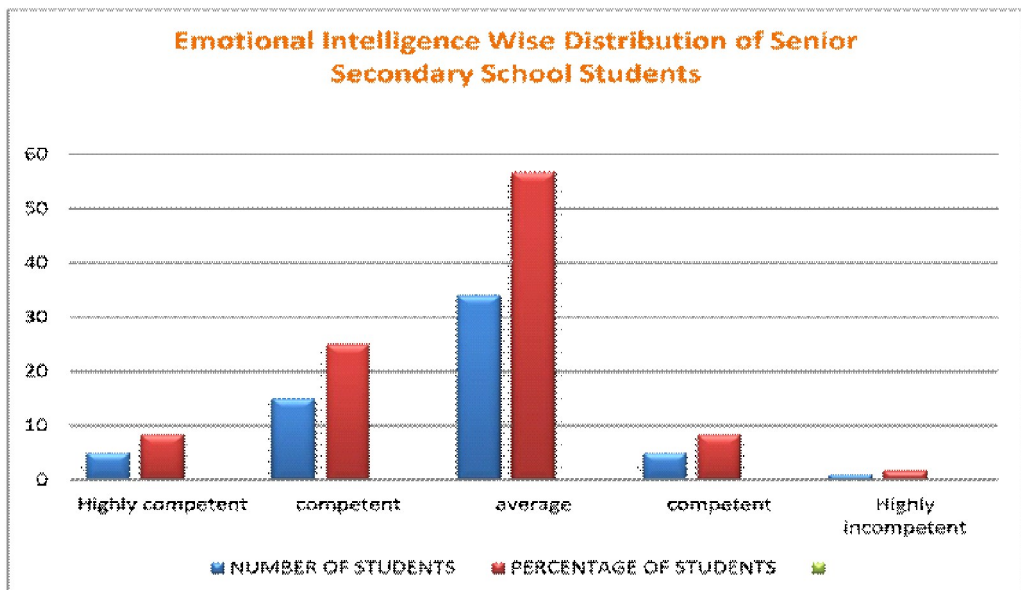
Figure 1

The comparison of Emotional intelligence level of Senior Secondary School students on the basis of gender

HYPOTHESIS-1 There is no significant difference between the level of emotional intelligence of boys and girls of 12th class.

To test this hypothesis T test was employed. The calculated values are shown in table 2

TABLE - 2

The comparison of Emotional intelligence level of Senior Secondary School students on the basis of gender

Gender	MEAN	SD	T critical value	Level of significance
BOYS	56.43	10.42	2.07	0.01
GIRLS	50.83	10.98		

From the table 2 it may be perceived that mean value for boys and girls of 12th class are 56.43 and 50.83 and T critical ratio is 2.07 for the degree of freedom 58. The table shows that there is no significant difference between the means of emotional intelligence level of 12th class boys and girls since our obtained values is less than table value of T critical ratio at .01 of significance for DF= 58 it can be concluded that there is no significant difference between the emotional intelligence level of boys and girls of 12th class.

The relationship between Emotional Intelligence and Academic Achievement

HYPOTHESIS - there is no significant relationship between emotional intelligence and academic achievement.

LEVEL OF ACADEMIC ACHIEVEMENT	LEVEL OF EMOTIONALL INTELLIGENCE					TOTAL
	HIGHLY COMPETENT	COMPETENT	AVERAGE	INCOMPETENT	HIGHLY INCOMPETENT	
EXCELLENCE	3	1	1	0	0	5
ABOVE AVERAGE	2	11	15	0	0	28
AVERAGE	0	2	15	3	0	20
BELOW AVERAGE	0	1	3	2	1	7
TOTAL	5	15	34	5	1	60

To test this hypothesis Chi-Square test of independence was employed. The calculated values are shown in table 3

TABLE - 3

The relationship between Emotional Intelligence and Academic Achievement

X^2= 41.11, Df= 12 , Table value of $X^2_{0.01}$= 26.217

P - less than 0.01

From table 3 it may be perceived that the obtained value of chi square is 41.11 and degree of freedom is 12, p is less than 0.01, which is greater than the table value of Chi-Square, hence chi square value is significant at 0.01 levels. So the hypothesis "there is no significant relationship between emotional intelligence and academic achievement" is rejected. It gives an evidence of real association between the two variables emotional intelligence and academic achievement. Thus there exist a significant relationship between emotional intelligence and academic achievement.

DISCUSSION

This is revealed from the results that senior secondary school students have average level of emotional intelligence which shows that these students have much more potential to develop their emotional quotient coz unlike IQ, emotional Quotient of a person can be raised by providing appropriate opportunities and practicing emotional intelligence enhancing modules and other ways to strengthen our students. the average level of emotional intelligence shows that the consciousness level of emotions of 12th class students yet not reached to optimum level and they are still in the process of sculpting their mental frames. School and educators should endeavour to develop these emotional and social skills among students so that they become successful in terms of performance at school and better adjusted to their work and social life later. As the students joining Government Schools specially of Delhi are from a low socio-economic backgrounds and not much importance is given to training of emotions, the responsibility therefore, lies wholly on the school and teachers for developing emotional competency skills in students. School as a whole and teachers should make endeavours for compensating children's deciencies in emotional and social skills. Emotional stability leads to better mental health so it should be top most priority of educational institutions in present circumstances.

Study found the significant relationship emotional intelligence and academic achievement which indicate that factors influencing performance of students includes not only external like environment at school, but internal factors like personality traits of students, personal and social skills are also important. This factor should be considered by the teachers in teaching process and educational planner policy makers should also work upon the ways for infusing emotional literacy in curriculum also.

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Early Childhood Educational Policies in India

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ABSTRACT

The programs under Early childhood care and education (ECCE) do more than just preparing children for primary school. The programs aim at holistic growth of children and improve a child's social, emotional, cognitive and physical needs. These programs can act as a prelude to a child's broad foundation for lifelong learning. The review paper will study different Policies and Acts that are substantiated for the development of children in India. The paper will explore the idea behind an Act, the targeted people and the issues that are faced in its implementation. Besides divulging in important characteristics of a policy the researcher will also investigate the gap between rural and urban education in light of these policies and the provisions that these policies amplify. The paper will thus compound various features of each policy that has uplifted and lowered the scope of education of children in India.

