Nurturing Creative Potential of All Children: Exploring the Possibilities of Realizing the Vision of NEP 2020 in Indian Classrooms

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Introduction

The launch of National Education Policy (NEP) 2020 was a historic moment for the country as the nation received a new education policy after 34 years. The policy is being deliberated upon, debated, and understood by various educationists and other stakeholders. One major concern has been how it can be implemented and how its vision can see the light of day. The policy being an exhaustive document has been developed around several themes that include many of the contemporary issues that education has delved with worldwide. One such concern has been to see education as a holistic experience to nurturing the potential in children rather than merely transmission of knowledge.

India has been struggling to provide education for all and being a diverse, large country has found it a daunting task. In this race, the quality of education in the country, in terms of nurturing the inherent potentialities, did not get much attention. This is the thrust area of the NEP 2020 policy, which states very explicitly that education should nurture the creative potentialities of each individual. It states that, *"Education Policy lays particular emphasis on the development of the creative potential of each individual. It is based on the principle that education must develop not only cognitive capacities – both the 'foundational capacities' of literacy and numeracy and 'higher-order' cognitive capacities, such as critical thinking and problem solving – but also social, ethical, and emotional capacities and dispositions"* (p. 4). Thus, the policy focusses on the developmental and inclusive perspective of creativity viewing it as a potentiality, which could be nurtured amongst all children.

The policy also advocates reducing the load of content so that creative ideas and creative processes can flourish. It states that, *"Education must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields"* (p. 3). To achieve these goals, it suggests the evolution of pedagogy to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, flexible, and, of course, enjoyable. Apart from this, it specifically mentions scientific temper and evidence-based thinking, and creativity and innovativeness as some of the skills and capacities that should be learned by all students to become good, successful,

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innovative, adaptable, and productive. Thus, the policy acknowledges creativity as one of the fundamental principles that will guide both the education system at large, as well as the individual institutions within it.

Creativity as an area already exists in education and has evolved over a period of time. It has developed into a construct that could be understood through multiple perspectives. Countries like the United Kingdom had long back envisioned nurturing creativity in their children and have in this process conceptualised newer notions of creativity specifically in the realm of primary education (Craft, A. 2001). Hence, to explore the possibilities one needs to look at the various perspectives of creativity and deconstruct the idea specifically for the Indian context. Thus, this paper attempts to operationalise the vision of NEP 2020 with respect to the idea of creativity in education. In this regard, the paper presents specific instances as well as anecdotes from Indian classrooms that provide convincing evidence for the creative potentialities amongst children and convey the possibilities of nurturing these potentialities. A synoptic view of various perspectives of creativity is also given as a reference point.

A synoptic view of creativity'Creativity' is a highly valued construct worldwide. Any human development in any field can only be possible through generation of new knowledge, new ideas and new ways of looking at reality. The importance of 'creativity' in education is explicit from the emphasis that various educational policies across the world lay on the development of creativity as one of the main aims of education. The concept of 'creativity' has many constructs that describe or explain it from different perspectives, which makes it challenging to define it in a few words or phrases. Traditionally, Rhodes (1961) concluded that creativity definitions existed in 4P's: PERSON – identification of the characteristics of the creative person; PROCESS – the components of creativity; PRODUCT – the outcome of creativity; and PRESS – the qualities of the environment that nurture creativity. Torrance (1976) has also observed that creativity has usually been defined in terms of process, product and at times personality or environment. A similar view was given by Simonton (2008) that provided four potential ways to study creativity. First, creativity can be viewed as a specific personality trait and can be measured with personality inventories. Second, creativity can be studied as a mental process and problem-solving technique. In this case creativity can be measured by divergent thinking tests. Third, creativity can be defined as a characteristic of a product and can be assessed through the estimation of the value of the product. Fourth, creativity can be described as a function of the environment. These ways to study creativity are mutually dependent and Simonton explained this inter-dependence by stating that "*Creative products are generated by creative persons using creative processes.*"

The 4C model of creativity developed by Kaufman and Beghetto (2009) viewed creativity as a developmental process. The first C refers to extraordinary or high creativity displayed by geniuses with special gifts, often called 'high' or 'big C creativity' (BCC); the second C refers to more ordinary, everyday creativity, called 'little c creativity' (LCC). This basic distinction neglects two key levels – mini-C and pro-C. Mini-C is the creativity that happens in the learning process, and pro-C is expert level creativity. It might be someone who has composed music that is currently popular. Everyone has mini-C and most of us can reach little-C. Many of us can attain pro-C with enough work and training and only a few reach big-C. Generally, most conceptions of creativity tend to take one of two approaches: big-C and little-C. "LCC is different from BCC in that it is the kind of creativity that "we all share because we have a mind and can think" (Csikszentmihalyi, 1996, p. 7). In the context of little-C perspective of creativity, the potential of all human beings to be creative is called 'possibility thinking' by Anna Craft (2000). She asserts that *"Possibility thinking is at*

the heart of all creativity in young children, whether they are working alone, in parallel or in collaboration with others. Possibilities are generated by children (and adults) in all areas of learning, whether imaginative play, musical exploration and composition, cooking, mark-making or writing, outdoor physical play, mathematical development or early scientific enquiry. Possibility thinking is the means by which questions are posed or puzzles surfaced – through multiple ways of generating the question 'what if?'... Fostering children's possibility thinking can be seen as building their resilience and confidence and reinforcing their capabilities as confident explorers, meaning-makers and decision-makers." She defined little-C creativity as a capacity to route – find in life, to take action and to evaluate – what is effective or successful and considered it as a cross-curricular skill, which could be nurtured in any domain of knowledge through education. She believed that all children have the potential of little-C creativity and this potential could be nurtured. This perspective of creativity can be viewed as an inclusive approach to study creativity.

