

A Method for Primary School Teachers to Educate Critical Thinking

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Abstract - One of the primary goals of the curriculum is to help students gain the necessary skills and information. The ability to think critically is viewed as a necessary talent for the 21st century and should be taught in schools. However, the key difficulty is how to teach thinking or critical thinking and how to get pupils to reflect on their own thinking methods. An significant aspect in terms of education systems and curricula is that critical thinking cannot be learned from a textbook, but rather sparked in the mind. Teaching critical thinking is not just about teaching kids how to think, but also educating their brains to be flexible and active enough to think about, research, and analyse new and old information or facts that they are exposed to. In this paper discuss the Primary school teacher to educate critical thinking.

Keywords - Primary School, Teacher, Student, Critical thinking, thinking

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1. INTRODUCTION

In the annals of history, education had many facets, nuances and understandings but it had the same aim, i.e. to make the recipient learned. The modes of operation of imparting knowledge have been different but the beneficiaries profited from what was done. In other words, the gurus, known as the teachers initiate the students to acquire wisdom which would free them from the darkness of ignorance.

If merely a student's potential can be turned into a widely recognized behavior, a teacher has shown their worth. Hence, it is critical to understand the psychology of the learner. Teacher's capacity to inspire and encourage pupils is one of the most important qualities. As a result, the most important aspect in education is the teacher. A student's ability to succeed in school is directly tied to his or her own initiative. So in addition to being an expert in their field of study, teachers should be able to read the thoughts of their pupils and appreciate their uniqueness.

Emotional Intelligence (EI) is one of the tools of the teachers for understanding the tempo of learning styles of the students. It enables the teachers to meet the learning needs and environment of the students in different cultures effectively. These aspects have to be harvested by his or her own experiences to share what he or she has been learning in theory. The teachers have to impart thoughtful and inspiring values to their students in their studies.

Creativity is a corporate culture. It has the capacity to lead the institution or management to self sufficiency. It also indicates going beyond the limit in a usual way. Thinking and doing the ordinary in an extraordinary way could be another aspect of 2 creativity. It conceives new rational structures, new interfaces, new modes of creating and delivering values. It could also mean re-engineering and redesigning the existing process. Creativity also refers to mental orientation and capacity of persons to evolve and develop new and superior solutions to complex, ambiguous or nuclear problems. Moreover, creativity is a challenge to established organizations/institutions while it is a difficult task to 'start-up' in the initial stage.

Teacher effectiveness is the effectiveness of the teachers in their planning and preparation of lessons for teaching, classroom management, knowledge of subject, interpersonal relationship, attitude towards the children, usage of teaching aids and time management during their teaching – learning process.[1]

2. EDUCATION IN INDIA

India's educational institutions date back to the ancient cities of Taxila and Nalanda. With the creation of the British Raj, Western education was embedded in Indian society. In India, education is a shared responsibility between the central government and the states, with some obligations falling to the national level and others being left to state discretion. The right to an education is

enshrined in several sections of the Indian constitution. Almost all of India's colleges and universities are under the supervision of either the central or state government.[2]

3. STRUCTURE OF EDUCATION IN INDIA

In India, education is viewed as one of the paths to social mobility. A good education is considered as a springboard to a successful career. India's educational system is now beset by contradictions. The ten Plus two + three (10+2+3) pattern is the most common educational system in India. For the first ten years, all pupils get an undifferentiated general education. The + 2 level, commonly known as higher secondary or senior secondary, represents the completion of school education and allows for distinction into academic and vocational streams. The student pursues advanced studies in his chosen field of topic throughout the + 3 levels, which include college education.

