Subjects taught in school are set to emphasize rounded learning

livemint.com/opinion/online-views/subjects-taught-in-school-are-set-to-emphasize-rounded-learning-11695823073407.html

September 27, 2023

School education is organized around the study of subjects. We don't pay much attention to subjects until students reach the 11th grade and are forced to choose which ones to study. The grouping of subjects and requirements by boards, capacity of schools to offer different subjects, societal aspirations, higher education entrance requirements and competitive demand among students all influence these choices. Students are often slotted or 'hard streamed' into a particular discipline, such as Science, Arts or Commerce. Each stream is tightly defined, cutting off students from other subjects and fields. Such silo-ing have long been a weakness of our education, though not much public attention has been given to this matter. That it's a weakness is now obvious and is often expressed as the need for 'multidisciplinary education.' Even the job market demands exposure and understanding of a wide range of subjects and fields. The National Curriculum Framework 2023 (NCF) addresses this matter squarely.

What subjects to study? This question is not merely important in Grades 11-12, but is critical from the very start of schooling, the first 13 years from pre-school to Grade 10. This column and the next few will explore the approach the NCF takes to school subjects.

In the Foundational Stage of ages 3 to 8 (i.e., from pre-school to Grade 2), education is to be 'play-based'. This doesn't mean unorganized, but organized in a manner that is like play for the child. This is because at this age, children learn best through play. Such play can be organized by stories, games, music, physical activities and many other mechanisms that together help the holistic development of the child, including literacy and numeracy. It is in Grades 1 and 2 that study gets formalized into the subjects of language

and mathematics, but because of the play-based teaching approach, connects children to a wide range of matters, including social life and the physical environment, art and music, sports and working with hands. Learning happens in all these areas. From Grade 3 onwards, study is fully organized around subjects, while the pedagogical approach is chosen appropriately for each age group.

In Grades 3-5, the Preparatory Stage, three subjects are added to the list from the Foundational Stage: art including music, physical education and well-being and 'the-world-around-us,' an interdisciplinary study of the child's social and physical environment.

In Grades 6-8, or the Middle Stage, 'the-world-around-us' doesn't continue as a subject and four subjects of study are added: a third language, social science, science and vocational education.

In Grades 9-10, the first phase of the Secondary Stage, one interdisciplinary subject is added: 'Individual in Society' in Grade 9, which is about ethical and moral reasoning; and 'Environmental Education' in Grade 10.

In Grades 11-12, the second phase of the Secondary Stage, students must choose subjects with a new method, enabling multidisciplinary exposure and avoiding narrow streaming.

The NCF tackles three critical sets of issues, which will otherwise make the implementation of this overall subject scheme difficult to implement.

First, it creates adequate 'time-table space' for all the subjects. It ensures that subjects like art or vocational education are taught and not glossed over. This space is created by reduction of content in other subjects such as social science and science. Content reduction also enables deeper learning of those very subjects—with genuine understanding and development of crucial capacities such as critical thinking—instead of rote memorization of facts, which is the inevitable outcome of heavy content.

Second, it establishes all subjects as equally important. It does this by giving adequate time to all subjects and having formalized assessments for all.

Third, it devises an approach through which these subjects can be taught within constraints, including current school resources. For example, most schools in India do not have a vocational education teacher. So, it devises a curricular approach that includes learning standards and content selection that can be handled by existing teachers with relevant training and the help of local community resources. Addressing these issues in the very design of the curriculum improves the likelihood of high-fidelity NCF implementation.

The effective teaching and learning of all these subjects in an integrated manner is necessary to develop the full range of knowledge, capacities, values and dispositions our children need; the NCF focuses on this objective. It also establishes 'learning standards,' the progressively specific goals of learning for each subject. These standards are

designed in a way that knits subjects together by cross pollinating learning goals across subjects. For example, a learning goal in social science will require the use of art. This breaks silos and fosters synergy across subjects.

Ensuring that our education system promotes the study of the full range human knowledge and capacities—and connects rather than divides how these subjects come together and reinforce one another—will help prepare our children better for an uncertain and constantly evolving future.