Runco (2003) also focussed upon creative potentialities amongst children (unfulfilled possibilities), which could be nurtured and may get manifested as creative performances. In the context of education, he defined creativity as, "*thinking or problem solving that involves the construction of new meaning. This in turn relies on personal interpretation and these are personal and new for the individual*" (p. 317). Runco (2003) stated that, "*a child's potentially creative work might very well be original and adaptive only for that individual child but unoriginal when compared with ideas or insights that other individuals have had. A child's creativity can be quite personal*" (p. 318). This perspective is similar to personal creativity and in consonance with Piaget's cognitive developmental theory. The major perspectives to creativity, as discussed, reflects that creativity is multi-dimensional and has a wide scope as it spreads across various domains with a broad spectrum of activities that can be described as creative. For instance, Einstein's theory of relativity, Newton's laws of gravitation, Planck's quantum theory are some of the renowned examples of creative ideas that manifests scientific creativity of the creative geniuses.

Clearly, these products/ideas are very different from how creativity is perceived in the artistic domain for example, Shakespeare's Hamlet, Vinci's Mona Lisa painting, Beethoven's fifth symphony, etc. Any individual can have one's own interpretations of the artistic works/ideas but to understand and interpret scientific theories the individual needs to have some basic knowledge of science. Whether creativity in different domains can be explained in similar terms is a relevant question that arises from this debate. The answer could be both 'yes' and 'no' as there are certain common features of creativity that are relevant to all domains but there are certain domain relevant specifications, which make creativity in that particular domain exclusive and different. In the context of education and learning, creativity is considered in relation to a specific domain. Though most of the earlier research on creativity recognised it as domain independent but learning related creativity is domain specific by nature; its functioning in one domain is unique and psychologically different from another. Also, creativity within specific domains is distinct from creativity as a separate process, applied within domains (Feldhusen, 1994). Thus, the knowledge of a particular domain, domain relevant skills, domain general creativity skills and creative thinking processes/skills are of great importance if one wants to be creative in a particular domain. As one proceeds to a higher level of education, such as graduate and postgraduate level, domain knowledge becomes highly specialised and creativity becomes more domain specific. However, in schools, the curriculum of various subjects/domains is more interdisciplinary that allows scope to nurture creativity general skills through different domains.

This synoptic view on creativity provides a brief description of various perspectives

about creativity that have evolved over centuries and the contemporary ideas of creativity that are most relevant to the field of education. The paper further explores how the vision transformed in the field of creativity education in the Indian context in terms of its educational policies up to NEP 2020.

Creativity education in India: Transition in vision up to 2020

India is a land of cultural diversities and has a rich heritage of ancient knowledge. The aim of education in ancient India was not just the acquisition of knowledge as a preparation for life in this world, or life beyond schooling, but for the complete realisation and liberation of the self, which was the ultimate philosophy of creativity. The ancient Indian education system produced great scholars and creative personalities, such as Charaka, Susruta, Aryabhata, Varahamihira, Bhaskaracharya, Chanakya, Panini, Gargi among numerous others, who made seminal contributions to world knowledge in diverse fields such as mathematics, astronomy, metallurgy, medical science and surgery, etc. Realising the importance of nurturing creativity, the educational policies in India have emphasised upon inculcating creativity and its associated skills amongst all children through education. For instance, the reports of Education Commission (1964-66), National Policy on Education, Programme of Action (1986,1992) and NCERT Curriculum Framework (1987, 2005) have all along emphasised the need to develop spontaneity, curiosity, independence in thinking, originality, courage to ask questions, in short, creative thinking skill and abilities.

It's been more than 15 years since NCF 2005 was implemented yet the situation has not changed to a large extent. NCF 2005 and earlier policies or commissions have discussed creativity merely in terms of reducing it to a kind of thinking, which is referred to as creative thinking. But NEP 2020 envisions it as a potential or a capacity in every child or individual. Where previous commissions, policies or frameworks have only focussed on the cognitive or thinking aspect in relation to creativity, NEP 2020 asserts that it cannot be solely developed as a thinking aspect. Rather, the creative potentiality has to be nurtured holistically by focussing on other aspects of the personality too, such as social, ethical, and emotional aspects. Literature on creativity too supports the idea. Several researches in the area of creativity prove that there are various other associated skills or abilities that facilitates an individual to realise one's potentiality and work towards it. Also, great Indian thinkers, such as Swami Vivekananda, Krishnamurti and Tagore have discoursed for a holistic development of an individual that is evolutionary in process. They have shown more concern about the kind of experiences offered to an individual and their development rather than their performance or contribution. The NEP 2020 also contextualises the idea of creativity for the contemporary times and acknowledges creativity as a prerequisite to adapt to the emerging field as well as the changing world. This idea is in congruence with the rationale given for the conceptualisation of little-C creativity by Anna Craft.

