

Creative Thinking in Pakistani Public Schools: A Qualitative Study of Teachers' Perspective and Practices

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Abstract

Due to globalization, developing countries' companies have a growing need for creative thinking. Consequently, education systems should adjust to societal requirements and improve learning outcomes by incorporating teaching approaches that encourage creative thinking. A study involving eighteen public elementary school teachers (ESTs) aimed to identify their viewpoints regarding enhancing creative thinking and the roles played by home and school environments in developing students' potential for creativity. The study uncovered seven themes, including the importance of creative thinking, the roles of teachers and the curriculum, teaching methods, challenges faced in implementation, the school environment, and the role of education department in promoting creative thinking. While acknowledging the importance of creative thinking, teachers lacked the essential skills to promote it efficiently. Additionally, creative thinking promotion in schools and the curriculum was inadequate. To address this issue, it is essential to train teachers, equip schools with appropriate resources, and enhance the curriculum to foster creative thinking in students.

Keywords

Creative Thinking, Perspective, Practices, Public Schools, Teaching

1. Introduction

The ability to think creatively is increasingly seen as a critical characteristic in our globalized world, where innovation and discovery are essential for societal growth (Primi & Wechsler, 2018). Developing countries are under pressure to innovate in areas such as software, design, engineering, education, marketing, and management, with innovation considered fundamental to addressing social problems such as environmental pollution, health, poverty, and unemployment (Doğan, 2016). Therefore, the education sector must adapt to societal needs and introduce changes to teaching, learning, and organizational practices that foster "skills for innovation" (Schleicher, 2012; Winner et al., 2013).

Most educational systems prioritize the accumulation of knowledge, with teachers following rigid curricula and delivering information while students are tested on their retention of that knowledge (Gurak, 2016). While knowledge and expertise are beneficial to creativity (Puccio et al., 2012), this approach leaves little room for exploratory and inquisitive thinking, and skills related to knowledge production may be suppressed. Moreover, students may not have opportunities to fail and learn from their failures (Hays, Kornell, & Bjork, 2013). Thus, creativity is deemed an essential life skill to prepare individuals for an uncertain future, and creative thinking should be considered a fundamental goal of the current education system (Gurak, 2016).

Education systems must be adaptable and flexible to face various challenges that may arise from social, personal, economic, and technological changes (Radovic-Markovic & Lecturer, 2012). Researchers emphasize the need for a high degree of creativity in learning within the education system (Radovic-Markovic & Lecturer, 2012). However, teachers may have their own ideas about what creative thinking means, which can affect their approach to teaching and assessment activities aimed at developing creative thinking (Odena, 2001). Understanding teachers' perspectives on creative thinking is essential to improving professional preparation and instruction (Diakidoy & Kanari, 1999). Teachers suggest that creativity training prepares children to meet challenges (Fischman et al., 2006), and current understandings of creative thinking are still evolving (Forrester & Hui, 2007: p. 30).

The exposure to diverse cultures and perspectives through globalization has inspired creative individuals to approach problem-solving in innovative ways. Furthermore, the use of new communication technologies and platforms has enabled global collaboration, leading to the creation of innovative products, services, and experiences. Social media platforms have also provided a global showcase for creative work. Ultimately, globalization has broadened the scope of creative thinking, resulting in innovative ideas and solutions that can contribute to the betterment of society (De Beule & Nauwelaerts, 2013).

Research Questions

1) What are the perceptions of teachers about creative thinking based on their teaching practices?

2) What factors promote or prohibit creative thinking skills of the students in public schools?

2. Literature Review

Guilford (1967) asserts that every individual is innately born with creative potential. The potency of this potential is susceptible to positive or negative influences from various environmental factors. According to Kampylis (2010), learning theories such as Duckworth (1964), Vygotsky (2004), and Dewey (1964) argue that the education system has a role to play in nurturing creativity. However, Plucker, Beghetto, and Dow (2004) suggest that classrooms may not be an optimal environment for fostering creativity. This is because educational systems often prioritize critical thinking, which encourages students to respond to existing knowledge but makes it difficult for them to generate new knowledge (Puccio & Cabra, 2012).