Keywords: Education Policies, Early childhood education, India.

INTRODUCTION

The construct of a sustainable and progressive society is ensured by pedagogy lessons that its young minds receive. The lessons and training received during the initial years of growth can form the basis of personality, attitude and behaviour that will guide individuals for the rest of their lives (Agnihotri, 2019). The World Declaration on Education for All, proposed by UNESCO (1994) states in the Article 5 of widening the scope of basic education that 'learning begins at birth'. The article further elucidates that early childhood education is important and it can be provided through arrangements made by families, communities or

institutions as preferred. Research work by UNICEF (2001) states that early childhood education is paramount for developing countries as children of the growing nations are more prone to risks of poverty and less opportunities. In order to break the pattern of violence, disease and poverty, coaching should come early on in life. Another research substantiated by UNICEF (2016) asserts that countries plagued with issues of socio-economic classes and inequalities can even the playing field by discourse of early childhood education (ECE). This particular review paper will study the ECE followed in Indian context. As India is an emerging economy in the eyes of the world it will be engaging to see the set of rules and regulations formulated in ECE over the years. The review paper will also analyse the proficiency of ECE rules in determining its set objectives or purpose.

METHODOLOGY

The present study has utilized a qualitative research approach and interpretive research paradigm is adopted as the research aims to gain an understanding of reality and draw conclusions. The current study has defined the policies and the comparison of the policies developed in India in the field pertaining to ECCE regarding the target group included in each policy by referring provision made for a particular age group and the targeted areas like urban, rural or tribal area.

1. LITERATURE REVIEW

❖ National Policy on Education, 1968

NPE was introduced by the Indian Government to encourage education at every level. It covered both rural and urban India and stressed on compulsory education for all up to the age of 14 years. For the purpose, it proposed deployment of trained and qualified instructors. This policy focused on learning three obligatory languages - English, Hindi and the particular state's regional language. The NPE (1968) led to an increase in the educational funding up to 6 percent of the total national income (Bharat, 1968). The policy also emphasized equal educational opportunities for males and females to accelerate social transformation. The policy also mentioned the identification of talent at an early age and teaching of the Sanskrit language in order to keep in touch with Indian culture (NCERT, 1986).

❖ National Policy on Children, 1974

NPC was formulated by the Department of Social Welfare of India. The agenda of the policy was to give equal opportunities of growth to all children and to bring social justice. NPC focused on prevention and promotion of child's health, providing free of cost education until the age of 14. The policy aimed at removing stagnation in schools by proliferating education prospectus for girls and poor children. The children out of formal education were facilitated with other forms of education, special weightage to recreational activities such as sports, and promote educational equality among students of urban and rural areas. This policy outlawed to employ children below 14 years of age in hazardous occupations. Improving facilities for children that are physically or developmentally challenged or that are distressed by some natural calamity. The policy also aimed to strengthen family ties

between a child and his parents and settling legal disputes between both the parties under the NPC (Kaul & Sankar, 2009).

❖ **National Policy on Education, 1986**

The policy was developed in 1985 and introduced in May of 1986. The policy put impetus on eliminating social disparities and equalize society by developing equal opportunities for all. The policy expanded provisions of scholarships, hiring of teachers from backward class, giving incentives to children of deprived families for attending school regularly. This policy paved the way for blackboards and other child-centered approaches in schools nationwide. Creation of the rural university model was first promoted through this program. (NCERT, 1986).

❖ **National Nutrition Policy, 1993**

NNP (1993) directly dealt with issues like nutritional deficiency among children (Rao, 2016). The program focused on implementation of oral rehydration, immunization and ICDS services. The growth was monitored for children between 0-3 years of age and the nutritional value was checked in adolescents and pregnant women. The intervention was a way to reinforce food security and upliftment of women (Ministry of Woman and Child, 1993).

❖ **National Health Policy, 2002**

The National Health Policy (2002) focused on controlling communicable diseases. The goals of the program were to eradicate polio, yaws, HIV, kala-azar (Agarwal, 2002).

❖ **National Charter for Children, 2003**

The National Charter (NCR) devised to ensure that no child is deprived of education, nutrition and treatment. The states under this law are obligated to give free education for children between 6-14 years. Children were given shelter to protect them against material abandonment and exploitation. Care and education were provided to children up to the age of 6. The policy guaranteed social, physical and mental development and put health and happiness at forefront (NHP, 2003).

❖ **National Plan of Action for Children, 2005**

NPAC was promulgated by the Ministry of Women and Children Welfare. The primary goal of the programme was to improve the health of individuals, lower the mortality rate, increase the participation rate and to control the dropout rates from schools. Primary education was made the universal concept of development among children. Access to safe water, improvement in the concept of basic sanitation across rural India, eradicating child marriage and reduction in HIV patients were some other goals inscribed within the program (Family and Child Welfare, 2012).

❖ **National Curriculum Framework, 2005**

The National Curriculum Framework (NCF) brought a fresh perspective on the discourse of contemporary education. It has a separate section that puts light on teachers' education.

Further enhancement in children education was brought by facilitating interaction with peers, environment and experienced people. The NCF operative was to push education and learning beyond textbooks (NCERT, 2005).

❖ **Right to Education Act, 2009**

The Right to Education (RTE) Act entitle children between the age group of 6-14 to free education till completion of elementary education (Jha & Parvati, 2010). It bought Private and Public schools both under the enactment of RTE Act. Under the Act screening of children up to 5 years of age is illegal for admission purpose. It made compulsory for private schools to provide at least 25 percent of their students with unpaid education (RTE, 2009).