The 10+2 system is an unified school education framework that has been implemented by all Indian states and union territories. However, there are differences in the number of classes that make up the primary, upper primary, high, and higher secondary school stages, the age for admission to class I, the medium of instruction, public examinations, Hindi and English teaching, the number of working days in a year, three academic sessions, vacation periods, fee structure, and compulsory education between states and the UTS. [3]

(i) The Primary Stage : In 20 states, the primary stage consists of classes I-IV, whereas in Assam, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Meghalaya, Mizoram, Nagaland, Dadra and Nagar Haveli, Daman and Diu, Lakshadweep, and the Mahe part of Pondicherry, the basic stage consists of classes I-IV.

(ii) The Middle Stage: Classes VI-VIII are included in the Middle Stage of education in 18 states, as well as Classes VI-VII in Andhra Pradesh, Orissa, and the Yaman area of Pondicherry. Classes V-VIII are the upper primary stage in Nagaland.

(iii) The Secondary Stage: Classes IX-X in 19 States/UTs make up the Secondary Stage. In 13 states/UTs, the high school stage includes grades VIII through X. However, all States/UTs provide the Higher Secondary / Senior Secondary level of education, which includes classes XI-XII (10+2 pattern), albeit certain States/UTs have these courses affiliated to Universities/Colleges.

3.1 Primary Education

"The advancement of elementary education is one measure of the broader social and economic growth

of the society as a whole," said Naik (1966), a prominent educator in our country. At this period, a well-planned and implemented educational system is critical in providing the correct basis for a child's cultural, emotional, ethical, intellectual, moral, physical, social, and spiritual growth. It also makes a significant contribution to the development of emotional and national integration ideals. So, it is extremely important to make a sufficient investment at this level of education.

3.2 Organization of Primary Education

The phrases "elementary," "basic," and "primary" are frequently used in the same context. The National Policy of Education (NPE) has used primary education for grades one through eight. In its paper National Curriculum for Elementary and Secondary Education: A Framework (1988), the NCERT states that elementary education (8 years) is divided into two stages: primary (5 years) and upper (5 years) (3 years). The Department of Education of the Ministry of Human Resource Development (HRD) employs elementary education, which comprises primary classes (classes I through V) and middle courses (classes VI to VIII). In general, basic education refers to a mixture of two educational stages: primary I through V (ages 6 to 11) and upper primary schools (ages VI to VIII) (age group 11 to 14). Primary education is prioritized by the Indian government till the age of fourteen. The Indian government has also prohibited child labor to protect youngsters from dangerous working circumstances. However, due to economic disparities and social conditions, both free education and the prohibition of child labor are difficult to implement. The District Primary Education Programme (DPEP) was established in 1994 with the goal of universalizing primary education in India through revamping and revitalizing the current system. 85% of the DPEP is funded by the central government and the remaining 15 percent is funded by the state. A total of 160000 new schools, including 84000 alternative education schools, have been created as a result of the DPEP, which has received funding from UNICEF and other international organizations. In certain areas, the Gross Enrollment Ratio for this primary education program has been as high as 93–95 percent during the previous three years.

As part of this plan, there has been a significant increase in personnel and the number of girls enrolled. Due to understaffing, lack of infrastructure, and insufficient funding, elementary school conditions in India as a whole remained subpar. Education for youngsters up to the age of 14 or the completion of class IX has also been made free of charge.

4. TEACHER EDUCATION IN INDIA: A HISTORICAL BACKGROUND

A historical view of teacher educational system in India will provide us with the right perspective to understand the future which was founded upon the past. There is no second thought that the Indian educational system has had a long history starting from the Vedic period.

The education system in Vedic period (before 1400 BC) had an idealistic form. Religiousness, spirituality, and character development, as well as the growth of a nation's culture and society as a whole, were all highly valued by the Gurus (teachers). These were the slogans of time then.[4]

During the Brahminic period (1400–600 BC), the students remained with the guru for twelve years. Another significant aspect in this system was that the student was taken in as their own children and the teacher as his father. Thus, there was a father son relationship between the teacher and the student.

During the Buddhist period (600 BC–700 AD), their relationship to each other was mutual respect, faith and love. Equality was the foundation of their relationship where students and teachers fulfilled their respective obligations and duties.