2.1. Creative Thinking

The ability to approach things from innovative and unconventional perspectives, use acquired knowledge in new situations, think in exceptional ways, and employ creative methods for unique creations and overcoming obstacles, is what creative thinking entails (Duffy, 1998). One of the central cognitive components of creativity is divergent thinking, which refers to an individual's ability to generate various novel and unconventional solutions to a problem (Guilford, 1959). Additionally, creative thinking involves problem understanding, evaluative skills, inventiveness, exploring ability, and intellectual flexibility for reshuffling (Guilford, 1950).

Kampylis and Berki (2014: p. 6) define creative thinking as the kind of thinking that allows students to utilize their imagination to generate ideas, hypotheses, and questions, experiment with alternatives, and evaluate their own and their peers' ideas, final products, and processes. Idea production is a significant aspect of creative thinking and consists of several components, including innovation, identification capacity, concern to complexities, initiative fluency, organizational fluency, phrasing fluency, remarking fluency, numbering fluency, and flexibility (Carroll, 1993). The ability to produce unique and useful ideas is assessed by requiring students to generate a sequence of responses quickly rather than relying on traditional beliefs (Anwar & Khizar, 2020; Barbot et al., 2011).

2.2. Education, Economy and Creative Thinking

The idea of the importance of creative thinking in education has been advocated for centuries, with early educators and philosophers like Plato and Aristotle recognizing its significance (Starko, 2005). In more recent times, John Dewey (1934) further emphasized the connection between creative thinking and education across various domains of knowledge, including teaching and learning (Dewey, 1916, 1934).

In China, the development of creative thinking has been identified as a priority in education since 2001 (Vong, 2008: p. 149). Hong Kong's education policy proposal also recognizes creativity as a higher-order thinking skill, and it is being given priority in educational reforms across preschool, primary, and secondary education (Baernstein & Fryer, 2003: p. 16, p. 19). While the concept of creativity is gaining more attention in Turkish education, attempts to enhance it through education are currently limited (Dunbar et al., 2006).

Creative education is linked to economic growth and development. The UK's creative industries contributed £101.5 billion (DCMS, 2018), the cultural and creative sectors in the EU contributed €509 billion (CCSEG, 2014), the arts and cultural industries in the US contributed \$804.2 billion (NEA, 2018), and the cultural and creative industries in Australia contributed \$111.7 billion (ABS, 2019) to their respective economies. These reports highlight the importance of creative education in developing the skills and knowledge needed for the cultural and creative sectors, which can ultimately contribute to economic growth and development.

2.3. Creative Thinking in Teaching Practices

Amabile (1983, 1996) asserted that various classroom factors, including teacher characteristics and behavior, can significantly influence the development of a person's creative thinking. Bateson et al. (2013) also noted the importance of everyday creative thinking in teaching, as it fosters innovation and new construction, which are essential for learning and growth throughout life.

In addition, Rahman & Manaf (2017) suggested a significant relationship between creative thinking and educational achievement. Cropley (2003) emphasized that creativity in the classroom can promote interesting learning approaches and facilitate personal growth, stating that conventional teaching practices such as transmission-models, punishment, reward, competition, and evaluation can stifle students' innate creative ability (Sinaga & Feranie, 2017). On the other hand, student-centered, self-directed learning and autonomy in the classroom seem to encourage innovative or novel thinking tendencies (Soh, 2017).

Furthermore, Lilly & Bramwell-Rejskind (2004) suggested that teachers can cultivate a positive learning climate, foster curiosity, and model flexibility. They also believed that fostering their own creative thinking is a precursor to fostering it in their students (Lilly & Bramwell-Rejskind, 2004: p. 3).

2.4. Teachers' Perspective of Creative Thinking

Rashid & Qaisar (2016) emphasize the role of teachers in the educational system is crucial, as their personal and professional development directly impacts student achievement. To meet the changing needs of society, teachers must be aware and trained accordingly, as they play an instrumental role in preparing students for their future (Rashid & Qaisar, 2016). Effective teaching requires an understanding of the intellectual processes involved, which are influenced by an individual's environment, including their formal education. However, research has shown that many teachers feel unprepared to teach certain subjects, such as English literature (Yunus & Suliman, 2014). Humor has been found to have a positive impact on creative thinking, increasing the quantity and quality of ideas generated in groups (Shade & Shade, 2016). However, the emphasis on class-room management and completing the curriculum often leads to a serious learning environment, with homework focused on consolidating lessons rather than developing thinking skills (Senel & Bağçeci, 2019).