❖   **National Early Childhood Care and Education Policy, 2013**

It laid a particular focus on the care and early learning of young children. This policy gave importance to age-specific care and the teaching-learning of children from birth to six years of age and split the zero to six years into three subgroups - conception to birth, birth to three years, and three to six years. It suggested repositioning of Anganwadis as 'vibrant child-friendly ECD centres.'

❖   **New Education Policy, 2019**

The foundation of the latest policy is equality, quality, accountability, affordability and access to education. It directs the National Council of Educational Research and Training to develop a Curricular and Pedagogical Framework for Early Childhood Care and Education rich in national and localized knowledge. It proposes to expand and co-locate Anganwadis and pre-primary schools with primary schools wherever possible. It proposes to give the zero to six age group also the right to free and compulsory education under the RTE act.

FINDING AND DISCUSSION

The findings section has been divided into three parts: The targeted audience of the policies, the provisions mentioned in the policies and targeted areas that the policies are implemented for. In table 1, policy and its target age range and target audience has been mentioned. The table helps in understanding the scope of each policy depending upon the nature of its intended audience.

Table 1: Policies and its corresponding age group and target areas

	Policies and Acts Under Childhood Care and Education	Year of Enactment	Targeted Audience	Targeted areas
1	National Policy on Education	1968	0-14	Both rural and urban areas
2	National Policy on Children	1974	All age group are inclusive	Both rural and urban areas
3	National Policy on Education	1986	0-14	Rural, urban, tribal and economically backward section
4	National Program of Action	1992	0-21	Rural, urban, slum and tribal
5	National Nutrition Policy	1993	0-3	Rural, urban and slums
6	National Health Policy	2002	Every Indian Citizen	Tribal, rural and urban
7	National Charter	2003	0-14	No specified area
7	National Plan of Action for Children	2005	Not defined	No specified area
8	National Curriculum Framework	2005	All Educational Institutes	No specified area
9	Right to Education	2009	6-14	Tribal, urban and rural
10	National Early Childhood Care and Policy	2013	0-6	Urban, rural and tribal areas
11	National Plan of Action for Children	2016	6-14	Specified urban poor and targeted all children
12	New Education Policy	2019	0-18	All children

The table 1, shows that the young children with age group zero to six years always considered with the children of higher age group i.e., with under fourteen or eighteen or twenty-one. It reflects that not much thoughts are given to the children of age under six years and to their special status of 'foundational years.' It is well established that needs and requirements of children under six are different from the children above six years. That is, the under early childhood care and education the age group zero to six is divided into three sub

groups as per their needs - early stimulation; 3-4/5 years old, organized centre-based play and development- oriented curriculum; and 4/5-6 years old, school readiness curriculum. There are only two policies – National Nutrition policy, 1993 and National Early Childhood Care and Education policy, 2013, which are framed specifically for the children under six years. These policies were framed after thirty-six and fifty-six years respectively, after independence, which shows that there is a lack of political will towards the young children.

The table indicates that the majority of the policies have mentioned the rural, urban and tribal areas. Some policies had provision for the slum urban and remote areas as well. The policies were well constructed and aimed at looking after the education and healthcare requirements of all parts of India. It reflects policies are evenly framed for rural and urban areas but the major differences arise with the execution of the provisions mentioned.

Table 2

	Policy	Provisions for early childhood care and education
1	National policy on education, 1968	No section for early childhood care and education
2	National policy on education, 1986	Part V- ECE, ICDS, Day Care Centres, Play way method
3	National policy for children, 1974	Health and Nutrition of infants, Pre-schools and free and compulsory education for under 14
4	National programme of action, 1992	Chapter 6- Pre-school education, health and nutrition, teacher training
5	National nutritional policy, 1993	Implementation of universal immunization, oral rehydration and ICDS services
6	National plan of action for children, 2005	Part II of the policy- universalize early childhood services
7	Right to education act, 2009	chapter III, section 11- take necessary actions for ECCE with reference to school readiness
8	National Early Childhood care and education policy, 2013	Universal and equitable access of ECCE
9	National plan of action for children, 2016	Universal and equitable access to ECCE for children 3 to 5 years of age
10	National education policy, 2019	Chapter 1- Develop Curriculum and Pedagogical framework, extending Right to Education to ECCE

From the table 2, it can be observed that early childhood care and education are multifaced and every policy considered some or other area related to the child development and their education. Many policies included specific chapters or parts for Early childhood care and Education for example – National Policy on Education, 1986 had Part V, Programme of Action, 1992 had chapter number six, National Curriculum Framework developed Focused Group Position Paper on Early childhood Care and Education, Draft of New Education Policy had Chapter number one. Policies immediately after independence focused majorly on the health and nutrition of the children. Later while execution of Integrated Childhood Development Services, the government broadens their focus to holistic development of child with reference to pre-school education.

CONCLUSION

The data analysis indicates that the government is taking numerous activities to increase their reach to all areas. The provisions are made for different areas and age groups. The rural areas are mostly benefited from the policies introduced in the field of ECCE. The tribal and remote areas were not able to gain all the potential benefits. Furthermore, the study also indicated that considerable amount of difference persists between the public and private education and healthcare facilities. The government educational institutes and healthcare centres were not effective as the private were. These points highlight the inefficiency and ineffectiveness of the government policies. It is suggested that the government should increase their investment in these fields and upgrade their present location and afterwards focus on the expansion ion untapped areas.

FUTURE RESEARCH

Reviewing the various policies may guide in analysing the policies for the context of their execution, impact and results. It also develops different perspectival understanding of various policies on ECCE for example rural-urban disparity. Policy analysis of is crucial for developing policies and their proper implementation in future.

