

“High Touch High Tech (HTHT) for All”: A call to action for a global consortium

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COVID-19, for all its devastation and havoc wreaked, is a brutal and much needed wake-up call. It is a wake-up call that has revealed, very prominently, the limitations of our traditional brick-and-mortar modus operandi. It is also a wake-up call that has inevitably incited a newfound reliance on technology-driven digital and online solutions—and simultaneously exposed our lack of preparation in leveraging their potential.

That the education sector has been especially hard hit is well recognized. At the pandemic’s peak in April, [91% of the student population worldwide](#)—almost 1.6 billion students—experienced the closing of their schools. While the wake-up call most apparently illuminates the current educational challenges engendered by COVID-19, it signals and signifies the gravity of a long-standing learning crisis that predates the pandemic. Projections by the Education Commission already revealed the concerning reality that [825 million students](#) in low- and middle-income countries would not be on course to gaining basic secondary-level skills necessary for the labor market. The advent of the Fourth Industrial Revolution (4IR) adds a further dimension of urgency with [65% of current primary school students](#) expected to have jobs that do not yet even exist today.

As the first act of the Fourth Industrial Revolution commences, it is necessitating a fundamental shift in what we learn and how we teach. Yet, if the COVID-19 response is any indication of our preparedness in adapting to the rapidly advancing 4IR landscape, prospects are grim. Evidenced by the often haphazard and disarrayed infusion of technology in remote learning schemes, a copy-paste type approach will neither suffice nor succeed; the offline content cannot simply be re-uploaded online. Rather, there is a need to meaningfully reconfigure and realign anew to the 4IR approach of acquiring, processing, and constructing information. Obfuscating the boundaries of the [physical and digital, and even the biological](#), 4IR and the skills it demands are profoundly more complex, more creative, and more collaborative. Education must, therefore, also follow suit.

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High Touch High Tech (HTHT)

Embodying these elements—conceptually, operationally, and relationally—is the High Touch High Tech (HTHT) learning approach. Like its name suggests, this approach is comprised of two distinct components and aims. *High Tech* refers to the advanced technology, and an adaptive learning technology that harnesses the power of artificial intelligence (AI), in particular. It boasts a diagnostic feature that identifies prior knowledge, and an adaptive facility that tailors instruction to diverse learning levels and needs—allowing students to be stimulated and nurtured as they progress at their own pace. Directly complementing the *High Tech* component is the equally critical *High Touch* element provided by teachers. With the inclusion of adaptive learning technology, teachers are afforded the capacity to supply more personalized guidance through software-informed data. Teachers are also granted more time to supervise active, interactive, and collaborative learning experiences, such as project-based learning, that foster higher-order and soft skills. Recognizing the importance of human touch and connection, mentoring that emphasizes socio-emotional development also constitutes a key aspect of the comprehensive *High Touch* learning schemes.

Spearheading this approach is the [Education Commission](#) and its recently established Asia hub, [Education Commission Asia \(ECA\)](#) based in Seoul, Korea. In the fall of 2019, the Education Commission, with support from the UK's Department for International Development, the Vietnamese Ministry of Education and Training, and Arizona State University, launched the first HTHT prototype project in Vietnam. Implemented across a seventh grade math curriculum, the HTHT approach demonstrated a positive impact of [0.436 standard deviations](#)—equivalent to two years of learning. Encouraged by these promising results, preparations are in development to conduct a feasibility study ahead of a scale-up to 40 schools throughout the country. With the primary mission of furthering HTHT's reach, ECA has also made efforts to build a robust HTHT portfolio since its inception last year. Globally, projects are underway in Uruguay, where the HTHT approach will be implemented for math and computational thinking, in partnership with Plan Ceibal, and Indonesia, on course to begin next year. Progress has also been made on the domestic front: the HTHT University Consortium (which now includes 16 member institutions) provides support to Korean universities incorporating the HTHT approach in their curricula and the HTHT K-12 Consortium targets low-income students across multiple cities, children of North Korean defectors, and multi-ethnic Korean youth.