NEP 2020 also advocates a holistic and multidisciplinary education approach based on positive learning outcomes of previous assessment of integrated educational approach at undergraduate level wherein arts is integrated with STEM (science, technology, engineering and mathematics). The assessments revealed that such integration have shown increased creativity and innovation, critical thinking and higher-order thinking capacities, problem-solving abilities, teamwork, communication skills, more in depth learning and mastery of curricula across fields, increase in social and moral awareness, etc., besides general engagement and enjoyment of learning. NEP 2020 cites the example of word renowned Indian universities such as Nalanda and Takshila and extensive ancient Indian literature that enforces the idea of integration of knowledge across different domains. For instance, it refers to ancient Indian literary

works such as Banabhatta's *Kadambari* that considered knowledge of the 64 *kalas* or arts as good education. It considered not just the usual artistic domain subjects such as music or painting but also technical fields such as science and mathematics. To quote from Banabhatta's *Kadambari*, "among these 64 'arts' were not only subjects, such as singing and painting, but also 'scientific' fields, such as chemistry and mathematics, 'vocational' fields, such as carpentry and clothes-making, 'professional' fields, such as medicine and engineering, as well as 'soft skills', such as communication, discussion, and debate. The very idea that all branches of creative human endeavour, including mathematics, science, vocational subjects, professional subjects, and soft skills should be considered 'arts', has distinctly Indian origins." Looking back to our roots, that is the Indian traditional knowledge, ancient culture and the notion of 'knowledge of many arts', which is also called 'liberal arts' in modern times, NEP 2020 advocates that such an education system should be brought back and considered as the exact need of the 21st century education system. It also emphasises upon the importance of arts as a strong medium of imparting culture and nurturing creative abilities in individuals and suggests that it should be offered to students at all levels of education as early as possible. NEP 2020, thus, promotes the idea of STEAM, including arts in STEM subjects, to nurture the creative abilities of students and to make the education system more holistic and multidisciplinary.

In previous policies before NEP 2020, the concept of 'creativity' was limited to just another thinking skill that needed to be nurtured for the overall development of the child but different constructs of creativity that are relevant to children were not even mentioned. However, NEP 2020 has specifically and explicitly emphasised and focussed upon the contemporary ideas of creativity, such as creativity as potentiality and everyday creativity. This shift in the way creativity is conceptualised in NEP 2020 looks more promising in terms of nurturing a child's creativity. However, how this vision can be implemented at the grassroots level and how the hidden creative potential of children can be identified and nurtured in our diverse Indian classroom is an important area to be explored to understand the dynamics and various possibilities that it offers.

Nurturing the creative potential: Exploring the possibilities in classrooms

This section is based on some evidence that shows the creative potentialities amongst Indian children and the experiences through which they get cultivated. The idea of 'potentiality' itself is indicative that it is inherently present in every child. This implies that the educators, teachers, and parents need to understand the experiences that may provide opportunities to further develop their potentiality. The question then is what are these experiences that help the children to engage with novel and unconventional ideas? How diverse can creative potentialities be and how do children realise as well as develop their potentialities? The classroom is the most appropriate space where one can expect to get responses to these questions. The deliberate efforts made by the teachers or their spontaneous attempts may create instances or anecdotes that are worth analysing and are insightful. Thus, various instances and anecdotes found helpful in understanding the above concerns have been discussed. An attempt has also been made to capture the perspectives of teachers in this regard through their narratives. The teachers' narratives and instances shared by them from their classroom experiences have been included.

Brief overview of the project

The project aims at understanding the potentialities of creative and other associative skills amongst Indian children from diverse backgrounds and establishing its linkage with curriculum for their nurturance. The study attempts to develop intervention models for

nurturing their potentialities and realising the changes in the classroom processes. The study seeks to enhance our ground understanding of creativity, education and skills and enrich the discourse of education, skill and employment for informing the policy formulation for 21st century schools in the Indian context. Two of the research objectives from the project that relate to the theme of the paper are as follows:

1. To study teachers' perspectives of creativity as well as associated skills amongst Indian learners
2. To study teachers' perspectives about various ways in which creative potentialities in children can be nurtured Methodology for data collection and analysis

This project is under process and in the phase of data collection and preliminary analysis of the obtained data. A semi-structured questionnaire was prepared by the researchers and a pilot study was done with five teachers. On the basis of the analysis of the pilot data, the questions were modified and the tool was finally validated by an expert. Due to the lockdown and the persisting pandemic situation, the data could be collected through online mode only. The questionnaire was converted into a Google form. Random sampling was done and the form was distributed through snowball sampling technique to collect the data from school teachers across various states of India. In all, 50 teachers from Delhi, Haryana, Pune, Bihar and Odisha submitted the form. The questionnaire included 10 open-ended questions. Hence, the data is subjective in nature wherein teachers responded from their personal experiences and shared many instances from their classrooms in which they could identify creative potentialities amongst their students.

This called for a qualitative analysis of the data to provide some insights into the matter of our concern and major themes that emerged from the analysis have been discussed in the following section.

Qualitative analysis of teachers' narratives in response to the questionnaire

The data obtained from the teachers' questionnaire were analysed qualitatively and the following themes emerged from the data:

1. Teachers' notion about different perspectives of creativity and creative potentialities amongst students
2. Instances and anecdotes from classrooms that depict children's creative potentialities
3. Strategies adopted by teachers to nurture creative potentialities amongst students

Each of the themes has been explained individually.