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A Study of Perception of Teachers, Pupil-Teachers and Students on Activity based Mathematics Learning Material

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ABSTRACT

Mathematics learning material (MLM) was developed for learners to learn mathematical concepts through experiential learning at the primary level. Pupil-teachers of District Institute of Education and Training, Pitampura used MLM while delivering lessons during School Experience Programme in actual classrooms in the presence of the regular mathematicsteacher of the sample schools. Three tools were developed by the researcher namely, Observation Schedule, Questionnaire and Focus Group Discussion with learners. Pupil-teachers filled Observation Schedule and teachers filled Questionnaire. Observations of teachers and pupil-teachers and their discussion with learners lead to the finalization of MLM. Learners performed hands-on activities in groups and learnt concepts on their own whereas student-teachers performed the role of a facilitator. Mathematics teachers appreciated MLM and gave their suggestions for further improvement. They were so enthusiastic about the material that they made it for their classes and started using it during the study. Work sheets were also prepared and conducted for assessing students' learning in mathematical concepts. Researcher worked to study the perception of teachers, pupil-teachers and students on MLM through the present study.

***Keywords*:** MLM denotes Mathematics Learning Material developed by pupil-teachers for learning mathematical concepts by students through hands on activities. MLM used in the study are: Unit, Ten & Hundred Cards, Bricks (models), and Nets of cube, cuboid, cylinder & cone, inclined plane, counting board etc. along with the manual for teachers. Manual

includes how to develop and use MLM, activities to be conducted and worksheets for assessing the learning of the students.

INTRODUCTION

The National Curriculum Framework (NCF), 2005 advocates the knowledge that is explored and constructed by the learners i.e., the one in which learners participate and interact. It also attempts to expand learning beyond textbooks and suggests learning which is constructed by the learner through learning material in the form of manipulative at the elementary level. NCF discourages rote learning which is imprisoned by the boundaries of textbooks andsyllabi. New Education Policy 2020, directs that experiential learning including hands on learning will be used in all stages of school as standard pedagogy within each subject. Constructing knowledge through hands-on-experience by the learner is the need of the hour. Teachers are expected to develop learning material and provide opportunities to learners to use that material in the classrooms in collaborative manner.

Mathematics being an abstract subject is chosen as it requires all learning to begin with concrete experiences by the learner, especially at the primary level. These learning experiences will help the children construct, accumulate and put to use new knowledge by engaging with the information passed on to them by the teachers in the classrooms. The teachers with exposure to develop mathematics learning material would be of immense help in improving classroom teaching of the subject.

Student-teachers of D.El.Ed in DIET, Pitampura were divided into groups of ten each. They were asked to develop mathematics learning material (MLM) on the concept on which they wished to work with students during school experience program (SEP). Student-teachers took care of durability, safety, feasibility and multiple use of the learning material across the classes at primary level. They planned, discussed, developed and presented the material. They also listed the activities which could be performed through this material and concepts that could be learnt through the material. After presentation of the material in the class, suggestions were invited from peers to improvise upon the material further. Suggestions given were incorporated before finalizing the learning material. Thus the pupil-teachers developed mathematics learning material with the write-up involving following details:

- ➢ Title/Name of each learningmaterial,
- ➢ What is the learning materialabout,
- ➢ What can be explored through the learning material thus developed, and
- ➢ Exemplar activities on how learning experiences may be provided to the students through MLM.

OBJECTIVES

1. To try out MLM developed for students at the primary level in classroom environment.
2. To study the perception of teachers, pupil-teachers and students on MLM.

METHODOLOGY:

➤ **Target Group:** Students studying in primary classes in Nigam Prathmic Schools and Sarvodaya schools in North West district of Delhi and teachers of mathematics in primary classes in those schools.

➤ **Sample:** Convenience sampling technique was used for selection of schools. Random sampling technique was used for selection of section in the selected school.

➤ **Design:** It is a perception/feedback study.

DEVELOPMENT OF TOOLS

Following three tools were developed for carrying out the present study:

(1) Observation Schedule for student-teachers

(2) Questionnaire for teachers

(3) Questions for Focus Group Discussion with students of selected classes.

The parameters of the tools taken were: Physical features of MLM; Use of MLM; Interaction within the group; Role of teachers and Evaluation of the concepts learnt.

All the three tools were discussed with the experts in workshop. They checked the first draft of the tools and gave suggestions regarding some of the items in the tools. The suggestions given were incorporated in the tools to finalize them. In this manner the content validity of tools was done by the experts.

ADMINISTRATION OF TOOLS & COLLECTION OF DATA

Tryout of the MLM was done during the SEP in sixteen schools selected for the study. Each school was visited for three to four days and at least two MLMs were tried out in each school.

The class was chosen according to the concept and learning objectives to be learnt. Section of the class was chosen randomly. Following steps were adopted for administering the tools:

• The concept was explained by the pupil-teacher in the class.

• Students were dividedingroups of two's, four's or five's depending upon the nature of activity and learning material,

• Learning Material was used by students while performing activities in groups for learning concepts in the presence of their regular teacher.

• Observation was made by pupil-teachers regarding the engagement of students in groups and their learning etc. in the presence of the investigator of the study. A video clipping of students was made in each class while they were working in groups. The regular teacher facilitated those students who were in need of individual attention. After the activities students were also asked to work on worksheets with the help of learning material.

- Manual developed for teachers were presented to them for further improvement. They also studied the manual. Worksheets were also discussed with them. It was not possible for the investigator to make the students solve all the questions of the worksheets in one go. So, some of the questions from the worksheet were given at a time.

- Observation schedule was filled by the pupil-teachers after using MLM in the class.

- Questionnaire was filled by the regular class teacher in each class.

- Focus Group Discussion was carried out with students by the investigator. One section was chosen in each of the sixteen schools, selected for the study. There was English medium section in all schools. An English medium section was selected for carrying out the present study.

FINDINGS OF THE STUDY

1. PHYSICAL FEATURES OF MLM

(i) Size: According to pupil-teachers the size of the material is appropriate.

Around ninety-five percent teachers responded that size of the MLM was appropriate. One teacher suggested that the size of the material could be increased. Later it was agreed that a bigger size of the MLM may cause inconvenience to them while carrying out activities. Thus, all the teachers responded that as per the space availability (i.e. surface of the desk) and size of the hands of children the size of MLM was appropriate.

