PRIME MINISTER Imran Khan has identified education reform as the central theme of his government. His first 100 days agenda seeks to "revolutionise social services", including transforming health and education. The new government's focus on education is much needed. The low quality of public education in Pakistan, corruption in exam boards, and widespread cheating has contributed greatly to our nation's decline.

Pakistan's education emergency statistics highlight that 25 million children do not attend school. Whilst getting these children into the formal education system must be a priority, an even greater priority is ensuring that those children who do attend school get a worthwhile education.

The central challenge of education reform in Pakistan is to improve education quality — measured by 'student learning outcomes', or what students are expected to know or be able to do — rapidly, affordably, and at large scale.

A World Bank study (2007) shows compelling evidence that education quality, rather than simply years of schooling, is a driver of economic growth and increased equity. Despite this, education reform efforts in Pakistan pay scant attention to improving what happens inside the classroom. They focus instead on improving school facilities and school management, in part because these are easier and more visible than raising standards of teaching and learning inside classrooms.

The solution to improving education must involve technology.

Reports on education performance point to the gap in literacy and numeracy in Pakistan's government schools. Comprehensive assessments, such as those run by EDeQUAL, of students in adopted government schools and NGO schools demonstrate a huge achievement gap: students in grade 6 typically fail a Pakistan national curriculum-based grade 3 math test. In other words, a 10-year old child already has a four-year achievement gap in numeracy. Few students from such schools will ever matriculate, let alone join reputable universities or attain professional jobs.

Delivering quality education in science, technology and mathematics — STEM —must become a central focus of Pakistan's education reform. Without this, money spent on school infrastructure, recruiting teachers and improving school management will not produce educated students who can think critically, solve problems, read and write well, and work effectively with numbers.

The solution to improving education quality rapidly at scale must involve technology. Technology offers teachers and students access to educational content and assessment tools that are normally out of reach. Technology adoption in education can enhance teacher skills and capabilities, provide students with unparalleled high-quality instruction that is customised to their needs, and enable independent and unbiased assessment of student learning. While technology won't replace teachers, teachers who use technology will eventually replace teachers who do not.

Today, technology-enabled learning that delivers results for students is available in Pakistan. Our work with adopted government schools and education management organizations in Punjab demonstrates the benefits of effectively implemented technology solutions in math and science. In one partner school that has implemented our national curriculum-aligned blended learning programme, delivered in both English and Urdu, most students gained one year of math competency after only four months. These results point to the transformational change that is possible when education technology is thoughtfully implemented.

Technology is, however, not a panacea; close attention must be paid to how it is implemented. Careful selection of teachers to implement technology-based learning, their training and certification and a carefully structured implementation process are key. Once classroom implementation begins, thorough baseline assessments of students, coupled with continuous assessment as they progress through the course are required. The aim must be for students to gain subject mastery.

Technology implementation in the classroom should be piloted before it is rolled out at large scale. A one-year carefully conducted pilot programme — perhaps involving 30 primary schools with 200 students each — can generate evidence of success and key learnings for implementing reform. This initial cohort of 'smart schools' can be quickly selected in Pakistan's urban and rural areas, with the aim of rapidly replicating success. The advantage of such a lean startup approach is that it is experimental at very low cost, and can quickly iterate to define a model for successful technology-based learning to be implemented at large scale in Pakistan.

We now need the new government to champion a smart approach to delivering education reform by using technology effectively in the classroom. Without this, the promise of transforming education may remain unfulfilled.