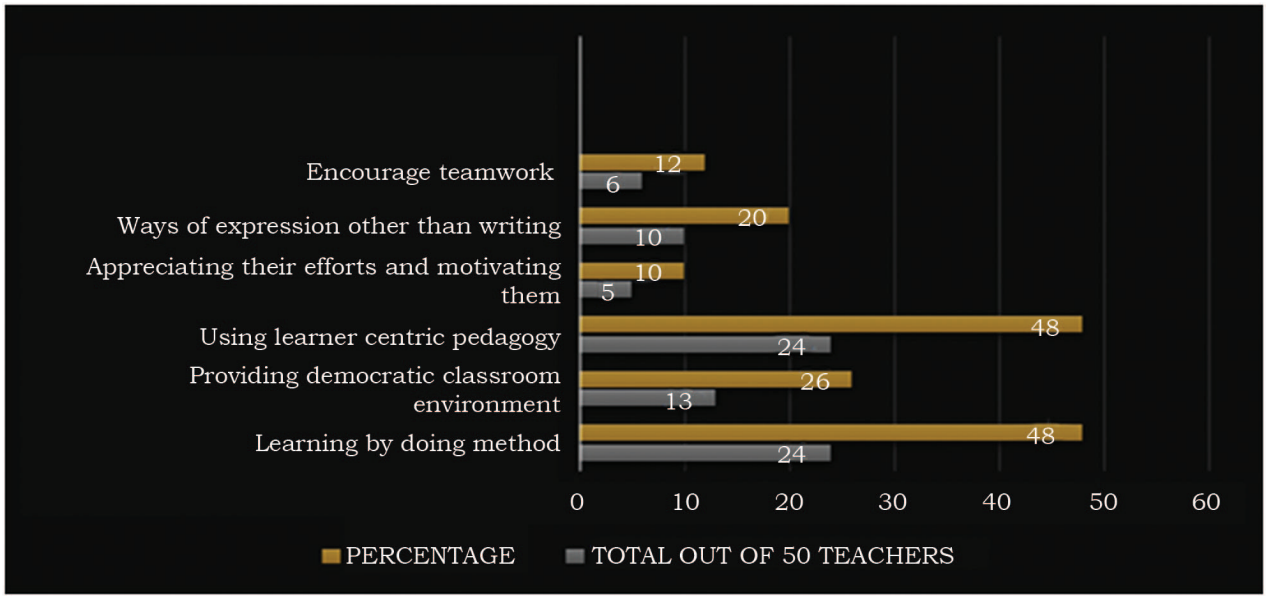
Theme 1: Teachers' notion about different perspectives of creativity and creative potentialities amongst students

The analysis of teachers' data about creativity revealed that teachers had multiple concepts about the idea of creativity that reflected different perspectives of creativity as discussed in the section on the synoptic view of creativity. The graphical representation of major sub-themes that emerged under this theme is shown in Bar Graph 1. Some of the responses were very few in number but relevant to the theme. They were also quoted and analysed qualitatively.

BAR GRAPH 1: Representation of frequency of teachers' responses and percentages for each sub-theme

Most of the teachers (48%) described creativity as an act of creating something new, which may not always be a tangible product obtained from turning imagination into reality but also new ideas or looking at things differently. Some responses from teachers are shared below.

"Creativity is the ability to create new things using your own ideas. It involves transforming your imagination into reality. It requires out of the box thinking."



"Creativity is the ability to come up with new ideas, to view the world and its patterns in a different and unique light."

"Creativity is looking at a thing differently. Being imaginative. Approaching things in an exciting way."

"Creativity to me is the ability to be imaginative and see things differently."

"Use of your individual talent and imagination to create something different."

The teachers' narratives quoted above reflect that the teachers believed creativity was an individual's ability that can be seen both in terms of the product created and as a process. They consider imagination and thinking divergently as important aspects of creativity. Some teachers shared that creativity was a potentiality amongst all individuals that can be nurtured, thus focussing on the developmental perspective of it. Some of the teachers' narratives in this regard are**:**

"*Creativity in the context of education can be seen as potentialities that engage a child to think, to act, to feel and to create something original. Here original is not in terms of original to the world but to that particular child."*

"Creativity is a wider term which can be used to describe one's potential in different manners in different domains."

"Every child is creative."

"Each person is creative in his own way."

"Creative means having a different perspective for a common thing."

"Creativity is hidden in every person. We just need to nurture it by encouraging the person."

These quotes reflected that teachers were more inclined towards Runco's ideas of creativity and Anna Craft's little-C perspective wherein they believed that everyone can be creative and viewed creativity as a hidden potentiality that needed to be explored. Also, the teachers are sensitive to the fact that 'originality or newness' may be subjective, that is it may not be new for the teacher or the world but may be new for the child. This shows that the teachers perceive creativity as an everyday perspective that is referred to as small-C in literature, which is dichotomous to the big-C perspective of creativity. This indicated that teachers perceived creativity as a potentiality that can be nurtured in every child and its manifestation can be seen as an idea or a tangible product that may be new for the child. Thus, this developmental

perspective as echoed in teachers' narratives too has implications for education. Contrary to this view, is the big-C perspective, which is an elite idea and is generally considered to be a prerogative of only geniuses or a selected few. Three teachers from the sample referred to creativity as an innate ability or an inborn quality as quoted below.