(ii) Safety: According to pupil-teachers and teachers edges and corners of the MLM are smooth. Size of MLM is according to small hands of students. No hard material is used for development of MLM. So, the MLM is safe and comfortable for students.

(iii) Attractiveness: Pupil-teachers and teachers revealed that MLM is colorful. Numbers written on the material are bold and easily visible. Coordination of hands and eyes can be made easily by students. So, MLM is attractive for children.

2. USE OF MLM

(i) Enjoy Learning: Pupil-teachers revealed that students were busy performing activities with MLM. Their facial expressions and light in their eyes showed that they enjoyed working with MLM. The questions put to them were answered correctly while performing activities with MLM. So, they enjoyed learning through MLM.They were discussing about the activity performed by them within the group.

All the teachers responded that:

- Students were so anxious that they started using the material for carrying out activities before they were even asked to do so. Further they mentioned that students were enjoying while undertaking activities with MLM. They wanted to continue working with MLM in their lunch break too. They asked the pupil-teacher when she would come next time with some more material. Students enjoyed performing group activities.

- The material was suitable for the age group of the learners for whom it was developed. They could say so because students were responding to the questions asked by pupil-teacher while carrying out activities and solving problems of worksheets.

- Sixty-four percent teachers told that children were using MLM for free play and thirty-six percent teachers mentioned that students need more practice, exposure and support for using MLM for free play.

(ii) Relevance of MLM to the concept: Pupil-teachers and teachers found MLM relevant to the concept being taught as most of the students were able to solve problems of worksheets on their own and answered the questions posed to them while performing activities with MLM.

Further most of the teachers mentioned that the learning material was useful to the students for learning related concepts as well. For example with the help of Unit, Ten and Hundred Cards Students not only learnt the concept of place value but they also learnt the operation of addition, subtraction, multiplication, comparison etc. Likewise with Bricks, students not only formed different wall and floor pattern but they also learnt to identify and count different edges, corners and surfaces of a cuboid. They learnt multiplication facts through rectangular arrangement of Bricks.

Almost all the teachers pointed out that related concepts could be learnt with the use of MLM in time period available for teaching-learning process in the class. They responded that time was not a constraint while learning concepts through MLM.

(iii) Engagement: All the pupil-teachers responded that learners were engaged in using the materialas they found them busy in performing activities with MLM. They were checking and helping each other while conducting activities with MLM within the group. They were anxious to show their answers of worksheet as soon as possible. No material was lost or found missing while working with MLM.

All the teachers mentioned that MLM engaged all the students in the class. As soon as they were asked to perform activities with MLM, they became busy in performing activities within their group. Some students were performing activities while some were checking the activities of others within their group. Those students, who found difficulty in performing activities initially, observed the activities performed by other students in their group first and then they also performed activities on their turn within the group. Formation of the groups helped slow learners to participate in group activities.

3. INTERACTION WITHIN THE GROUP

(i) Scope of Collaboration Learning: Students were performing activities collaboratively within the group. They were helping and correcting each other while performing activities. They were sharing MLM with each other turn by turn within the group.

All the teachers mentioned that the students were interacting within their groups. They were communicating actively with each other regarding mathematical concepts, activities and MLM within their group. One learner was asking questions, while the second was

replying and others in the group were checking, helping and correcting the responses of their peers within the group.

(ii) Work on one's own pace: Almost all pupil-teachers and teachers observed that students' were working on their own pace as some common activities were performed by everyone within the group by taking turns but the fast students performed more activities on their own within the time allotted to them.

4. ROLE OF TEACHERS

(i) Without the supportof teachers: Pupil-teachers observed that a few students were in need of support from the teacher as their understanding of previous learning was not in line with the whole class. The students faced problems in reading, comprehending and writing of numbers and were not in habit of working on their own. They learnt reading, comprehending and writing of numbers through MLM after teachers paid individual attention to them while the other students worked with MLM on their own in the class.

Teachers revealed that those students who were non participant learners of the class, showed interest in learning through MLM. With the support, they performed activities and solved worksheets through MLM. Learning through hands on experience and visualization of mathematical concepts help weak students of the class in learning.

(ii) Participation of slow learners: Eighty-eight percent teachers and pupil-teachers revealed that slow learners also participated in learning through MLM, though at their own pace. First they were given opportunities to observe the activities performed by other students of their group and then they were asked to perform activities themselves. They learnt concepts through MLM with Peer Tutoring.

5. EVALUATION

(i) Follow Instruction: Pupil-teachers revealed that some students (twenty percent approx.) were unable to follow instructions for solving problems of worksheets due to language barrier. They were unable to read instructions from the worksheets. They were supported by their teachers and pupil-teachers in explaining instructions. They performed activities and worksheets through MLM with support of their teacher.

(ii) Solve problems independently: Pupil-teachers revealed that a few students (nearly twenty percent) were not able to understand the questions given in the worksheet without seeking help from the teacher due to their poor base of mathematical concepts. Their inadequate previous knowledge and lack of ability to read and comprehend became a barrier in understanding the questions given in the worksheet without seeking help from the teachers.

Eighty-eight percent teachers responded that students were able to undertake activities with given material without much support from their teachers. Twelve percent teachers responded, *"thoda to btana padega, ye apne aap question nhi parh payenge. Kuch ko to padhna nhi aata"*.

FOCUS GROUP DISCUSSION

Focus group discussion was carried out by the investigator with students who used MLM. It was conducted immediately after students carried out activities with MLM. Questions were posed to them in simple Hindi language and their responses were recorded.

1. **Handling the material:** All the students responded that they could use the material easily. While showing the model of bricks, one child told, *"mujhe to pehle he pta tha ki ye bricks hein. Mein to esse diwar or farsh ke kaee pattern bna sakta hu." Hundred ten and unit cards to bahut he asan hein. Mein oro ko bhe esikha sakta hun. Meine to agle din he ye ghar per bna liye the apni copy ke gatte se"*.