Even with the initial favorable results of the HTHT approach, however, its scalability holds the keys to its ultimate impact. HTHT must show promise not only as an approach that is *adaptive* to individual students, but as one that is ultimately *adaptable* to a variety of contexts. Without doubt, the most apparent and ubiquitous bottleneck in scaling HTHT is the infrastructural diversity in accessibility to networks and devices—and the accompanying variations in digital

literacy. Unhindered by offline limitations, technology—and the digital devices, digital content, and online platforms it encompasses—inherently boasts the potential to enhance connections and foster exchange in learning. Yet, our evident lack of readiness in meeting the challenges of the current pandemic, and the greater 4IR era, has resulted in a failure to not only optimally capitalize on this potential but to prevent an exacerbation of the digital divide—further inhibiting learning for many students. With [43% of all students worldwide](#) (about 706 million) lacking home internet access and an [even greater proportion](#) (about 826 million) with no household computer to use, technology-dependent remote learning schemes are proving more divisive than inclusive.

“HTHT for All”

Amid the chaos of COVID-19, education has been presented with an unprecedented opportunity to reorient its focus in light of the Fourth Industrial Revolution, and redefine its scope to impact far more students than it does now. It is an opportunity, and simultaneously, a responsibility, that demands the attention and the proactive efforts of the global community. Heeding this call, the Education Commission and Education Commission Asia have launched a global initiative with the vision of sharing “HTHT for All.”

Just as the prospects of 4IR rest on our capacity to [collaborate effectively across sectors and disciplines](#), so too will the “HTHT for All” initiative be determined by its success as a multi-sectoral and multidisciplinary pursuit. The prolonged devastation of the pandemic and its relentless penetration of all industries has also reaffirmed that no sector has been spared—and a collaboration across them is imperative in rebuilding and building anew. Channeling the momentum garnered from the crisis, this initiative, therefore, invites and urges relevant actors from all segments of the ecosystem to forge a synergistic alliance so that “HTHT for All”—true to its name and mission—can be realized for all students.

Integral in this collaborative endeavor are diverse actors fulfilling unique and complementary roles: educators sharing the content knowledge; government officials across various ministries advancing policy and securing funding; edtech innovators supplying the technology; network providers and industry partners constructing the infrastructural foundation; and non-governmental coalitions generating awareness and advocacy. Notably, even within a robust and supportive ecosystem, a passive coalescing of factors will not suffice; leaders and pioneers must make conscientious strides to forge partnerships and consensus.

Within the policy arena, a reliable system of cross-ministerial communication must be in place to ensure an overarching vision supported by durable funding streams, and proper oversight

without duplication of efforts. Public-private partnerships between edtech providers and schools also comprise an essential feature of the ecosystem: the former must cooperate to distribute the technological hard- and software at subsidized rates, as the latter functions as a testing ground or testbed for the technology. Moreover, bolstering the legal framework to enhance the availability, accessibility, and applicability of data would serve to benefit researchers, instructors, and edtech providers alike. In the case of Korea, for instance, education data constitutes but a mere [5% of the total public database](#)—only 9% of which is standardized and suitable for further analysis. It is only when these foundational elements take hold that an effective quadripartite collaboration across the government, academia, edtech industry, and NGOs will emerge—propelling the innovation, investment, and research necessary for an effective and equitable expansion of HTHT.

“HTHT for All” Global Consortium

For the vision conceived to become a vision actualized, the pursuit of “HTHT for All” must be advanced strategically, swiftly, and with great intentionality. Against the reality of competing interests and priorities, however, the ecosystem—and the actors that comprise it—will naturally remain scattered in their disparate domains unless otherwise prompted. To this end, the Education Commission and Education Commission Asia have joined forces to establish a multisided “HTHT for All” Global Consortium to anchor and unify the ecosystem in scaling the HTHT approach—and addressing the existing bottlenecks that prevent its proliferation. Inspired in large part by the success of the ECA-led University and K-12 Consortia in Korea, the Global Consortium stands to benefit from further leveraging the lessons emerging from the experiences of the two consortia.

Despite its relative nascency, ECA’s HTHT University Consortium has revealed that, with proper facilitation, scalability of the HTHT approach is indeed achievable. Without doubt, the rapid expansion of the Consortium can be attributed to the sudden onset of the pandemic—leaving cities, universities, and schools desperate and eager to embrace new ways of teaching and learning. The progress made is noteworthy, nevertheless. Highlighting the advantage of an evident network effect, or economies of scale, the Consortium has grown to enjoy the participation of 16 universities, eight edtech companies, five cities, four schools, and two foundations in a span of less than 10 months following its launch. Beginning with just six universities and one vendor, the Consortium’s incorporation of three new global vendors, shortly thereafter, resulted in garnering the interest of more institutions—some of which requested for adaptive learning platforms in Korean. The introduction of four domestic vendors and the increased courseware options in Korean then further heightened the appeal for prospective institutions, leading the Consortium to extend its membership to 10 additional universities and colleges.