"Creativity is an innate ability that activates the senses of the child (person) by using imagination and ideas to come up with a solution to a problem. Creativity plays a significant role in development and success. Creativity should be nurtured."

"It's a born quality."

It is difficult to interpret from the above narratives whether the teachers' perception could be referred to as a big-C perspective. In educational psychology, the terms 'innate' or 'born quality' have an inherent implied understanding that the quality or ability is present from birth with the assumption that it couldn't be developed. This can be located in the discourse of the nature vs. nurture debate where it is presumed that the two views are discrete and dichotomous. In this context, the first quote either contradicts itself as it ends with a suggestion that *creativity should be nurtured* or perhaps it sees the convergence in the two views, thus, viewing creativity as an innate ability that can be nurtured. Hence, whichever may be the case, it can be said that most of the teachers view creativity from a developmental perspective and believe that education has an instrumental role in it. This is important as the teachers' perception is one of the influencing factors for educational planning for children.

Teachers' narratives also acknowledged creativity as a personal experience for children wherein they create their own meaning while learning something. Given below are some related quotes.

"Creativity is about constructing or making meaning of the world, which emphasises on the personal interpretation of the world."

"Creativity is something very personal, but it can be flourished further in a conducive environment."

"I think creativity is all about setting a person free about his views and we can say one is creative if the person constructs something or gives any idea, which is useful and something everyone was unaware of."

"It may or may not turn into a product but it definitely starts with an idea. It can be as evolutionary or revolutionary to the field. These differences occur, because we use different lenses to understand and explain creativity."

The perspective of personal creativity is similar to the idea that Runco asserts in context of children's creativity. As discussed above, meaning making and construction of new knowledge is also in consonance with Piaget's theory and constructivism. The last quote from the above stated teachers' narrative extends the personal creativity to big-C creativity, that is expressing one's view is the first step, which can gradually evolve into an idea that is new and useful for others too.

Along with personal creativity, a few teachers also explained the importance of the process aspect of creativity rather than focussing upon the product aspect only. Teachers considered creativity as a process that can be manifested across all domains of knowledge. Sharing a few responses:

"Creativity is involved with all the subjects. As a child listens to a story in language class, the child uses imagination and later creativity to extend the story. I can say that the nature of the subject and idea of creativity is related. For example, while teaching maths I see how different children take different routes to solve a mathematical problem. On the other hand, while engaging in Hindi class, I see how children make connections with the text, and interpret it within the frame of their experiences. How elaborately they express the meaning, constructed while interacting with the text, etc."

"When I was teaching primary grade children, I was supposed to teach all the

subjects and according to me all the subjects have scope for creativity, just the degree varies. Languages have scope for story making, poem making, giving multiple endings to a story, role playing, etc. EVS provides the scope for exploring the surroundings by being observant, looking for similarities and differences among plants or animals, it nurtures classification and categorisation skill, experimentation like making sun dial by observing the shade of the movement of the sun, etc."

Many of the teachers viewed creativity as a problem-solving ability (44%) and thinking abilities such as divergent thinking . For example:

"Doing things differently to find solutions to problems in a bid to improve quality of life."

"Thinking of new possibilities or ideas to solve the problems.".

Few teachers also acknowledged that creativity is a multi-dimension construct. To quote:"*Creativity is a multidimensional construct. Generally, few characteristics like newness, uniqueness in ideas as well as in products can be associated with creativity."*

"It doesn't have a fixed framework, drawing or artwork doesn't mean creativity. It changes as per subject, and content-level of children."

"Creativity has many faces. It comes in different forms, in different places and situations for and with different objects. Everyone is creative in their own way of thinking, persuading and acting."

In this quote, the teacher also explained how creativity varies across different domains through examples, hence indicating domain specific creativity.

Few teachers also considered creativity as an ability of understanding self and a form of self-expression. For example:*"Creativity is the freest form of self-expression. It generates curiosity and is a satisfying and fulfilling experience for children to be able to express themselves openly and without judgment."*

"Understanding self and others is my creativity. Be happy and spread happiness. Be positive and spread positivity."

Such quotes reflected that creativity is associated with positive words such as happiness and it leads to self fulfilment and realisation of one's potential. Such views were in consonance with Indian philosophy about creativity.

The narratives discussed above indicated that the teachers had contemporary perspective to creativity wherein they laid more emphasis on the process aspect of creativity than the product aspect and considered that there is a shift from traditional approach (big-C) to developmental approach to view creativity as a potentiality, which could be nurtured amongst all children. Hence, the ideas of Runco and Anna Craft's little-C (everyday creativity) perspectives of creativity echoed in the teachers' narratives.

Theme 2: Instances and anecdotes from classroom that depict children's creative potentialities

Teachers' shared a variety of experiences that indicated various creative potentialities, which they observed in the children. Teachers' narratives showed that most of the teachers associated creative potentiality to various abilities that ranged from children assigning their own meaning to the idea, to applying the concept in daily life, critical thinking and identifying issues, divergent thinking, use of imagination to create different ideas, and logical thinking. The narratives include contexts where children responded to the teacher's question or to an activity given by the teacher. The contexts also included instances where the students' responses were unexpected, and the teacher facilitated by encouraging and building up from those responses. This reflected the spontaneity required on the part of the teacher while teaching for creativity.