3. Methods

The study conducted utilized a qualitative methodology to investigate the views and methods employed by elementary school teachers to foster creative thinking among their students. The objective was to gain insight into how teachers perceive creative thinking, how they incorporate it into their teaching practices, identify obstacles and facilitators that affect its development, and explore possibilities for improvement and evaluation from their standpoint.

3.1. Population

The purpose of this study is to examine the state of creative thinking skills in Pakistan's public schools and develop a research interview for teachers to assess the effect of creative thinking on elementary school students. The study population comprises teachers teaching at the elementary level in public schools located in the Punjab province.

3.2. Sample

The schools were chosen using purposive sampling, and interviews were conducted with teachers teaching in public schools located in Sargodha city for this research. The study involved a total of eighteen teachers, as presented in the demographic **Table 1** below.

3.3. Research Instrument

To guide the interview framework and ensure coverage of all relevant aspects related to creative inclinations, teaching practices, and factors that promote or inhibit creative thinking, a semi-structured interview protocol was created specifically for this study. The development of the protocol involved identifying key themes and issues through a review of relevant literature, resulting in the formation of 33 questions. After obtaining expert opinions, 23 questions were selected

Age Range	F	%	Qualifications	F	%	Designation	F	%	Work Experience	F	%
20 - 25	1	5%	B.A	6	33%	EST	13	72%	5 -10 Years	3	17%
25 - 30	1	5%	M.A	9	50%	SST	5	28%	10 - 15 Years	2	11%
30 - 35	-	-	M.Phil	3	17%				15 - 20 Years	1	6%
35 - 40	2	11%	B.Ed	18	100%				20 - 25 Years	6	33%
Over 40	14	79%	M.Ed	5	28%				More than 25 Years	6	33%

Table 1. The demographic table of the sample.

for use in the protocol to directly address the essential research questions of the study. Prior to conducting each interview, the researchers obtained consent from the participants, and some interviews were conducted in Urdu with the interviewees' convenience, and later translated into English, while others were conducted in English. Recordings were made of each interview for analysis purposes.

3.4. Data Analysis

The data obtained from the interviews was analyzed using the thematic analysis method, which involves identifying patterns or themes within qualitative data (Braun & Clarke, 2006). Thematic analysis is considered a foundational method for qualitative analysis due to the diverse, complex, and challenging nature of qualitative approaches (Holloway & Todres, 2003). The data was analyzed according to the main themes identified in the semi-structured interview protocol, and open coding was used to ensure that all relevant information was incorporated into the study and analyzed through thematic analysis. As a result, seven main themes were identified from the interview questions.

4. Results and Discussion

Theme 1: Teachers Perspective about Creative Thinking Interview Questions:

- What does the word "creative thinking" mean in your opinion?
- Do you believe creative thinking is important?
- What do creative children do? How can we spot a creative child?

The study's primary discoveries concerning this interview inquiry demonstrated that the teachers who participated defined creative thinking in a broad and contextual manner. While they incorporated universal definitions of creative thinking, they also provided context-specific definitions that were specific to teachers and their classrooms. This encompassed a focus on student-centered creative teaching, an acknowledgment that creative thinking is within everyone's reach, and a continuous cultivation of a creative thinking mindset within their classrooms. When asked to describe creative thinking in various ways, the respondents provided some of the following descriptions:

"Every person is creative or has this ability, some are able to express while some are not. We have to explore each individual and help them to discover this ability in themselves."

"It depends on the student that how they discover their ideas."

"It's hidden ability of student and we try to improve this ability by brainstorming".

On asking about the word "Creative Thinking", all the participants (100%) in the current study advocated the importance of creative thinking in teaching and learning process, but many of them (77%) have no idea how to promote creativity practically among the students. Just 22% of the teachers had know-how in recognizing a creative child. Traits of creative thinking are showed in Figure 1.

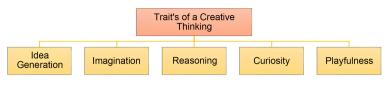


Figure 1. Traits of a creative thinking.

In general, creativity and creative thinking can be considered synonymous terms. To delve further into this concept, it can be argued that creative thinking is a cognitive process, while creativity is the outcome of that process. The idea of creative thinking has been around for a long time, dating back to antiquity and the early Greeks (Starko, 2017). Another respondent also shared their perspective on creative thinking:

"Creative thinking is essential in learning process, without it, it's like a tree without leaves. Teaching without creativity is just like we want to grow crops on a barren land."

