Accessible learning

A change in pedagogic techniques would enable blind students to continue studying Mathematics and Science till Class XII

George Abraham

ENABLING RESOURCE: *The Braille system helps blind students read and write.*

The proposed FYUP (Four Year Undergraduate Program) by the Delhi University mandates that every student study foundation course each in basic Mathematics and Science in the first year. This is a positive step forward, since I believe the study of Mathematics and Science has a great impact on the way one processes knowledge and perceives the world around.

However, in the present context, making the study of these two subjects compulsory is certain to exclude most blind students. Majority of schools in India do not offer the subjects to visually impaired students beyond Class VIII.

Traditionally Mathematics and Science involves a lot of visual learning in terms of graphs and diagrams, which is difficult to communicate to visually impaired students. Further, their inability to perform practicals in science subjects also goes against them. Most education boards have taken the easy way out by exempting blind students from studying these subjects and offering alterative options.

However, there are plenty of examples to the contrary. Kartik Sawhney, of DPS RK Puram, New Delhi, who has been accepted at the prestigious Stanford University to do his bachelor's in Computer Science this year, Preetish Dutta from IIT Kharagpur who was honored with the J.C. Bose Award for Mathematics last year, Dr. Sushma Agarwal, professor of Mathematics at the Ramanujan Institute for Advanced Mathematics Studies, Chennai, and T.V. Raman, a graduate from IIT Bombay, who is currently working with Google US are all testimonies to the fact that visual impairment does not hinder a child's capacity to learn Mathematics and Science. In fact, I think, the limitation is the inability to teach these subjects to blind students.

The solution is not in exempting the study of Mathematics and Science, but in taking on the challenge of finding ways to include them. The initiative taken by the Delhi University to teach these subjects is a positive step forward. We should grab this opportunity to strongly advocate for the inclusion of Mathematics and Science in the curriculum for blind students till Class XII. This requires a change in pedagogic techniques, the need for trained teachers, and development of study material in accessible format.

The time has come to look at blind students as a part of the mainstream, and treat them as potential resources for the economy. We need to invest in them, have expectations of them, and shed our traditional misgivings towards them.

(The writer is CEO of Delhi-based Score Foundation, which works in the domain of Life with Blindness. He became visually impaired when he contracted meningitis at an early age)