One of the teachers shared about her students' creative potentialities while referring to the lockdown period. She responded that various children in her class engaged themselves in different creative expressions at home, which reflected the potentialities present in them. This,

the teacher has referred in context to the lockdown period when children were spending time at home with their parents or families, which indicates that the teacher hinted on the role of the parents or family too in nurturing the potentialities in children that could be explored further. Her narrative is as follows: "*As the global health crisis has resulted in a prolonged period of a lockdown, most children in my class engaged themselves in artistic ways of expression. Some wrote songs, poems and stories while most others spent their time drawing and making craft. I was overwhelmed with their creative thinking and their ability to be highly productive during such testing times. It would have been absolutely easy for all the students to while away their time during the lockdown. However, they did not let boredom get the better of them. They made sure to get themselves involved in some form of creation in any capacity that they could from their homes.*"

This showed that the teacher acknowledged that all children had some form of creative potentiality in them and given the opportunity, they are able to find expressions for them.

Another teacher quoting an instance from her classroom showed how children could be encouraged to create their own meaning about a concept through learning by doing. Her response was:

"*Introduction of topic magnet in Class 6: I tell them to bring their own magnet and play with it and answer my following questions like the shape of your magnet, what happens when you bring two magnets together, etc. Now the students are able to give answers of their own and create something new and interesting related to magnet.*"

This showed that she gave them an opportunity to explore and experience the magnet and then engaged them with certain questions. This, according to her, gave them an opportunity to create their own ideas about the magnet, which she related to their creative potentiality.

Another teacher shared how children apply learnt concept and improvise on various everyday material to use them as the apparatus for performing experiments at home. The teacher said, "*The one, I remember the most is when we talked about buoyancy. Then a child went home and tried the concept taught in school by performing the same at home but using things available at home like, raw eggs, boiled eggs, salt water, RO water, oil, etc and then shared the observation in the group.*"

Her narrative showed that while relating a concept to their daily life, a child can think divergently (such as in this case use of different materials), which she associated with creative potentiality.

Other teachers too focussed upon divergent thinking abilities and considered it as an indicator for children's creative potential. For instance: "*A multiplication problem is given to students of Class 3. They use a different approach to solve the problem.*"

"*Children connect something abstract with a context. This can be done differently without a definitive right or wrong way.*"

"*While solving sums some children come out with different ways to arrive at the answers.*"

"*While teaching lines and line segments, just give two diagonal lines and ask the children to make a few things with the help of those two lines. Children come up with different ideas.*"

This showed that most teachers related divergent thinking to creative potentiality amongst children. This could be encouraged in children through various activities in different subjects as well as by giving them the opportunity to try the same thing in different ways.

One of the teachers also referred to a child with hearing impairment in her narrative. "*One of my hearing impaired students is extremely creative in making different designs. The creative designs she made are not ordinary and she made them with ease.*"

This indicates that the teacher expects creative potentiality in a child with impairment, which is an inclusive idea. Also, the teacher associated creative potentiality as an ability to think easily about an extraordinary idea (in this case in the form of design that she refers to).

Few teachers shared how children use their personal experience to think critically and identify issues in the society. For instance, one teacher said, "*While talking about letter writing, I asked the students to share their opinion about what important points we can add in a letter. They were aware that when we write a letter to the authority regarding any problem, we share the problem we are facing in detail. Children, without conforming to the 'guidebook', suggested that we incorporate issues that they face in real life regarding the same problem. For me, this was a creative manifestation of students."* Another teacher shared how children think critically of social issues and identify issues. *"Students actually raised the question about consumer awareness and asked that they should know about the ingredients used in the meal that is served in the dining hall."* The same teacher also gave another example and said,

"Students raised the question that if the government wants to promote education why aren't they providing facilities to the poor instead of installing LED TV in Bihar for election campaigns."

Most of the teachers shared examples wherein children used their imagination to create different ideas. "*While teaching about the advent of British Raj in India, I specifically remember the students coming up with scenarios of the reaction of Indians as well as British living in those times. They were curious about how the kings and queens of India would have reacted to their arrival, how their arrival would have affected the peasants, soldiers, etc. and how the British viewed India and Indians. We then created a few stories and role plays around this scenario. I consider this instance to be a form of creative manifestation because instead of chugging history, children used their own imagination to think of various scenarios. They not only imagined those instances but also made up some stories and dialogues related to it."*

"While teaching the lesson, Aladdin and the Magic Lamp, I asked the children to write about / draw any one magical thing that they would like to possess and the activities they would do using the magical thing. The children beautifully expressed themselves by way of pictures and write ups. Each child had own imagination about magic."

"For a recent lesson, I had asked children to come up with an animal that may have lived millions of years ago with the dinosaurs, was a carnivore and hunted them for food. The children shared some mythical creature drawings based on the body structure of the carnivores explained in the lesson. They gave ingenious names to the creature as well. The children were only explained about the structure of the teeth and digestive system of the carnivores. For them to imagine a creature that was powerful enough to kill large dinosaurs and draw it, also using nomenclature for it was an indication of their ability to think creatively."

"While making the maps of their homes, they visualised their homes in their minds and transformed them into a two-dimensional drawing. The task was common for all but the result or the maps were all unique and their own."

"In one class while enacting the story from their English textbook, a group of students framed the dialogues from the passive text. They also created some more dialogue, understanding the context of the story. Those dialogues were their creation and were original. They also improvised a lot by including more scenes in between because they felt that they will not be able to convey the story well without those scenes."