"In this way of teaching student should be enabling to do their work by themselves instead of memorizing things".

During the interview the researcher had also asked about identifying a creative child, how teachers spot a creative child in a classroom? Every teacher has her own opinion about this question; some of the answers are given below:

"We can spot a creative child, who tries to make many things with the provided resources. Especially in language, if they are provided with the few words, they can make a new sentence which reflects their ideas properly."

"When they try to write something other than the syllabus. When they try to observe and write on their own, when they try to make new sentences on the provided topic by themselves, but unfortunately every student doesn't have this ability."

Most of the teachers (77%) agree on a point that the creative children are those who can write something by themselves, if any topic is provided to them. They have the ability to create or generate different ideas and have the capacity to imagine things and reasoning thinking in a good way. Some teachers (33%) believe that the creative child has a very active and sharp mind, which help them to think rationally and logically. Moreover, the creative children are the happier ones because they found pleasure in thinking creatively. Another statement says:

"Who use her own mind, who is able to write something on her own. It's not necessary that every hardworking student has the creative mind, sometimes lazy and dull children are more creative than the hardworking ones."

Theme 2: Role of Teachers in Developing Sense of Creative Thinking among the Students

Interview Questions:

- Do you focus on creative thinking during teaching? If yes, then how often?
- Did you ever try to train your students of any creative thinking skill? How?
- Do you follow any lesson plan for teaching creative thinking?

According to Shahar et al. (2006), teachers have a crucial role in the learning

process. They are not only responsible for imparting knowledge but also for assisting students in understanding concepts. In addition, teachers are expected to engage students in learning activities and encourage them to explore concepts independently. When asked about the teacher's role in promoting creative thinking among students, one respondent provided the following response:

"I try to motivate the student to write something on their own. Sometimes students allowed to express their ideas about a certain topic, but mostly we focus on syllabus due to shortage of time. In Pakistan, objective type pattern (MCQs) is killing creativity of students, because it focuses more on memorizing and cramming rather than creativity."

Another respondent said:

"I tell my students to come and speak on a selected topic. I used to give them 5 minutes to think and then they are allowed to speak on that topic. Sometimes, I write a topic on a white board and ask them to raise their hands if they have any ideas about it. I always motivate them by saying mistakes doesn't matter, and I always appreciate them whatever they say about the topic. For creative thinking you have to make the children to talk about their opinions of a certain topic, their pros and cons and most important how can we apply it in our daily life."

When the teachers were asked about any lesson plan they made in order to develop the creative thinking among the students. Nearly, 66% the respondent didn't know any type of lesson plan which help the students to develop creative thinking. Some of the respondent (27%) just simply said no to this question, one of the respondents told a detailed answer which is as follow:

"Not really, we don't use any special lesson plan for creative thinking. It is difficult for the teachers due to the shortage of time, we just try to cover syllabus. We divide lessons on a monthly basis, like these topics we have to cover by the end of the month, so we make our lesson plans according to the given time allowed to us."

Incorporating creativity into the daily school routine can lead to greater long-term success in various areas for students, according to research. By going beyond traditional learning methods such as textbooks and worksheets and utilizing various learning materials, students can become more proficient in self-expression and generating original ideas. Developing creative thinking skills, in conjunction with critical thinking and focus, is crucial for recognizing patterns that may not be immediately apparent. Creative thinking also improves problem-solving abilities, which can have widespread benefits in both personal and professional settings. Engaging in expressive and creative thinking can challenge personal assumptions, stimulate new discoveries, enhance mental agility, and increase optimism.

There are multiple approaches to encouraging creative thinking among students. While practicing different thinking strategies and team brainstorming (such as mind mapping and activities) are effective in developing these skills, teachers need to motivate students by offering attention, encouragement, and confidence. Another method is to design strategies around topics that capture students' attention and generate possible answers before researching the actual answer. Breaking from routine and trying new approaches is key to fostering creative thinking in daily life. Teachers must act as dedicated coaches to inspire students to develop creative thinking skills. **Figure 2** depicts the important role of a teacher to promote the creative thinking among the students.

