

Reimagining education: Technology can reduce tensions between learning in school and learning for life

Kavita Gupta Sabharwal



Einstein once gave an exam and 15 minutes into the exam, one of his students stood up

and asked, "Aren't the questions in this year's exam the same as last year's exam?" Einstein replied, "Don't worry; the answers are different this year."

This wonderful story is very relevant to school education because learning, teaching, curriculum, and pedagogy are the same words but mean very different things than they did 50 years ago. Schools need to reinvent themselves for four reasons: early education matters, our understanding of the brain has progressed in the last two decades, the world that future generations enter will be very different from ours, and teaching practices are changing to support these developments.

I was horrified to hear a pundit recently pontificate that all future education will be on the go, on demand, crowd-sourced and gamified. But social, technological and pedagogical changes mean that schools have to think about first principles (early education, foundation

skills, and teaching practice) and I would like to make the case that these forces are actually reducing the tension in K-12 education, between teaching for a good life, college readiness and work – making education real.

Foundational skills are beyond the 3Rs because the internet makes rote learning less relevant and lifelong learning needs to replace the upfront 25 years of school. The one skill that we know our

Contrary to belief, existing structures (outdated/unimaginative textbooks, board exams, college application processes, the Right to Education) are a thorn in the flesh but not a dagger in the heart

children will need is the ability to relearn all the time. To try things, to come back, read, try new things, come back to read and learn more, and go back again. Poets usually see things



way in advance of the rest of us; a hundred years back William Butler Yeats wrote "Education is not the filling of a bucket but the lighting of a fire."

Contrary to hearsay, teachers are not going anywhere. But pedagogical practices are changing and effective schools need a shared vision, collaborative practices, distributed leadership, performance management rather than performance appraisal, and a cohesive, engaging, rigorous curriculum.

Teachers move from didactic teaching of content to building skills (communication, research, thinking, self-management, collaboration), creating inquiry and differentiating teaching

based on ability, learning styles and interests; from teaching isolated subjects to transdisciplinary interconnections; from rigour that is beyond mere content to concepts or the big ideas across subjects to see, analyse and understand the world around.

Indian schools have traditionally had many strengths: academic excellence, math and science rigour, and a strong focus on written English. But they must move – from extracurricular activities (such as sports, art, music, drama and the library) to everything as curricular; from moral education classes to invoking citizenship, from

incessant repetition for test prep to calculating and charting learning in a motivational spiral, integrating content vertically and horizontally in developmentally appropriate stages.

Contrary to belief, existing structures (outdated/unimaginative textbooks, board examinations, college application processes, the Right to Education, etc) are a thorn in the flesh but not a dagger in the heart.

Society responded to the Industrial Revolution with mass schooling and to the service revolution with mass college. The context for schools is rapidly changing. Children are spending more time in school, they receive more communication from teachers, watch more TV, are more aware and technologically savvy, have easy access to content, and their goals tend to change quickly. But the new worlds of work, college and citizenship are telling us that they need children who are knowledgeable, risk-takers, communicators, reflective, open-minded, inquirers and who show curiosity, confidence, respect, integrity and empathy. In the long view, life is not the solving of a sum but the painting of a picture.

The writer is Managing Trustee, Neev Academy