

NURTURING CRITICAL THINKING SKILLS: NEP 2020 PERSPECTIVE

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Abstract

The aim of the study is to identify new recommendations on higher-order thinking skills especially critical thinking in NEP 2020. Developing thinking skills have an important place in the educational process. The indispensable components of critical thinking are analysis, self-regulation, making comments, detecting assumptions, explaining things, and employing assessment. In this 21st century, National Education Policy (NEP 2020) has assumed a significant role in the critical thinking skills of students and teachers. The NEP 2020 initiative encourages active pedagogy, the development of fundamental abilities and life skills, including 21st-century skills, experimental learning at all levels, low-stakes board exams, a comprehensive progress card, changes to assessment to foster student's critical and higher-order thinking, mainstreaming the vocational education, and reforms to teacher education. In this study aspects of critical thinking in NEP 2022 are analyzed.

Keywords: *Critical thinking, NEP- 2020 (National Education Policy-2020), PISA (Program for International Student Assessment), NAS (National Assessment Policy).*

INTRODUCTION

Critical thinking has an important place in the educational process. Analysis, self-regulation, making comments, identifying assumptions, giving explanations, and using evaluation are the main constituents of critical thinking. Glaser (1942, p. 6) and Fisher (2001) defined critical thinking is the capacity to pinpoint issues, come up with workable solutions, gather appropriate information, recognize, understand, and use language with perfection, clarity, and discrimination, interpret data, evaluate evidence, and assess the arguments, as well as the capacity to recognize the presence of absolute assumptions and ideals (or lack thereof) of others.

The Government of India created the NEP to advance and oversee education in India. The policy covers primary, secondary, and higher education in India's rural and urban areas. The first NPE was launched by Prime Minister Indira Gandhi in 1968, the second by Prime Minister Rajiv Gandhi in 1986, and the third by Prime Minister Narendra Modi in 2020. An

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encouraging beginning towards modernizing the nation's educational system is the new NEP 2020. It is a brave and aspiring policy that aims to drastically alter the educational system during the following ten years. In this 21st century, NEP has presumed a notable role in critical thinking skills.

The review of the previous NEPs with a special focus on the provisions for critical thinking

- **References to Critical Thinking - NPE 1968**

The Government of India developed the NPE of 1968 as a policy to support education among Indians based on the requirements of the nation. The UGC's chairman oversaw the policy, which included basic education in India's cities and rural areas. To promote national unification and increased cultural and economic growth, the NPE, 1968 called for a "radical reconstruction" and equitably distributes educational possibilities. NPE 1968 lacked recommendations and provisions related to the skills of critical thinking, problem-solving, and higher-order thinking.

- **References to Critical Thinking - NPE 1986**

One of the key points in NPE 1986 was research in the universities and higher education institutions providing enhanced support and steps to ensure its high quality. Recommendations to set up suitable mechanisms by the UGC for coordinating research in the universities, particularly in core areas of science and technology, with research undertaken by various agencies was the key highlight. The modification of curricula and methodologies of learning through problem-solving, creativity, pertinence, and research were considered essential parts of higher education. The criteria of empowerment were building a positive self-image and self-confidence and developing the critical thinking abilities. The possibilities and the provisions for developing critical thinking skills and problem-solving skills from the lower levels -elementary, secondary, or higher secondary levels of education were given less significance.

- **References to Critical Thinking - NEP 2020**

The new NEP 2020 is a positive step to revamp the educational system in the country. The main challenge of NPE 1986 was the curriculum which encouraged rote-based learning and so didn't get any perspectives on critical thinking. Based on the review by K. Vinoth Kumar on

Earlier National Education Policies of India (2018), had a clear vision and was vigorous in nature but it has not had the results as expected. This may be due to the continued lack of follow-up, and little attention to implementation. Hence the NEP 2020 places a strong emphasis on the need for all students to acquire 21st-century skills including critical thinking, creativity, and problem-solving.

Why is critical thinking given so much importance in NEP2020

- **National Assessment Survey (NAS)**

The national assessment survey is the national level, a large-scale assessment conducted to gather information about the learning achievement of students of classes 3,5,8, and 10 studying in state government schools, aided schools, and private and Central Government schools. This study links contextual factors to student achievement. Researchers can use NAS to better understand how assessment, pedagogical process, and learning the results are interconnected for educational planners and policy makers.

The national assessment is important for measuring educational success. The result of NAS is significant in framing educational policies and practices at district, state, and national levels. It helps to identify lacunas in the field of education, especially related to teaching and learning resulting in the low achievement of students, and to find possible solutions for it. It provides guidelines for framing child-centred pedagogy, teacher training programs, reviewing curriculum, and structuring assessment practices.