Theme 3: Role of Curriculum in Promoting Creative Thinking Interview Questions:

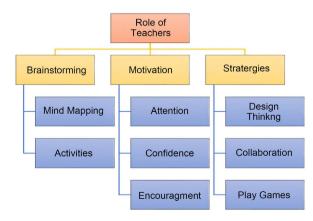
- Do you think that the curriculum improves a student's creative thinking?
- Do you follow the given pattern in the book?
- Do you face any difficulty while teaching according the pattern?
- Do you follow the exercises completely given at the end of every chapter? Do these exercises include creative thinking tasks?
- Do you think English textbook helps to develop student's creative thinking? If yes, then please outline the textbook's chapters which develop children's creative thinking.

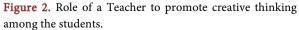
On asking about the role of curriculum in promoting creative thinking among the students, teachers showed a mixed response, some (55%) were in the favor of the curriculum, and some (45%) were not. In the favor one respondent told,

"The curriculum is good in fact it is very good, it has no flaws. It depends on the teachers and the students how they used this in developing creative thinking."

"Yes, now we have such questions in our exercises which help to develop creative thinking. These questions could give more exposure to the student ideas and they are compelling to think more creative than before."

On the other hand, approximately 88% respondents were against the curriculum structure, they described that the curriculum focuses more on the cramming rather than creative thinking. Some have (44%) the opinions about the syllabus should be short enough to give time and space to the students to think in a creative way. Real life is very different, students could not be able to relate the curriculum with their daily lives, and hence the curriculum lost its credibility to promote the creative thinking among the students.





"In Pakistan, the merit is so high that the children focus more on gaining marks rather than be creative throughout their study. There is a race for marks gaining in their minds, that's why they started memorizing thing in order to take more and more marks in the exam. Creative thinking has nothing to do in the curriculum, but with the cramming children are scoring full marks."

"No, not at all, even if the child has some kind of creativity in his mind, this curriculum is destroying that creativity. It is completely based on the Ratta System (Cramming), and just like that we are training the parrots."

One approach to fostering students' understanding of creativity is through reading biographies and autobiographies of individuals who have demonstrated creative breakthroughs in various fields. By examining their development, the discovery of their own talent, and the process they used to make a contribution, students gain deeper insights into what it means to be creative in a specific domain. According to Rifner and Feldhusen (1997), students often underestimate the amount of failure and effort that goes into creative success. Understanding how creative production occurs provides students with not only cognitive but also affective awareness. Extracurricular activities are an excellent area for students to use their creative talents. Competitions in areas of strength and opportunities to perform in debate, drama, and chess all activate not just academic skills, but creative ones as well. **Figure 3** below illustrates the crucial design of a curriculum that promotes creative thinking. Below **Figure 3** shows the important design of a curriculum to promote creative thinking.

Theme 4: Teaching Methodologies in Assisting Creative Thinking Interview Questions:

- What method do you use to develop student's creative thinking? How?
- Which teaching methods do you think may help to improve a student's creative thinking?
- Do you think that the teacher's methods may enhance a student's creative thinking? If yes, to what extent?

The satisfaction and success of the teacher-student relationship can be attributed to the dual perspective of meeting both the affective and cognitive needs of students, which is achieved through the provision of a strong emotional support base and the demonstration of high-level functioning in a field by teachers (Bennetts, 2001; Davalos & Haensly, 1997). As Davalos and Haensly (1997) point out, teachers play a crucial role in not only providing emotional support to students but also serving as role models of professional excellence.

On asking about the teaching methods they used in order to develop creative thinking among the students, almost 94% respondents have no idea about the teaching methodologies in order to promote creative thinking. Most of the respondents (88%) said that they don't have enough time to perform any activity because of the shortage of time. The load of the syllabus and pressure to complete this syllabus is itself a tough task for the teachers, and they don't have time to perform any creative activity.

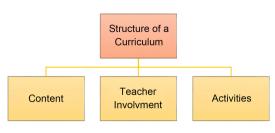


Figure 3. Structure of a curriculum to promote creative thinking.

"Mostly we stick to the syllabus, but if there is some activity in an exercise to perform it by student or brainstorming session, only then we engage students otherwise we are bound to teach students according to the lesson plan."

"I don't use any specific teaching method to promote creative thinking. Mostly I used the direct method by giving them a topic and asked them to write something about this topic."