2. **Attractive:** All the students responded that they liked the learning material and found it to be attractive and interesting. They wanted to do more activities with the material. One child told, *"Mujhe to cube, cuboid, cone and cylinder ke nets bahut ache lage. Unhe fold karo to three dimensional and kholu to two dimensional". Enka size or colour bhi theek h.*

3. **Enjoy learning:** All the students responded that they enjoyed learning mathematical concepts through the use of learning material. They further told that they enjoyed working in groups, performing activities and solving problems of worksheets through learning material. One student told, *"meine bricks se jharokho wali deewar bnaee"*. Other child told, *"Dominos se bahut sare pattern bnaehein"*. Another child told, *"Humeest arah mzaa ata h copy mein swalkarne se nhi. MLM se hum apni speed se activities perform kerte h"*.

4. **Explore:** Around sixty percent students replied that they performed activities and explored knowledge on their own. Around twenty percent students replied that *"job achhe padhnhi par he the meine unhe bhi bta diya"*. Some students (around twenty percent) admitted that they required help and support from teacher for solving problems of worksheet with the learning material.

5. **Preference:** All the students replied that they would prefer to learn all the mathematical concepts in the similar manner. Some of the students told that learning with MLM was easy and interesting. One student told, *"Mein unit and tens nhi samajh pata tha per ab clear h."*

MAJOR FINDINGS

Pupil-teachers and teachers perceived that:

- Students enjoy learning in groups with MLM.
- Peer tutoring help slow learners in exploring and learning mathematical concepts.
- On visualizing mathematical concepts through MLM students understood concepts and solved problems of worksheets on their own.
- Students are anxious to develop and use learning material in their classrooms.

- Size, colour and usefulness of the learning material attracts students to learn through that material.
- The learning of related concepts is easy through MLM and time is not a constraint in the classroom.
- Use of MLM leads to collaborative learning in the classrooms.
- Use of MLM help students participate in learning process in classroom.
- The learning material was easy to prepare and they could develop their own kit using the manual. They said, "We will prepare these materials for our students". They gave three reasons for the same, "first the MLM discussed in the manual is not difficult to make. Secondly it does not require any special material except cardboard, which is readily available in the classrooms. Thirdly, we can give the material to students for use, manipulate and learn. And if some of the material get lost or torn then we can prepare them again unlike the kits provided by the departments, which are kept in safe custody for record.

STUDENTS PERCEIVED THAT

- Learning mathematical concepts through MLM is interesting, easy and joyful.
- Appropriate size and colour of MLM attracts us to use MLM for learning mathematical concepts.
- MLM help us to explore concepts and learn according to one's pace.
- Learning through MLM give us opportunities to learn from each other in groups in the classroom.

DISCUSSION (FUTURE DIRECTION)

Learning Material: Learning material is important for mathematics learning. It provides experiential learning to students. Mathematical concepts like place value, are much more understand able through learning material. Therefore as far as possible learning material should be used in the classroom for teaching and learning of mathematical concepts.

Ownership: Ownership of the material is very important; if a teacher makes a material and owns it then it is certain that it would be used in the class. Such an approach is much more sustainable as compared to providing a readymade learning kit to the teacher.

Group Activities: Manuals and Resource books should be developed which provide a lot of group activities in pairs, small group, large group and classroom. Such group activities provide opportunities to students to learn through their peers interactions and through collaborative learning.

Learning mathematical concepts through activities: Linking activities to mathematical concepts is important and needs to be taken up as a regular day to day classroom activity. Otherwise activities may be reduced to simple games without any learning.

Role of the teacher: The teacher would be a facilitator and this role also envisages that the teacher should think of various questions for assessment of the concepts learnt verbally. The teacher should observe students more while performing activities so that better judgments can be made regarding their learning needs.

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Pedagogy of Human Values in Delhi NCR:
A Case Study

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ABSTRACT

Human values are important for the survival, growth and development of human civilizations, has become more important now due to the current world situation which is advancing relentlessly towards uncertain futuristic scenarios. Covid-19 is one biggest examples of the interference of human in the natural process, forgetting all its values and duties towards nature and mother earth. There is need to change it and redirect it towards a scenario characterized by sustainability. However desirable changes in the society without the good quality educational processes can't be ensured.This paper is precisely written to highlight the scheme of educational changes based on certain values that could bring desirable changes in the society essential for the human sustainability. To do these changes, it is important to study the status of human values education or pedagogy of human values.

Key words: Human Values, Pedagogy, Education System, NEP 2020.

INTRODUCTION

Human beings are endowed with some many capabilities. One of these is the concept of values. Values are very important in the life of a human being and present them guidelines which governs the behaviour of human society. What we feel important or cherished in our life are values. Values of various kinds but those values which make human beings human are human values. These characterize human beings, and are therefore the core of humanity as given in figure I below:
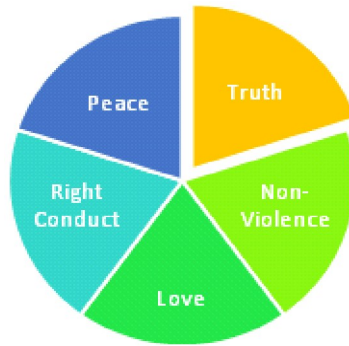
WHY HUMAN VALUES IMPORTANT OR RELEVANT TODAY MORE THAN EVER?

Human values are important for the survival, growth and development of human civilizations. It has become more important now due to the current world situation which is advancing relentlessly towards uncertain futuristic scenarios. Covid-19 is one biggest examples of the interference of human in the natural process, forgetting all its values and duties towards nature and mother earth. There is need to change it and redirect it towards a scenario characterized by sustainability. Sustainability is a new ways of executing jobs and tasks so as to improve our environment while ensuring freedom, justice, equality with economic progress. However desirable changes in the society without the good quality educational processes can't be ensured.