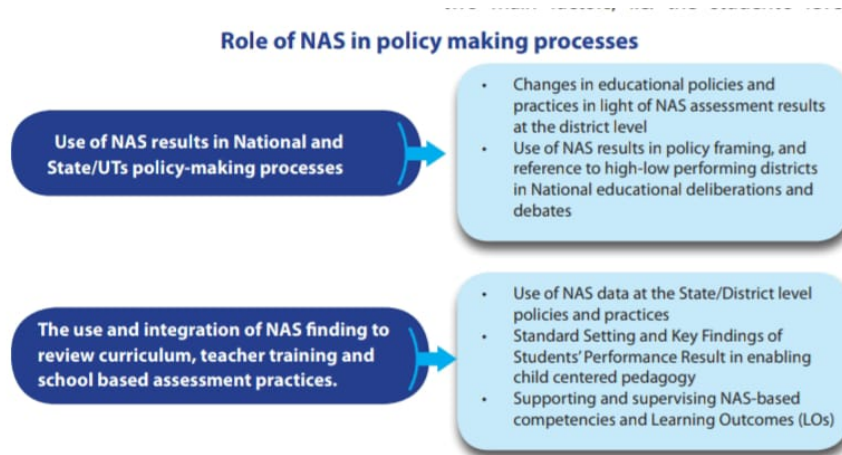


Figure 1. The role of NAS in policy making processes

Note: The data on the role of the NAS in policy making processes adopted from the NAS - 2017 national assessment survey Released on 22nd February 2019 by the Hon'ble HRM ©

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National Average Achievement by classes and subjects NAS - 2017

NAS assesses Language, Mathematics, Science, Social Science, and English. The NAS was conducted throughout the country on November 13, 2017, for classes 3,5,8. The learning levels of 2.2 million students from 1,10,000 schools across 7001 districts in all 36 union territories were assessed. The results of the survey indicated a decline in the achievement of students from class 3 through class 8, especially in Mathematics, Science, and the social sciences. Some of the low-performance learning outcomes in the assessment were related to the conversion of data, arranging the information in the form of a table or pictograph, conducting, and interpreting simple experiments, plotting and interpreting the graph, constructing models using materials from surroundings all of which needs critical thinking and problem-solving skills.

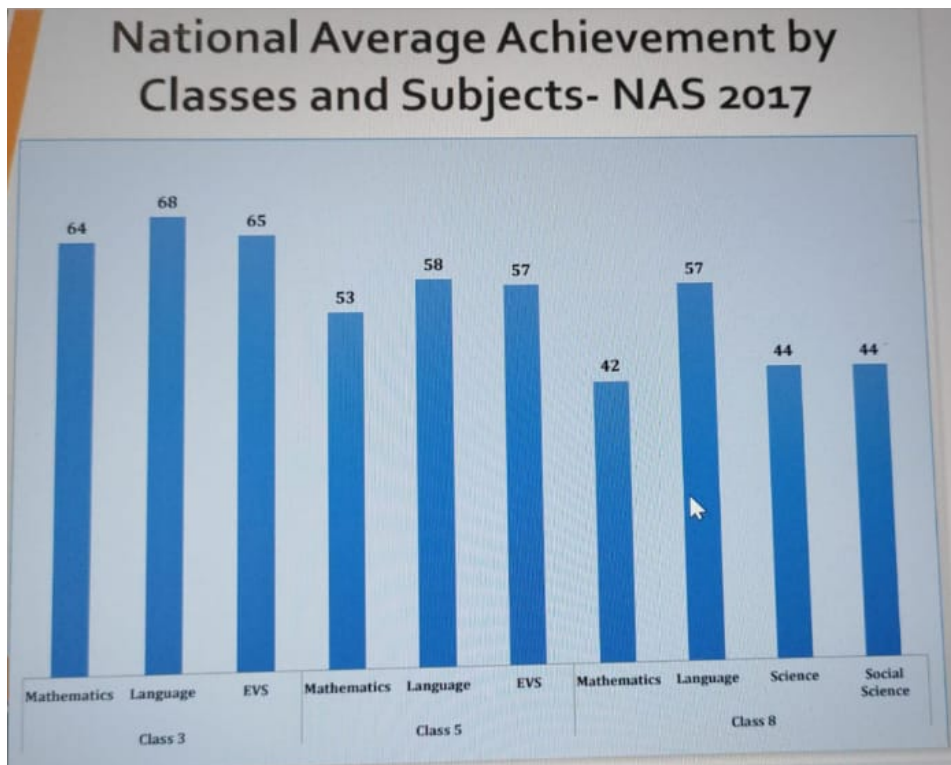


Figure 2. National average achievement -NAS 2017

Note: The data of the National average by classes and subjects- NAS 2017 adopted from NAS -2017 national assessment survey Released on 22nd February 2019 by the Hon'ble HRM ©

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Some of the low performing learning outcomes (LOs) in the States/UTs are:

Language	<ul style="list-style-type: none"> • Reads textual/non textual material with comprehension and identifies the details, characters, main idea, and sequence of ideas and events while reading
Mathematics	<ul style="list-style-type: none"> • Finds surface area and volume of cuboidal and cylindrical objects • Generalises properties of addition and subtraction, multiplication and division of rational numbers through patterns • Finds out approximate area of closed shapes by using units square grid/graph sheets • Solves problems related to conversion of percentage to fraction and decimals and vice versa • Arranges given/collected information in the form of table, pictograph and bar graph and interprets them • Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers
Science	<ul style="list-style-type: none"> • Conducts simply investigation to seek answers to queries • Explains processes and phenomenon • Plots and interprets graphs • Constructs models using materials from surroundings and explains their working
Social Science	<ul style="list-style-type: none"> • Describes the functioning of rural and urban local government bodies in sectors like health and education • Analyse the decline of pre-existing urban centers and handicraft industries and the development of new urban centers and industries in India during the colonial period • Locates important historical sites, places on outline map of India. • Locates distribution of important minerals, e.g. coal and mineral oil on the world map • Draws interrelationship between types of farming and development in different regions of the world • Applies the knowledge of the fundamental rights to find out about their violation, protection and promotion in a given situation • Identifies the role of government in providing public facilities such as water, sanitation, road, electricity etc. and recognizes their availability

Figure 3. The low performing learning outcomes in the state/ UTs

Note: The data of the *low performing learning outcomes in the state/ UTs* adopted from the NAS -2017 national assessment survey Released on 22nd February 2019 by the Hon'ble HRM © National Council of Educational Research and Training, 2020 All rights reserved. ISBN 978-93-5292-299-4 (WithReleaseDate_NPPTL.pdf (ncert.nic.in))

- **The results of the PISA Survey**

PISA is an international survey harmonized by the Organization for Economic Cooperation and Development (OECD) and was first carried out in 2000. It is a competency-based test designed to evaluate the ability of 15-year-old candidates to apply their knowledge to real-life situations. It also measures their literacy in reading, mathematics, and science every three years. India took the PISA test, in 2009. India ranked 72 only outperforming Kyrgyzstan who was 73 in this round of PISA. Since then, India stayed away from the test until now since Chandigarh children will be taking the test in 2022.

The results of the above surveys proclaim the need to identify all the possibilities to nurture critical thinking skills in learners from the lower classes itself. NEP 2020 has given due attention and importance to promoting critical thinking providing ample opportunity at all levels of learning. Under this policy, there will be a greater emphasis on the entire development of students rather than just rote learning. This means that students will be uplifted to think critically and creatively and to develop skills including problem-solving and collaboration. The policy says that:

At the middle stage (11 -14 years), students are expected to develop central academic skills such as reading, writing, and basic language competencies. They are also expected to develop life skills including teamwork, problem-solving, and critical thinking.

At the Secondary Stage (14–18 years), the students are intended to inculcate the studies of interdisciplinary, coupled with critical thinking.

At the Secondary Stage, students are expected to engage in interdisciplinary study, building on the Middle Stage's subject-focused pedagogy and curriculum, but with greater breadth, critical thinking, attention to life goals, flexibility, and student choice.

NEP- 2020 lays particular emphasis on the;

- The development of the creative potential of everyone.
- The development of social, ethical, emotional, and cognitive traits as well as the foundational capacities of reading and numeracy and higher-order cognitive abilities like critical thinking and problem-solving.

- The shifts in school education to a more play and discovery-based style of learning with a focus on the scientific method and critical thinking.
- Evaluations of the educational strategies in undergraduate education that combine the humanities and arts with STEM have shown the positive learning outcomes, including increased creativity and innovation, critical thinking and higher-order thinking capacities, problem-solving abilities, teamwork, and communication skills, as well as more in-depth learning and mastery of curricula across fields.
- Assessment of higher-order skills including analysis, critical thinking, and conceptual clarity. Reduce curriculum content to enhance essential learning and critical thinking
- Making room for critical thinking and more all-encompassing, inquiry-based, discovery-based, discussion-based, and analysis-based learning by condensing the curricular content to its fundamentals.

CONCLUSION

Every policy is developed based on agenda setting, formulation, evidence-gathering, debate, evaluation, and then implementation. Concrete evidence is collected to identify the gaps in the existing system. The results of the surveys mentioned earlier necessitate providing provisions for developing higher-order thinking skills from the lower classes themselves. The findings recommend reducing Curriculum content focus on the core concepts, ideas, applications, critical thinking, and problem-solving abilities. Questions will be welcomed, and classroom sessions will often include more enjoyable, creative, collaborative, and exploratory activities for students to engage in deeper and more immersive learning. Teaching and learning will be performed in a more interactive manner. With the implementation of the NEP 2020, there was a desire to transform education and place a strong focus on teaching students how to think critically, solve issues, be creative and multidisciplinary thinkers, as well as how to innovate, adapt, and absorb new information in cutting-edge and rapidly changing fields.

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