During the British Period (1835–1947) Macaulay developed and modernized the old educational system in India. The educational system brought in the minds of the Indian minds the prevalent social and political system. The teachers motivated the students to be creative in every sphere especially in political leadership.

During those days there were no systematic training centres in India. The systematic educational system was a felt need during British period. In the postindependence period school education expanded rapidly. A large number of new teachers' education institutions were started by both the state and by private management. According to the National Council of Teacher Education's (NCTE) 6th All India Educational Survey, there were around 900,000 schools and 4.6 million instructors in India in 1993. Approximately 2000 teacher education institutes are now preparing teachers for various school levels.

5. OBJECTIVES OF TEACHER EDUCATION FOR THE PRIMARY STAGE

- (i) In order to be competent in the first and second language, mathematics and environmental studies-related areas, as well as in the fields of scientific and social sciences.
- (ii) To develop skills in identifying, selecting and organizing learning experiences for

teaching and above subjects in formal and non-formal situations.

- (iii) To possess sufficient theoretical and practical knowledge of health, physical and recreational activities, work experience, art and music and skills for conducting these activities.
- (iv) To develop understandings of psychological principles underlying growth and development of the children of the age group 6+ to 14+.
- (v) To acquire theoretical and practical knowledge about children education, including integrated teaching.
- (vi) To develop understanding of major learning principles which help in promoting cognitive, psychomotor and attitudinal learning.

6. THINKING

The word thinking is used carelessly to mean almost any mental operation. Everyone is sure he knows what thinking is? This type of thinking about thinking is useless. We often refer thinking today - dreaming, reveries, a flight of fancy or building castles in Spain, or 'shooting the moon' etc. and other mental streams which may be more chaotic. Thinking as defined is not memory or imagination, or opinions or believing or intuition, or insight. The thinking uses all of these.[5]

7. CRITICAL THINKING

The term 'critical' as it is used here does not mean thinking, which is negative or finds faults or censors; but rather thinking which evaluates reason. Here the term critical thinking is intended to highlight the intellectual autonomy. The critical thinking model embarks upon the task of fostering thinking skills in the students like making interpretations, analysis, synthesis, evaluation, making plausible inferences, exploring assumptions etc.

Critical thinking is described as good, unemotional judgement that results from an analysis of the material or a situation closely allied to the scientific attitude, critical thinking can be developed as the result of the problem solving approach to learning. It is also involved in a more personal analysis of a situation, or written or an oral presentation.

Critical thinking as defined by Beyer (1987), is "Determining the authenticity, accuracy and worth of information knowledge claims." Robert Ennis (1985) states that, "Critical thinking is reasonable reflective thinking that is focused on deciding what to believe or do." This concept provides for a wide range of applications, including decision-making,

problem-solving, metacognition, value judgment, and Bloom's taxonomy's higher knowledge level.[6]

8. CHARACTERISTICS OF CRITICAL THINKING

A person may be said to think critically to the degree that he exhibits the following skills and attributes:[7]

1. **Recognizes and defines problems** - He is sensitive to issue circumstances; he understands and expresses the nature of any challenge that prevents him from achieving a desired objective; he simplifies complicated difficulties down into manageable components.
2. **Formulates adequate hypothesis** - He approaches problems in a flexible manner; he is skilful in establishing an appropriate solution model.
3. **Makes pertinent selection** - He is aware of the need for facts. He is able to keep a problem clearly in mind. He consistently discriminates between relevant and irrelevant assumptions. He distinguishes between reliable and unreliable information and exhibits good judgement.
4. **Draws valid conclusions** - He is rational and applies both deductive and inductive reasoning to reach the conclusion.
5. **Applies conclusions** - He grasps the general principles, which relate to a problem. He is apt in applying these generalizations whenever they are appropriate and he is capable of decisions, of actions consistent with his conclusions.