"It is very difficult for us to manage the time, because we have to deliver the lecture, check homework, and sometimes taking a test, that's why we have no extra time to perform any method."

The results of the survey indicate that around 83% of teachers lack knowledge about a specific teaching approach to encourage creative thinking among students. According to the respondents, they are unable to dedicate time to activities that promote creative thinking, and are unaware that creative thinking can be cultivated by training various skills during lectures. The researcher found it alarming and disappointing that not a single teacher was able to name a training program aimed at improving or teaching creative thinking skills. As a result, there is a pressing need for more teacher training programs to equip teachers with the necessary methods to develop creative thinking skills during their lectures. Some of the teaching methodologies to assist creative thinking among the students are shown in **Figure 4**.

Further views:

"Education is not merely depending on the curriculum or syllabus, but teachers are the true pillars upon which the roof of education could withstand. Teaching method is most important in any education system. In order to convey our understanding, we should go to the level of the children. Education is the fundamental right of every individual, and it is the responsibility of every teacher to teach each individual with full attention and sincerely, and trust me it requires a lot of skills."

"It depends upon the teachers how they take their class. Because when children come to middle classes, they had already completed the primary level, so we can easily recognize their ability to understand the topic. I emphasize on reading and pronunciation, because they are very good in memorizing the translation, but they don't know how to pronounce the new English words."

Theme 5: Obstacles in Implementing the Creative Thinking Interview Questions:

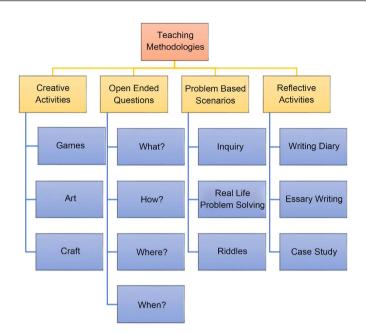


Figure 4. Teaching methodologies to assist creative thinking among the students.

- What obstacles do you face in developing student's creative thinking?
- Do you have enough time and space to implement creative thinking experiences?
- Do you have enough resources to implement creative thinking tasks?

The major obstacles the teacher face is resources, time, space, incompetency, and no attention on teacher's training program about creative thinking. Almost all the respondents (100%) agreed on a point that due to the shortage of time it is nearly impossible for them to conduct any activity which could promote creative thinking among the students.

"No, we have not enough time to perform any activity, we have to cover the syllabus, revision of syllabus, assessment, examination, and evaluation in the given time. Therefore, we have no spare time to conduct any activity to enhance creative thinking among the students."

"There are not enough resources to teach children according to the modern demand. Classrooms are not well equipped with modern teaching techniques. There is no such training session which help teacher to train according to the modern education system. Moreover, the burden of syllabus to complete within a time frame is so heavy that no one would ever think to teach out of the box."

On asking about the instructional aids or resources for develop creative thinking among the students, almost all the respondents (94%) agreed that they have no idea about any instructional aid or resources for this purpose. One of the respondent replied:

"In this section the school is absolutely without the resources. However, some schools are able to manage some helping aids like; audio visual aids, charts and cards, and others group activities."

To overcome this barrier, it is important to examine whichever problems

faced with from many angles. There are some internal and external hurdles which involved in the creative thinking as shown in **Figure 5**. The students' intelligence, personality and psychoticism play an important role in promoting creative thinking. Moreover, teachers are unexperienced, uneducated and unaware of the modern teaching methodologies. External Factors include environment (school, home, classroom), syllabus and resources. Many creative thinking methods work best when they're done in a group and discussion without any materialistic aid. Developing new ideas together can strengthen bonds and help to combine ideas to create something truly innovative. Creative thinking allows trying on perspectives that may not have considered before. For example, they might think an empty cardboard box is ready for the recycling bin, but to a child that box can become a doll house, a submarine, a spaceship, or any number of fascinating places. It is essential that children are able and assisted to choose from a variety of materials to learn what media work best to express their ideas.

Theme 6: Role of Environment in Assisting Creative Thinking Interview Questions:

- Do you agree that the school environment plays an important role in enhancing the student's creative thinking?
- Do you think classroom overcrowding affects a student's chances of improving their creative thinking?
- Do you agree that the home environment plays an important role in encouraging the student to be creative?

