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# UNIVERSAL LEARN TODAY

## INTEGRATING TECHNOLOGY IN CLASSROOMS IN INDIA



*A Universal Learn Today classroom. Photo credit: Universal Learn Today*

## EXECUTIVE SUMMARY

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Universal Learn Today (ULT) is a privately-owned education management company operating out of New Delhi, India. Its information and communications technologies (ICT) division works to transform the way technology is integrated into the classroom. Schools that upgrade to digital infrastructures and purchase software and devices often face roadblocks in the successful implementation. ULT's team has researched and developed methods of professional development that optimize and specify the ways that technology can enhance education, and respond to the pedagogical inertia around ICT in schools. These include value-stream mapping for teachers and collaborative, community-minded ICT projects for students.

*Keywords: education, digital literacy, India*

## CONTEXT

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In 2016, eight out of 10 Indians owned a mobile phone, but there were still nearly 1 billion Indians not connected to the Internet, according to World Bank. A 2014 Deloitte study suggested that among 439,000 mobile network towers nationwide, only 700 could actually support 3G or 4G mobile telecommunications data use. In terms of Internet speed, India ranks 52<sup>nd</sup>, despite having the third-largest population of Internet users in the world. Low literacy rates and the rigid education system also contribute to youth's unevenly distributed digital literacy skills.

The government of India, as well as civil society and other agencies, has taken several initiatives to improve the situation. The National Digital Literacy Mission is a central government scheme with the goal of ensuring at least one person per household to be digitally literate. The Pradhan Mantri Gramin Digital Saksharta Abhiyan program is one of the largest digital literacy programs in the world that aims to make 60 million rural households digitally literate by March 2019. Other initiatives taken by nonprofits and the private sector to train youth with ICT skills include the ICT Academy, DXC India, the Sehgal Foundation, among others.

<b>India</b>			
<b>Population (UN, 2015)</b>	1,282,390,303	<b>Fixed broadband subscriptions (%) (ITU, 2016)</b>	1.44
<b>Population density (people per sq.km) (UN, 2015)</b>	390.11	<b>Mobile cellular subscriptions (%) (ITU, 2016)</b>	86.95
<b>Median household income (Gallup, 2006-2012)</b>	US\$ 3,168	<b>Individuals using the Internet (%) (ITU, 2016)</b>	29.5
<b>Education (Mean years of schooling) (UNDP, 2013)</b>	Male: 5.6 Female: 3.2	<b>Individuals using the Internet by Gender (%) (ITU, 2016)</b>	N/A

## PROJECT DESCRIPTION

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Value mapping is a tool that was introduced to teachers as a method for improving their pedagogy through the use of ICT. Identifying what matters most to them and then brainstorming solutions to local problems is the first step to guiding teachers toward the relevant technological solutions. Take, for example, a special-needs teacher who wants to better communicate with the family of her pupil. The family of the special-needs pupil also wishes to better integrate the day's lessons into the structure of their family life. After value mapping, the teacher and family begin to upload progress reports to Google Drive and communicate via WhatsApp. By setting concrete goals and engaging in productive self-reflection, teachers create sustainable methods for integrating technology into their pedagogy.

The project also addresses the problems of the digital divide in Indian schools. By pairing urban and rural schools to collaborate on ICT ventures, the project builds symbiotic relationships between schools with vastly different resources. Each team must develop their work along the axis of selection that its result needs to benefit all members. Additionally, each team works competitively to create projects that will be featured at an educational technology (Ed Tech) Summit, a yearly showcase for student-led learning.

<b>Project details</b>			
<b>Technology</b>	Varied technologies, suited to project needs	<b>Training</b>	Professional development and technology integration based on value-stream mapping
<b>Year program started</b>	2014	<b>Cost to users</b>	Consults can be individually paid for or purchased via yearly subscription.
<b>Geography</b>	Varied – urban and rural India	<b>Total cost of program</b>	Not disclosed
<b>User profile</b>	Teachers and students in primary and secondary schools in 100 Indian schools	<b>Associated organizations</b>	LEGO India, Mindbox, Royal Family of Bhutan

## **PROGRESS AND RESULTS**

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The first Ed Tech Summit in 2014 focused on bringing teachers and administrators together to discuss ICTs, professional development, and pedagogy. Since then, the summits have focused on showcasing collaborative student projects that stem from technology integration in the classroom.

Collaborative projects presented at the summits have been innovative and community-oriented. One pairing between a private school and a school for the blind developed a walking stick equipped with sensors. Another group developed a gender-focused awareness campaign aimed at combating myths that were keeping Muslim women from donating blood.

Due to the school partnerships and Ed Tech Summits, students who would have otherwise little access to education professionals capable of supporting them in pursuing higher education, now know teachers and administrators who are willing to help them with letters of recommendation and university application support.

Currently, the number of schools served lies somewhere between 80 and 100. In order to retain the quality of their programs, ULT is not actively seeking to grow these numbers. Instead, the goal of growth is long-term – students and teachers who benefit from these methods and activities today will be the ones to continue and promote it tomorrow.

## CHALLENGES

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**Lack of access to infrastructure** – Most schools in India do not have the infrastructure to support these initiatives. The problem is not only the lack of availability of hardware, software, and Internet access, but also a social class-based problem where the issue is the lack of opportunities. For example, in public schools where the main problem to be addressed is sufficiently feeding and clothing its pupils, the question of technology is not a priority.

**Lack of funding** – Funding is often in short supply. Well-endowed private schools are more likely to be able to afford consults, while public government schools are much less likely. The partnerships between urban and rural schools help to share this cost, but funding remains a challenge.

**Regressive mindsets to technology use** – The changing face of education is one that must be recognized. Those involved need to understand that textbooks are becoming redundant and that research skills and independent hands-on learning is becoming more and more important.

## ULT'S SUGGESTIONS FOR FUTURE PROJECTS

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**Integrating pedagogy and value-stream mapping into the implementation of ICT projects is essential** – Value-stream mapping operates successfully on the principle that in education pedagogy needs to come before technology. The simple introduction of technology in the classroom will not automatically improve pedagogy or even necessarily affect it. Furthermore, these introductions often take the form of impositions by higher-level administrators, neglecting the input and perspectives of teachers. By encouraging teachers to set goals for improving their pedagogy, value-stream mapping allows for the efficacious selection and implementation of technology in the classroom

**Incentivizing schools and communities to partner and celebrate growth helps to make sustainable projects** – By promoting community-oriented collaboration between students in public and private schools, the organization has seen these schools independently continue their partnerships after the official project has ended. The Ed Tech Summit also incentivizes sustainable partnerships by rewarding those groups that grow an initial project into a multi-year program, building on a previous group's work to create their own collaborative technological intervention.

## SOURCES

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Sawhney, D. (2017, August 8) Personal Interview.