9. CRITICAL THINKING IN EDUCATION

The first reference of critical thinking is found in Plato's recording of Socrates' instruction. When a person studies, assesses, and interprets information before making a decision, they are using critical thinking. Self-evaluators, problem solvers, clear analyzers, receptive to others' views, careful (thinking before acting), open-minded, good listeners, and keen to take on challenges are all characteristics of critical thinkers. A critical thinker is someone who is always thinking and interacting with the world.[8]

Students' critical thinking skills may be enhanced by assisting them in constructing their thoughts after evaluating, interpreting, and reviewing data. However, in previous educational institutions, this method was a flaw. Previously, instructors and mentors believed that children might thrive in life by learning facts from books and lessons. However, in today's educational system, this technique has undergone a significant change. With technological

improvements, information flows considerably faster nowadays, changing the way students study and experience the globe. Misrepresentation, incorrect information, and erroneous data, on the other hand, travel at the same rate. Critical thinking is crucial in this situation. The major goal of education is to critically analyze all information before solving issues and making decisions, which is accomplished successfully through critical thinking skills taught in the classroom.

Educators, parents, and others frequently ask if critical thinking can be taught. Critical thinking may be taught in the classroom or in education, and it encourages pupils to think in several dimensions. Furthermore, teaching critical thinking in the classroom may boost student engagement, encourage them to view obstacles as challenges, motivate them to participate actively in classroom activities, and assist them in analyzing the acts and events that occur around them.

Critical thinking may be incorporated into every part of classroom instruction, even in elementary schools, starting as early as kindergarten. Teaching strategies are currently being developed to help students become more articulate thinkers and problem solvers. It's worth noting that critical thinking abilities are beneficial in many academic areas, including literacy, arithmetic, and art.

Some popular ways of teaching critical thinking skills in education are:

- Asking students to apply their knowledge by asking open-ended questions or any other form of inquiry may also develop into a terrific knowledge transfer session.
- Encouraging pupils to make decisions is another strategy to improve their critical thinking abilities. This allows pupils to adopt several techniques in various scenarios after considering the benefits and drawbacks of each option.
- Group activities and discussions help students to streamline thought processes and also consider every point of view before narrowing down on a perspective or decision.
- Linking different ideas assists students to analyze different situations, which are separate from normal activities and may disrupt their routine. This strategy also helps them build potential solutions for new problems based on their past

knowledge and apply their learnings to a new context.

- Encouraging creativity encourages pupils to use what they've learned and create something new. This technique might be implemented through art projects or activities. From a tale to a game, innovation may take many forms.
- Brainstorming is an exceptional tool to help students build critical-thinking skills, and when combined with visual aspects it can bring about great critical thinkers.

10. NEED AND IMPORTANCE OF CRITICAL THINKING

Teaching to develop thought processes is the opposite of teaching to fix automatic responses. Learning without thinking critically becomes memorization. A pupil can 'recite' accurately without understanding what he is saying. Verbalism is often mistaken for thinking. Some teachers tend to over-emphasize memory. A large number of the grades given to children are based upon their ability to reproduce certain facts from memory. This shows that the emphasis is on content memorization.[9]

Since there are so many ways for students to get knowledge these days due to the proliferation of information, the emphasis should be on teaching them how to think about and analyze that information, rather than teaching them the material itself. According to NCERT (2000) appropriate method and techniques which would facilitate interactive methods of teaching and learning needs to be involved; Replacement of current teaching techniques that rely on rote learning, lectures, and information replication with more interactive approaches aimed at promoting learning and fostering curiosity and independent thinking, as well as developing problem-solving and self-learning abilities. The teacher's role will be one of helping the pupil to develop the skill in collecting information, their verification and evaluation for further processing for drawing inferences. In other words, to develop critical thinking of students:

- It makes possible action with a conscious aim.
- It enables us to act in deliberate and intentional fashion to attain future objectives. (it converts blind action into intelligent action.)
- It makes possible systematic preparations and inventions.
- It enriches thinks with meanings.
- It helps to anticipate difficulties or problems and thus to prepare in advance.
- To contribute to the stability and security of life to both the individual and the society, the huge majority of men are

uninformed, there are misinformed about them about the natural world about the civilization in which they live.