Schools have several options to promote creativity in their students, including fostering a culture of discipline, freedom, and collaboration among students. Research on talent development indicates that schools should adopt a more facilitative approach to learning rather than a directive one, as suggested by Schinke et al. (1995). Additionally, academic counseling is a vital technique that schools should employ to assist students in identifying their interests and strengths. Teachers' perspectives on this matter are also significant.

"School's environment plays a vital role in developing the creative thinking. School should have a creative room, where children can relate with the real life and try to think out of the box by combining the syllabus with the real life examples. Unfortunately, in most of the government schools there are no such activity rooms which could give real life experiences to the students."

"It is necessary to have an ambient environment to teach the student properly. Every school should have the proper facilities in order to make students engage and active. School environment must be very supporting and nurturing."

It is crucial for classroom assignments and projects to offer various methods for students to demonstrate their proficiency, allowing them flexibility in completing their work. Strom and Strom (2002) suggest that such activities should be as open-ended as possible, granting students greater freedom and collaboration in developing their own unique responses to given stimuli. To promote creative thinking in the classroom, it is beneficial to directly teach relevant skills that students can apply to their specific interests, with transferable value to other

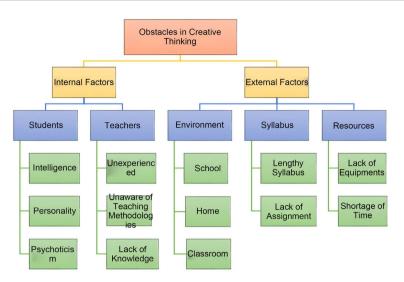


Figure 5. Obstacles in promoting the creative thinking among the students.

areas as well. Additionally, teachers should foster an environment that encourages and supports students in building self-confidence, ultimately helping them to think more confidently in class

"In Pakistan, overcrowding of classrooms is the major problem in implementing any kind of activity. We cannot focus properly, if there are many children. Due to the shortage of time and overcrowding class it is nearly impossible for us to focus on each student individually."

"Yes, many students are ignored due to overcrowding of classrooms. Every teacher tries to pay attention to all the students, but it is impossible to do it in a crowded class. I normally got headache due to the children's noise and distortion during the lectures."

Although not a new concept, parental involvement in schools and communities remains essential to improving the quality of education that their children receive. According to Stelmack (2005), such involvement can positively impact student learning across all grade levels. However, the impact of social support, including any potentially useful information, can have either positive or negative effects. Grolnick and Slowiaczek (1994) proposed a combined approach to parental involvement in children's education, integrating both constructive development and education, with a common definition and specific dimensions. Parental involvement involves the allocation of resources by parents to support their children's education. Respondents gazed at:

"Home is the first school and parents are the first teachers. Home is the setting for an individual's physical, mental, emotional and spiritual growth. The family, particularly parents, plays an important role in the development of moral values in children."

On asking about the home environment nearly all the respondents (100%) confirmed that the parents are equally responsible in developing creative thinking among their children, they possibly have a greater interest in encouraging thinking abilities than may be expected from parents with a lesser exposure to

education. The atmosphere of a home should be peaceful and helping in order to develop a sense of creativity in a child. The peaceful environment helps a child to think creatively.

"Yes absolutely, home environment is very essential in order to teach the child. It children come from a good home environment, their minds are fresh and they are more active and learn fast, and if their home environment is disturbed, they come with the disturbed mind and become retarded."

If parents take an active role in promoting creative development in their children, the combined efforts of school and home can begin to demonstrate a true accumulation of positive acts that can simply facilitate the future development of students toward greater creative productivity. **Figure 6** shows the role of environment in a child's creativity.

Theme 7: Role of Education Department in Promoting Creative Thinking Interview Questions:

- Does your education department encourage you to develop student's creative thinking?
- Do you feel that teachers are well trained to develop students' creative thinking skills in the subject of English?
- Do you know or ever heard about any training program which helps to develop student's creative thinking?

The ideas about teaching creativity based on research should have been a priority for the Education department to consider. When programs of study deviate from traditional models, parents and teachers often express concerns. Convincing stakeholders of the effectiveness of such ideas in a standards-based learning environment, which prioritizes short-term achievement over long-term learning, may be necessary (Ulger, 2019).

On asking about the role of education department in promoting the creative thinking, nearly all the respondents (94%) agreed that they don't have received any opportunity to attend any training program about creative thinking. Teachers are being proved with the instructions book name as "Instructions for the Teachers" or "Teacher Guide", this is all they have to teach the students according to this instructive material.