NEED FOR THE STUDY

NEP 2020 mentions value based education as an integral part of education system. NEP 2020 talks about the principles of this education policy as follows:

> *"The purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper and creative imagination, with sound ethical moorings and values. It aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive, and plural society as envisaged by our Constitution"* (page number 4-5, NEP 2020)

On page number 6 of NEP 2020, it is mentioned that fundamental principles that will guide both the education system at large, as well as the individual institutions within it are:

"**Ethics and human & Constitutional values** like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice"

Various committees and commissions on education have laid emphasis on education for values. After independence the **National Commission of Secondary Education (1952-53)** was a significant landmark in **emphasizing character building as the defining goal of education.**

*"**The supreme end** of the educative process should be the **training of the character and personality of students** in such a way that they will be able to realize their full potentialities and contribute to the wellbeing of the community."*

So it becomes very important that we focus human values in education. But are we prepared? The previously mentioned goals could be ensured only with the desirable changes in the educational processes, particularly during formative age or school level. This paper is precisely written to highlight the scheme of educational changes based on certain values that could bring desirable changes in the society essential for the human sustainability. To do these changes, it is **important to study the status of human values education or pedagogy of human values at the school level**

DESIGN OF THE STUDY

It is given as follows

Objectives of the study:

1. To study the status of human values education and pedagogy at the school level
2. To suggest remedies, if any required

Population: Students studying in the UG programme of Universities in Delhi & NCR

Sample: 50 UG students of community services in Delhi NCR .

Tool used for data collection: A self-developed questionnaire used by the researcher. The tool was tested for validity and reliability of the data. Content validity was measured by referring the draft questionnaire to the experts of the domain whereas the reliability was determined using split half method. Both of these were having quite.

Administration of the tool: Data was collected through google doc format during the Community Service period of the students. To ensure fair responses, no personal information (like name, enrollment number, name of programme etc.) of the students were collected

DATA ANALYSIS

- Date collected was analysed
- Analysis of the data have been given in the coming slides

Findings of the research: Findings of the research have been given as follows in the tabular form:

Tabel 1: Findings of the Research on Human Values

Sr. No.	Statement	Findings	Remedies
1	Why did you choose this course?	• Majority of students joined community services class out of interest • Around 18% joined because of compulsion	• System should emphasize creation of interest amongst students • Compulsion should not be a factor to join community services
2	I know the concept of Human Values	• Majority of students agree that they know the concept of human values • Around 10% are neutral and a small % disagree	• Good indicator that school system is able to develop concept of human values amongst majority of students
3	Human values are values characterizing a human being and humanity	• Majority of students agree that they know the concept of human values • Around 15% are neutral and a small % disagree	• Good indicator that school system is able to develop concept of human values amongst majority of students
4	Human Values are important in today's time	• A large majority of students agree that human values are important in today's time • A small % are neutral and nobody disagree	• Good indicator that students are able to understand the importance of development of concept of human values amongst themselve
5	Human are superior to animals and therefore should display characters of humanity	• More than half of students agree and around 25% strongly agree that human should display human values • Why as they are endowed • A small 15 % are neutral and around 10% disagree	• Students understand it that responsibility of human beings, (a social animal) is more than other animals • Students understand it that responsibility of human beings, (a social animal) is more than other animals
6	I have previous experience of activities based on human values	• Around $2/3^{rd}$ of students responded that they have previous experience of doing activities related to human values • Around 27 remained neutral and a small % of students disagree.	• Students would expect more activities based on human values during their current courses too • University should provide more such activities
7	My teachers at schools organised activities focusing human values	• A little over half of students gave positive reply, 37% were strongly agree whereas 22 were agree • More than $1/3^{rd}$ of students were not certain that their teachers organised activities focusing human values	• It becomes the responsibility of the teacher to explain the objectives of various activities being organised in the school. • It will ensure better results of those activities
8	Teachers at School knew how to teach human values	• More than $2/3^{rd}$ of students gave positive reply that teachers know pedagogy of human values. • However, around 25% students were not certain about teachers' pedagogy of human values • A small % of students were either strongly disagree or	• There is need to work more on strengthening pedagogy of human values as many students gave negative response to this statement

9	Principal at my school used to motivate us to follow human values in our life	• A little over 55% students gave positive reply to the statement, 46% of them agreeing and 12% strongly agreeing • A large number of students, more than 1/3rd of them, were neutral to them meaning thereby that, they don't know about the statement • A very small % of them disagree with statement	• Principal or HoS role is very critical in almost all areas in school functioning. • Motivating all especially students through his knowledge and wisdom is one such important task
10	My parents emphasize us to follow human values in my life	• Majority of students responded that their parents emphasize following human values in life • Only a small % of respondents remained neutral • No student disagreed	• It's a very encouraging finding • Re-establish the important role, parents play in their wards socialization process
11	Books I read in my school were sufficient to teach me human values	• Very crucial finding • More than 1/3rd students disagreed (SD+D) • Around 40% remained neutral • Around 20% agreed (SA+A)	• Books are a very crucial resource for teaching human values • Reading habits of students decreasing, might be because there sufficientbooks are not available • Number of books of good quality needs to be increased to improve reading habits
12	Sufficient learning experiences were provided to us for learning human values in my school	• More than half of students gave positive response • More than 25% remained neutral and 20% disagreed • No student strongly disagreed	• School still need to provide more learning experiences to the learners if they want their students to be better future citizens
13	Teachers were well educated in teaching human values to us while I was in school	• Around 60% students gave positive response (SA+A) • Around 30% remained neutral • Around 10% responded negatively	• However, a good number of the students responded positively • Yet, there is need to work more on pedagogy of human values • Both Pre-Service & INSET TE needs to be strengthened
14	There is need to organise more activities to inculcate human values at school level	• More than 80% agreed (SA+A) • Just around 12% remained neutral • Only a small % of just gave negative response to the statement	• Very interesting finding • Huge number of students want more enriching activities aiming human values
15	All teachers should know pedagogy of teaching human values at school level	• 83% students gave positive response to this statements emphasizing the fact that teacher should be aware of pedagogy of human values at school level	• Pedagogy of human values need to be taught to all the pupil teachers • Integration of pedagogy of human values with other pedagogy subjects