Some teachers shared examples wherein students used their logical thinking to manifest their creative potential. "*I had asked the students some riddles based on shapes. They had to identify the objects. Here, they*

used their listening skills. They could imagine the shape, apply logical and critical thinking and give the answer."

"While teaching Sudoku puzzles to focus on logical thinking, I encouraged children to come up with different creative ideas of creating Sudoku puzzles using shapes, fruits, etc along with numbers."

The teachers' narratives quoted above showed that the teachers acknowledged that the students have different kinds of creative potentialities that they may express in various ways. This is in consonance with the domain specific idea of creativity that creativity existed in different domains. The teachers' narrative also signified that they associated children's creative potentialities to the ability of assigning their own meaning or constructing their own idea about the given concept, which could be encouraged by engaging them in learning by doing. The teachers have stated instances where students have applied or improvised an idea to a real-life situation, which means they see this ability as a creative potentiality as it required divergent thinking. The other abilities associated with creative potentiality in children included the ability to easily think of an extraordinary idea, divergent thinking, thinking critically without simply conforming to the book and identifying issues from real life, imaginative and logical thinking.

Theme 3: Strategies adopted by teachers to nurture creative potentialities amongst students

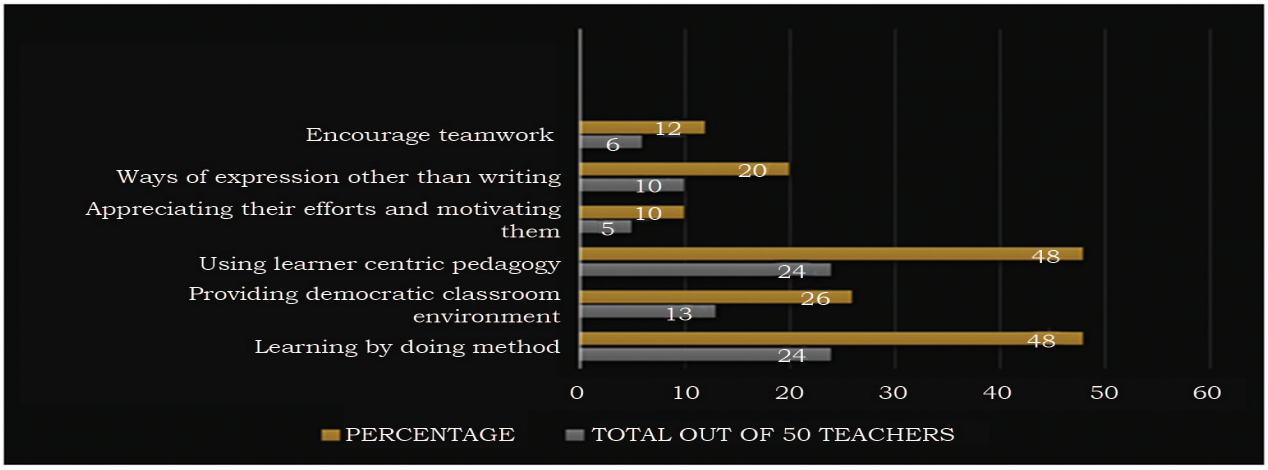
The teachers have shared diverse strategies in their narratives that they usually apply in their classroom to nurture creative potential amongst their students. These have been categorised into six sub-themes, which are explained further along with the phrases quoted from the narratives of the teachers. The graphical representation of these sub-themes is shown below.

BAR GRAPH 2: Representation of frequency of teachers' responses and percentages for each sub-theme

Learning by doing method: Teachers have shared various responses, which show that most teachers plan activities that involve 'doing', that is active involvement on the part of the learners for nurturing their creative potentialities. Various ideas shared by teachers in this respect include planning activities that involve observation, experimentation, hands on work, taking them out for exploration; giving inquiry-based instructions emphasising more on practical knowledge than bookish.

Providing democratic classroom environment: The teachers' narratives showed that they give a lot of emphasis on the nature of classroom environment, which they think should be democratic and should give space to the learners to think on their own. Different strategies shared by them in this respect include asking open-ended questions, assigning situations in which they can think differently, openness to new ideas, allowing the students to ask questions why and reasoning, giving them sufficient time to think and judge the questions and answers, and giving them the freedom to do their best.**Using learner-centred pedagogy**: The teachers' narratives show that they apply learner centric pedagogies for nurturing the creative potentialities in learners. They stated play way methods, experiences that gave them opportunity for visualisation, imagination, discussion, divergent thinking, creative thinking, problem solving, role play, etc., which is focussed on developing abilities in the learners.

Appreciating their efforts and motivating them: Some teachers have also stated that they appreciate and motivate their students for their efforts, creative initiatives or abilities and provide them motivation by giving them appropriate suggestions. They appreciated their creative capacities, suggesting improvements, and providing continuous motivation. Thus, the teachers see themselves as facilitators in this process by giving them independence but also guiding them at the same time.



Ways of expression other than writing: By involving them in activities such as drawing, painting, paper folding activities, poster making, etc., some teachers have indicated the role of alternate ways of expression for the children other than writing or speaking.

Encourage teamwork: Few teachers have also stated that they should be involved in team work such as group projects that provide the opportunity to work independently at the same time in coordination with others. This will help them to develop their interpersonal creative abilities.