The experience of the HTHT K-12 Consortium also provides a valuable perspective in the establishment of the proposed Global Consortium. Following the lead of its higher education counterparts, the K-12 Consortium's first venture began in April of 2020 with the Seocho district of Seoul—part of the affluent Gangnam area yet replete with many students in disadvantaged and vulnerable contexts, particularly those low-income. Realizing the merit of personalized and adaptive modes of learning especially for these students, community youth centers in the district were keen to integrate the HTHT approach utilizing a Korean adaptive learning platform into their mentoring programs. In expanding the K-12 Consortium to other cities and regions, however, it quickly became evident that the participation of more and varied actors would be imperative. In contrast to universities with the capacity to pay access and usage fees, programs serving vulnerable or disadvantaged youth often rely on financial support from external organizations; hiring competent and trained personnel is also a prevailing challenge. As the convener and facilitator of the Consortium, ECA, therefore, initiated relationships with foundations and NGOs to secure funding, as well as with colleges to supply student mentors for these programs. Alongside enlarging its geographic presence, the K-12 Consortium has actively pursued partnerships with schools and centers for children of North Korean defectors and multi-ethnic Korean youth so as to extend its reach to more diverse populations. A promising partnership with a middle and high school for children of North Korean defectors has been particularly instructive in functioning as a model case for other nontraditional, alternative schools seeking to join the Consortium.

Notwithstanding HTHT's relative newcomer status on the block of learning modalities, its diffusion has been remarkably proactive and purposeful. Insights from Arizona State University's experience in implementing adaptive learning approaches have contributed to shaping the Vietnam prototype; the lessons learned from the Vietnam prototype, then, in turn, have motivated and catalyzed the operations of both the University and K-12 Consortia in Korea. Against this backdrop, the Education Commission and Education Commission Asia's proposed "HTHT for All" Global Consortium is uniquely situated to even further accelerate the testing of the HTHT approach in more varied contexts and subsequently strengthen the robustness of its evidence base. Through the preceding examples, the lesson most prominently brought to the fore is that of the need for all the relevant actors of the HTHT ecosystem (e.g., schools, universities, vendors, NGOs, foundations) to be appropriately represented in the Consortium. Notably, the Global Consortium's added capacity to invite the participation of multilateral development banks and organizations, as well as global companies in network and energy, will serve to reinforce and galvanize the ecosystem in overcoming the digital divide to deliver HTHT to all.

“HTHT for All” is a call to action. It is a call to action for a collective mobilization of efforts, talents, and funds from all facets of the ecosystem. At the same time, it is a response—and a responsibility—to redress the global community’s inaction, as yet, to produce a concerted plan and way forward that will adequately equip students far beyond the pandemic.

No longer can we afford to dismiss the learning crisis as simply an educational issue; no longer can we continue to address it as a purely educational endeavor. Given the known effects of education on individual and societal outcomes, the learning crisis—albeit most pressing and prominent as an educational issue today—will eventually resurface as a workforce issue, and ultimately, as an enduring challenge that impairs the overall economy. It is only a matter of time.

The wake-up call may be loud and commanding now, but it will not resound forever. The aftermath of failing to recognize it, however, will persist into the decades ahead—long after COVID-19 has abated. The anticipation of a return to normalcy cannot justify our present neglect and complacency.

While the attention to the learning crisis is long overdue, the opportunity is now. How—and how thoughtfully—we harness it will determine the strength and sustainability of its impact. As a global initiative that addresses the wake-up call—and the corresponding opportunity, “HTHT for All,” strives to be as inclusive as it is innovative—for true impact is realized only when the innovation is accessible and enjoyed by more than a privileged few.

Today, “HTHT for All” is an initial call to action, but through our collective vision, drive, and resolution, it can inspire a transformation of learning altogether for students and societies today, tomorrow, and for generations to come.