16	Human values are not given too much importance in school curriculum	• More than 27% gave positive response to the statement (SA+A) meaning thereby that they agree human values don't find its due place in school curriculum • 39% students remained neutral or undecided	• Need to include human values in school curriculum and give it, its due place
17	Employers should see competency of students in human values too while recruiting them	• More than 70% gave response in positive (SA+A) • Around 1/4th remained neutral • Very less responded negatively	• If employers start giving due importance to human values amongst future employees, • definitely schools and other educational institutions would start focusing on inculcation of human values
18	More emphasis should be on development of holistic personality of a student than only mental development	• More than 55% responded positively • 35% students remained neutral • Just 7.5% disagreed with statement	• The system should focus development of holistic personality
19	Principal of my school used to give more emphasis on development of mental abilities than holistic development through dance, drama, sports etc.	• More than 50% agreed • More than 12% disagreed with statement • 1/3rd students remained neutral and just 13% disagreed to the statement	• Role of principal is very crucial • If he/she emphasize development of holistic personality, all other stakeholders including teachers and parents will understand its importance
20	Parents during my school days used to give more emphasis on development of mental capabilities than holistic development through dance drama, sports etc.	• 39% students responded positively to the statement • More than 1/3rd remained neutral • More than 20% disagreed (SD+D)	• Parents too should understand the importance of human values in life • Schools should create awareness amongst parent
21	Activities focusing human values are just a wastage of time	• Around 88% appreciates the importance of human values • Just 7% believe time devoted to human values is wastage • Around 5% remained neutral	• It's a good sign, students appreciates importance of human values, they are ready to learn human values • System should do more for HV inculcation
22	As an employer, I would give due emphasis to human values while selecting my employees in future	• More than 78% students responded positively • Around 20% remained neutral and a very small disagreed	• Future looks bright as would be decision makers believe they would see whether human values get reflected in their employees or not

MAJOR FINDINGS

Major findings of the research are given below:

- Majority of students joined community services class out of interest.
- Majority of students agree that they know the concept of human values.
- A large majority of students agree that human values are important in today's time.
- Majority (more than half of students agree and around 25% strongly agree) agree that human should display human values as they are human beings, not animals.
- Around 2/3rd of students responded that they have previous experience of doing activities related to human values.
- More than 2/3rd of students gave positive reply that teachers know pedagogy of human values.
- A little over 55% students gave positive reply to the statement, 46% of them agreeing and 12% strongly agreeing that Principal at school used to motivate them to follow human values in their life.
- Majority of students responded that their parents emphasize following human values in life.
- Very crucial finding that more than 1/3rd students disagreed (SD+D) that Books they read in their schools were sufficient to teach them human values.
- More than half of students gave positive response that sufficient learning experiences were provided to them for learning human values in their school.
- Around 60% students gave positive response (SA+A) that Teachers were well educated in teaching human values to them while they were in school.
- More than 80% agreed (SA+A) that there is need to organise more activities to inculcate human values at school level.
- 83% students gave positive response to this statements emphasizing the fact that teacher should be aware of pedagogy of human values at school level.
- More than 27% gave positive response to the statement (SA+A) meaning thereby that they agree human values don't find its due place in school curriculum. More than 27% gave negative response to the statement (SD+D) meaning thereby that they don't agree human values don't find its due place in school curriculum.
- More than 70% gave response in positive (SA+A) that Employers should see competency of students in human values too while recruiting them.
- More than 55% responded positively that more emphasis should be given on development of holistic personality of a student than only mental development.
- More than 50% agreed that Principal of their school used to give more emphasis on development of mental abilities than holistic development through dance, drama, sports etc.

- 39% students responded positively to the statement that their Parents during their school days used to give more emphasis on development of mental capabilities than holistic development through dance drama, sports etc.
- Around 88% appreciates the importance of human values believed that activities focusing human values are not just a wastage of time.
- More than 78% students responded positively that as an employer, they would give due emphasis to human values while selecting their employees in future.

CONCLUSIONS

- Human values are very important aspect of education, particularly at the school level.
- Students understand the importance of development of concept of human values amongst themselves.
- Students understand it that responsibility of human beings, (a social animal) is more than other animals.
- Students would expect more activities based on human values during their current courses too, University should provide more such activities.
- Responsibility of the teacher SHOULD BE to explain the objectives of various activities being organised in the school. It will ensure better results of those activities.
- There is need to work more on strengthening pedagogy of human values as many students gave negative response to this statement.
- Principal or HoS role is very critical in almost all areas in school functioning. Motivating all especially students through his knowledge and wisdom is one such important task.
- Re-establish the important role, parents play in their wards socialization process.
- Books are a very crucial resource for teaching human values. Reading habits of students decreasing, might be because there sufficientbooks are not available. Number of books of good quality needs to be increased to improve reading habits.
- School need to provide more learning experiences to the learners if they want their students to be better future citizens.
- Huge number of students want more enriching activities aiming human values.
- Role of principal is very crucial. If he/she emphasize development of holistic personality, all other stakeholders including teachers and parents will understand its importance.
- It's a good sign that students appreciates importance of human values, they are ready to learn human values. System should do more for HV inculcation.

IMPLICATIONS

- The system should focus development of holistic personality.
- System should emphasize creation of interest amongst students. Compulsion should not be a factor to join community services.
- Need to include human values in school curriculum and give it, its due place.
- Pedagogy of human values need to be taught to all the pupil teachers. Integration of pedagogy of human values with other pedagogy subjects.
- Employers should start giving due importance to human values amongst future employees, which definitely in turn motivate schools and other educational institutions to start focusing on inculcation of human values.
- Future looks bright as would be decision makers believe they would see whether human values get reflected in their employees or not.
- Parents too should understand the importance of human values in life and Schools should create awareness amongst parents.
- There is need to work more on pedagogy of human values.
- Both Pre-Service & INSET Teacher Education needs to be strengthened.

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