A few responses by teachers:

"I try to include a scope of discussion in my pedagogy to provide opportunity to my students to nurture their creative potential, be it any mathematics problem, EVS related concept or language class. I think it is important to not provide readymade solutions at first. Initially, we should let children explore and then provide an opportunity to discuss their thinking, ideas or solutions over the same."

"Some common strategies which I employ to provide such opportunities to the children are to help them make stories or plays around the idea of significant historical events. I also encourage them to critically think about the present and identify the problems or gaps the society is facing and draw solutions from the past."

"Especially for primary children, igniting their curious minds is very easy. Demonstrating, making the topic interesting and by giving a personal touch by appreciating goes a long way. Recently when I was teaching patterns in nature, children tried several small activities, which were shown but also shared several other things they tried innovatively. Observing patterns in leaves, flowers, clothes made them look at patterns in a different way."

"I provide them free space and sufficient time to share their ideas and it was observed that students come up with interesting ideas. Activity-based teaching is done most of the time to concretise the abstract concepts, which helped to facilitate understanding, and hence increase the scope of participation and origin of new ideas."

"Giving the students space and scope for thinking and imagination, design a task that invites multiple perspectives and is open ended. Listen to students' ideas and respond positively. Provide space for group work, presentation and asking questions (not only to teachers but amongst themselves too), etc."

"With audio-visual aids, powerpoint presentations, subject enrichment activities, project work, etc. conduct various activities in class to teach a concept in a fun way. Our school conducts enhanced learning activities (dance, drama, tabla playing, skating, music, taekwondo) where students can further nurture their skills in a particular field."

The analysis of various themes showed that most of the teachers applied various strategies ranging from learning by doing to developing a democratic classroom

environment to focussing on learner centric pedagogy and providing them diverse ways for working as well as for expressing themselves for nurturing creative potentialities of learners. These were aligned to the various contemporary discourses on pedagogy that are based on various recent paradigms of learning and intelligence. This indicated that the teachers find a strong association between experiences that offer opportunities for independent and imaginative thinking, divergent thinking, questioning and critical thinking, autonomy in terms of pace at which learners work, conducive and accepting environment, etc. that are essential for the development of creative potentialities in children. They acknowledged that there may be chance factors in a learner's life that may create such opportunities for a child but in context of schools, these opportunities need to be created for the learners.

Findings and conclusion

The teachers' narratives reflect the ideas and initiatives that they apply in their classrooms. Thus, the study of their narratives to understand their perception of creativity and creative potentiality amongst children as well as various ways to nurture them led to the emergence of three themes. These themes as discussed above provided insights about teachers' perception about creative potentialities in their learners as well as the instances or anecdotes where they had witnessed its manifestation and the deliberate efforts in the form of various strategies that they used to nurture them. The responses and narratives in the three themes shared above substantiate each other to establish certain findings. It can be said that the teachers implicitly have the developmental perspectives of creativity and thus see it as a potentiality in every learner. The instances or anecdotes specified by them in their narratives show that they have a comprehensive idea of 'creative potentiality' as they associated it to diverse abilities in learners and not just a few abilities such as divergent thinking. Also, the teachers have quoted various processes that led to the nurturance of the potentialities, which shows their concern for the experiences that the learners should be given for nurturance rather than for merely assessing them. The responses in the last theme proved that the teachers employ a diverse range of strategies that they think would contribute towards nurturing the potentialities in their learners.

Thus, it can be concluded that the teachers' perceptions as gathered through their narratives are in sync with the ideas given in NEP 2020. The teachers see creativity as a potentiality amongst all learners that has been stated assertively in the policy too. The policy has recommended nurturance of high order thinking skills as part of the development of potentialities in children, which has been echoed in teachers' narratives. Further, the policy's focus involving children in experiential and holistic learning as well as on their social, emotional well-being is a concern for the teachers' too. The teachers' have expressed that continuous motivation and encouragement of the learners was essential for nurturing their potentialities. Hence, the vision and concerns in the policy regarding the potentialities and their nurturance amongst Indian children echoes in teachers' perception too. This is crucial as teachers' conviction is the foremost aspect for implementing or realising the vision of any policy.

Implications of the study

The teaching-learning process is closely linked to the way teachers perceive their learners with respect to their potentialities and also their perception and understanding about various constructs of creativity and its relation to the nature of the subject that they teach. Teachers should aim at cultivating students' curiosity and enhance their creative thinking abilities by providing an active learning environment through learning activities that involve implementation of their knowledge as well as creative processes. If students are engaged in

such activities in a meaningful way, it gives them the opportunity to work freely and to explore on their own without foreclosing the experience that will provide opportunities to nurture their creativity. Engaging students in these activities while learning will provide a start-up for evolving a creative process, hence these should be used as pedagogical strategies in classrooms to assist students in thinking creatively and generating original and novel ideas. Thus, students should be involved in creative experiences as early as possible so that they can question the validity of their previous knowledge and experiences about the phenomenon they observe in their surroundings and environment, find logical explanations and build conceptual change while they try to understand newer concepts. Students should be provided with freedom of expression and multiple opportunities to get engaged with these processes so that they can think creatively by generating new ideas, forming new connections or relations between various concepts. Though the potential for creativity amongst all students will be different, it can be developed by providing them equal opportunities and ample enabling experiences such as inquiry explorations, activities, experiments, project-based learning, exhibitions, etc.

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