"No, we have never listened about such training programs. All we know is to complete our syllabus within a required time frame. Sometimes the education department emphasis stress on the attendance of the students, but they never look upon the overcrowded classroom problems, and the hurdles teachers face in an overcrowded classroom."

"Sometimes, the education officers send some screenshots from the British Art Council, in order to train us about a specific program. The workshop held about 3 days, but they don't have any proper training program."

"No, I have never heard of any training program on creative thinking, but I really want to have such knowledge and attend such workshops. Because learning is a continuous process, we can learn at any age. If there will be any program about teacher's training, I would love to attend that."

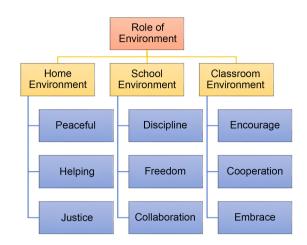


Figure 6. Role of environment in the growth of a creative child.

There is an immediate need to promote educational measures and processes that involve teachers in the development of their students' creative thinking, based on teaching methods that allow them to generate knowledge and respond to social, scientific and technological problems (Celik, 2021). In this regard, there is a need to introduce teacher training programs to develop skills, attitudes, willingness to act as role models, awareness of students' needs, flexible lesson structuring and certain types of classroom interaction. Some teachers (27%) stated:

"Everything is changing with the passage of time. Teachers also need to change their teaching methodologies, because most of the teachers are very seniors, they have been teaching for about 30 years. At that time the curriculum was different and different teaching methods were adopted. Now, the curriculum is quite different, education is more based on brainstorming of a child rather than simple memorization of things. Therefore, teacher's training is essential to equip the teachers with the modern techniques."

"Teachers should be trained time to time; there must be a proper training session for the teachers. Practice makes a man perfect. Despite the fact that our experience matters a lot, there is a need of proper training session in order to equip us with the modern education system."

The data revealed that teachers are inefficient in encouraging students to use creative thinking skills in the classroom. The findings indicated that teachers require training to improve skills that are constructive to combat with modern era requirements. Therefore, there is a need of introducing teacher training program and workshops to support creative thinking among the students. The education department should also focus on the curriculum development and manage more funds in order to have all the resources which is required for the activities and creative projects of a particular schools. The following **Figure 7** shows the role of an education department has to be played in order to promote creative thinking.

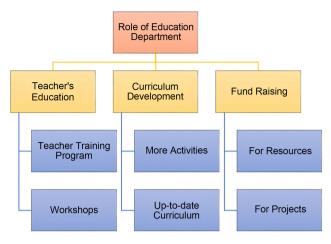


Figure 7. Role of education department in promoting the creative thinking.

5. Conclusion

In today's globalized world, creative thinking is highly valued as an essential personal trait, and the progress of society is increasingly dependent on creativity and innovation. As a result, creativity is not only seen as means of expressing human potential but also as a fundamental driver of societal growth. Given that education is a social institution that serves the needs of society, it is crucial for both survival and prosperity. The purpose of this study is to investigate how teachers perceive creative thinking and its application in the classroom. The data analysis revealed seven key themes. The study's main findings suggest that although all participants recognize the significance of creative thinking, they lack the necessary skills and teaching methodologies to foster creativity among students. To promote creative thinking, schools must prioritize activities that foster it. Some participants suggested shortening the syllabus to provide students with more time and space to think creatively. Additionally, the study found that teachers need training to encourage and support students in developing in their creative thinking skills. Consequently, there is a need to introduce teacher training programs to improve their abilities to meet the demands of the modern era.

In conclusion, it is recommended to implement measures to educate and teachers, parents, and students about the importance and potential methods for enhancing creative thinking skills. As well as responsible departments ought to provide more opportunities for teacher training on how to effectively implement creative thinking techniques in the classroom. This can be done through professional development workshops, conferences, and online courses. However, for creativity to become a permanent aspect of the education system, more comprehensive changes are required in policies, curriculum, textbooks, teaching methods, and assessments. This requires a coordinated effort to foster creative thinking among school children (Feldman & Benjamin, 2006: p. 332). These changes will take time, detailed planning, and consistent follow-up strategies to ensure their effectiveness.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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