- Democracy depends for its existence on critical thoughts of the group. People must be able to make valid judgments based on facts; not on emotions and prejudices.
- Critical thinking skills help in critical appreciation of literature without blindly following what the author has written. Now a days several newspapers, magazines have a tendency to sell their ideas and win over more and more followers over their ideologies.

11. HOW TO TEACH CRITICAL THINKING

Teaching critical thinking in the classroom is an important skill, as it has several benefits, such as:[10]

- Students develop critical thinking in the classroom, which allows them to better comprehend and regulate their own learning process.
- The use of critical thinking in the classroom improves students' attention spans and enables them to better interact with their peers.
- Students who exercise critical thinking skills are better equipped for the future and learn how to manage many events, whether at work or at home, and gladly participate in interactive learning.

Critical thinking abilities, when taught in the classroom, have a positive impact on students' life, whether in academics, future work, or dealing with family issues.

There are several techniques for helping pupils improve critical thinking skills. Students may learn critical thinking by asking questions that encourage them to create their own opinions on popular themes. Promoting group discussions enable the students to listen to others and share their opinions. Imagination and creativity are the key to developing critical thinking skills in elementary classes. By making students write stories or poems, they trigger their creativity, which ultimately leads to critical thinking. Some other ways of teaching critical thinking involve engaging students in activities that require an innovative and attentive approach, while other ways encourage role-playing by assuming a role in a problematic situation that needs resolution. Brainstorming is also an excellent learning tool, especially when paired with visual elements, thus inspiring uniqueness in thoughts.

12. CONCLUSION

Teaching critical thinking and creative thinking in the classroom using various illustrations from the primary school text book can help teachers and experts become more aware of the importance of implementing these activities in the classroom, as well as how to work out critical thinking and creative thinking teaching in classrooms using the various illustrations.

REFERENCES

1. Buzan, T. (2001) *The Power of Creative Intelligence*, London: Harper Collins Publishers
2. Chennabathni, Revathi (2007) *Case Study of a Creative Teacher in Dissertation Abstract International*, Vol 68. No.3 pp 873, September 2007
3. John, P, T. (2007) *Quantum Learning Instructional Leadership in Practice*, Thousand Oaks, CA: Corwin press
4. Joshi, C. M. (2009) *Effectiveness of the Programme for the Development of Creativity for Primary Teachers Trainees*, an unpublished Ph.D. thesis (Edu.), Rajkot: Saurashtra University
5. Tripathi, S. (2005). *The Effect of Brainstorming Technique on the Creativity and ability to Integrate Teaching Skills of B.Ed. Students*, an Unpublished Ph. D. Thesis, University of Lucknow in *Sixth Survey of Research in Education* from <http://www.eduresearch.dauniv.ac.in/retrived> dated 11.06.2008
6. Among Middle-Level Student (Doctor's thesis, Oregon State University). Charoenwongsak, C. (2002). *Thinkers' Map*. Bangkok: Success Media. Charoenwongsak, C. (2012). *Critical Thinking* (9th ed.). Bangkok: Success Media.
7. Kammanee, T. (2005). *Instructional Model: Various Alternatives*. Bangkok: Chulalongkorn University Printing.
8. Kammanee, T. (2010). *Science of Teaching in Body of Knowledge for Efficient Learning Process Management*. (13th ed.). Bangkok: Chulalongkorn University Printing.
9. Kongsong, S. (2010). *Program Development for enhancing Critical Thinking for Gifted Students in Grade 4-5* (Doctor of Education thesis, Srinakharintarawirote University).
10. Kowtrakool, S. (2009). *Educational Psychology* (8th ed.). Bangkok: Faculty of Education, Chulalongkorn University.

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