High Touch High Tech for All
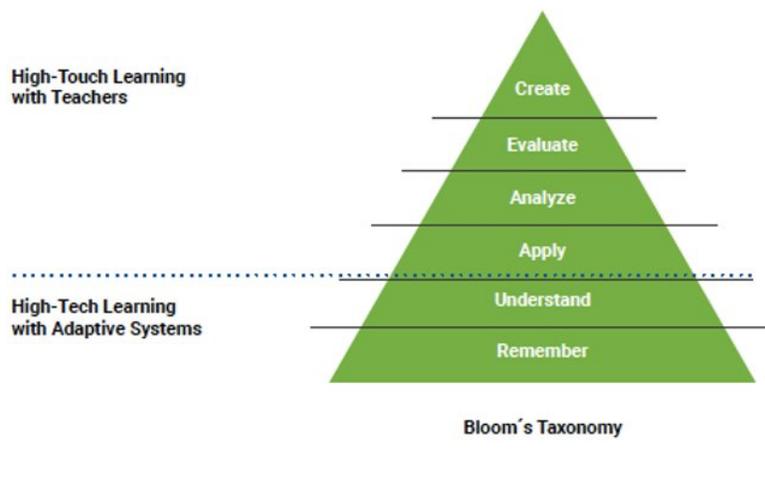
Transforming learning to achieve equitable learning for all

Why now?

While technology has evolved rapidly in the last 20 years, education has changed little over the past 200 years. The current classroom model, where teachers deliver standardized content in a uniform mass manner, cannot meet students' individual needs. There is strong evidence for the past 15 years that personalized learning approaches, such as Teaching at the Right Level (TaRL), which reorients teaching to the level of the student, consistently improves learning outcomes, yet this has been difficult to do at scale. Emerging research shows that technology-supported personalized adaptive learning may help to close educational gaps for lower attaining students. This is desperately needed as 70% of 10-year-olds in low- and middle-income countries can't read or understand a simple text, and 68% of the world's youth are not on track to learn basic secondary skills by 2030.

The Vision: High Touch High Tech for All

High Touch High Tech for All (HTHT) is an approach that aims to deliver the vision of personalized learning for the most disadvantaged learners by combining the unique strengths of the teacher (High Touch) and the power of AI-enabled adaptive learning technology (High Tech). The locally available **technology** selected by the government or partner provides adaptive content and assessment aligned with the national curriculum. This develops students' foundational skills by meeting students at their level and helping them progress at their own pace. The **teacher** use data to personalize teaching and nurtures higher-order skills such as critical thinking, collaboration, and socio-emotional growth. The technology combined with teacher training and support provides the potential to accelerate learning for all at scale.

High-Touch Learning with Teachers

Create
Evaluate
Analyze
Apply
Understand
Remember

High-Tech Learning with Adaptive Systems

Bloom´s Taxonomy

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Promising results to date: Vietnam, Uruguay, the Philippines, Cambodia

The Education Commission, now the Learning Generation Initiative (LGI) at Education Development Center (EDC), in partnership with Vietnam's Ministry of Education and Training and Arizona State

University and funding from UK FCDO, developed a High Touch High Tech (HTHT) prototype that trained teachers to harness adaptive learning technology at the same time as including more active learning techniques. It generated significant results after just one semester: **Math test scores of grade 7 students improved by an equivalent of two years of learning (0.436 standard deviation).** Furthermore, teachers gained familiarity with instructional technology and collaborated around student data, optimizing their ability to impact student learning and resulting in greater teacher satisfaction.

In Uruguay, the Education Commission (now LGI) and Education Commission Asia partnered with CEIBAL Uruguay's public policy center for digital education, and the Inter-American Development Bank, to implement a HTHT pilot for math in grade 5 and computational thinking in grade 7. **Math scores improved by an equivalent of 1.63 years of learning in one year's time (0.33 standard deviation) and computation thinking scores had a statistically significant improvement (0.1 standard deviation).** Notably, only the combination of high-tech and high-touch improved performance. Schools that received only technology without teacher training did not achieve similar improvements in scores.

With generous support from the Equinix Foundation and the Philanthropy Asia Alliance, LGI piloted the HTHT approach in the Philippines, focusing on grades 4-6 math, and in Cambodia, focusing on math for grades 7 and 8. In the Philippines, LGI partnered with the Ayala Foundation, Inc to implement HTHT. Students gained the equivalent of **four additional months of math learning in just 12 weeks (0.25 standard deviations).** In Cambodia, LGI partnered with Teach For Cambodia to implement the project. Students achieved approximately **eight additional months of math learning within eight months (0.36 standard deviations).** Teachers reported that they now provide more differentiated instruction, more targeted support, and more student-centered learning.

High Touch High Tech: LGI's role
After the promising pilot results and development of a scaling framework, LGI is keen to work with governments to implement this at scale and in other countries. LGI will also facilitate global knowledge sharing and partnerships for others to harness this approach.

LGI's approach in summary:
> **Analyze:** research and rigorously test HTHT, capturing evidence in accessible formats
> **Act:** work with countries to pilot, evaluate, and develop ecosystems for scale.
> **Amplify:** facilitate global learning, networks, partnerships, and financing for scale.

How you can be involved
With additional partners, we can create a community of actors working on personalized learning. We would welcome others to **harness this approach** to accelerate progress in learning, whether this is foundational learning, STEM at secondary level, or skills development and in other countries. There is also a need for more **implementation research** for digital personalized learning approaches at scale, including examining the necessarily enabling factors. Please be in touch if you are interested in using or researching this approach. Together we can share lessons and evidence to help teachers ensure that all children can learn.

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