Global Science of Learning Network

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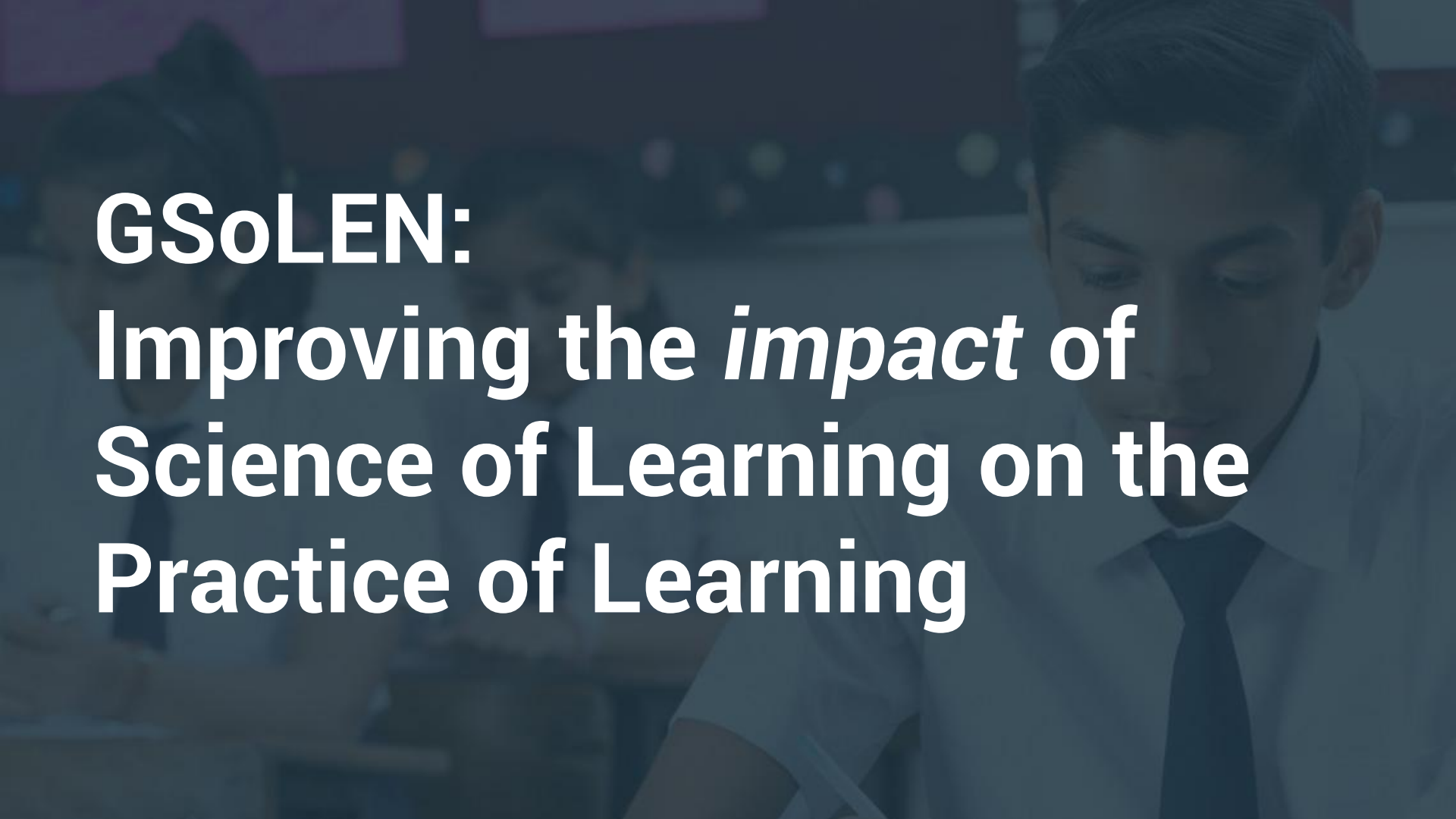

GSoLEN:
Improving the *impact* of Science of Learning on the Practice of Learning

Why We Exist: The Opportunity

There has never been a greater opportunity to accelerate and change the paradigm for lifelong learning globally.

- Great progress has been made by scientists, researchers, educators, philanthropists, and policymakers to maximize implementation of science-backed strategies that meet the learning needs of students:
    - Research institutions have made advancements in the multidisciplinary science of learning - we now have a basic science for education: a consolidation of human knowledge and learning which is underpinned by advances in neuroscience.
    - Numerous collaborative efforts have been initiated in the last decade, in the United States and other nations (Brazil, India) and internationally (OECD, UNESCO, the World Bank, International Mind Brain and Education Society) to better infuse the science of learning into education practice and policy.
- The shared experience of COVID-19 has inspired a renewed sense of urgency and worldwide commitment by citizens and leaders to not just restore our systems but to transform and improve.

We have the opportunity to catalyze this network of committed stakeholders to solve major problems of today and tomorrow at scale.

Why We Exist: The Challenge

Too many students around the world are not best-served by their education system, and vast inequities exist that have been exacerbated by COVID-19.

- We continue to lack sufficient wide-scale mechanisms for “knowledge brokering” to ensure that policymakers and educators can access, understand, and find relevance in SoL findings to their needs, challenges, and context.
- Researchers and scientists face constraints related to silos in their field, a lack of visibility into applications of their research, and input as well as feedback loops from end users to inform their inquiries.

Why We Exist: The Need

A more effective ecosystem and supporting mechanisms ("a better model") for implementing the next generation of science is needed – one that more effectively brings together research, translation, implementation, and evaluation – to achieve systems-change resulting in improved and more equitable outcomes for students around the world. The next phase of science and research needs to:

- Be *collaboratively designed* with policy and practice experts and foster close interactions and bi-directional feedback loops between these players
- Be increasingly focused on and informed by policy and practice *implementation* of SoL findings that improve the well-being, learning, and mastery of different groups of students.
- Cultivate pathways for the recruitment and development of a new generation of cross-disciplinary experts (e.g. scientists with background in education, and vice versa)
- Have its findings and strategies *rapidly disseminated and adapted* to many different cultures and societal contexts, ultimately maximizing understanding of "what works, for whom, when"

Over the past few years – in partnership with researchers, educators, policymakers, and philanthropists – we have been building a network-of-networks to support the development and advancement of this new model: the Global Science of Learning Education Network (GSoLEN).

Who We Serve: Our Value Proposition

Global Science of Learning Education Network

Our Constituents

- **Educator practitioners,** including systems leaders, who are working to implement programs focused on student and educator learning. GSoLEN offers them access to science-based strategies and a scientific community, and opportunities to inform future research and policy through participation in Focused Collaboratives in relevant areas.

- **Education technologists,** who are working to develop products that will impact student outcomes. GSoLEN offers them access to science-based strategies and a scientific community, and opportunities to inform future research and development through participation in Focused Collaboratives in areas relevant to their work.

- **Policymakers (and organizations supporting elected officials),** who need access to knowledge and information that is accessible and relevant to their needs, challenges, and context (which vary greatly around the world as well as within national borders, where we see vastly different cultures within neighborhood jurisdictions). By facilitating the expansion, learning and application of the SoL across national, cultural, and socio-economic differences in global context, GSoLEN offers policymakers in any context access to knowledge and information that is useful.

- **Scientists/Researchers,** who ultimately want their work to have an impact at scale but are often limited by silos and constraints within their field and the process of research translation. GSoLEN offers them a better means to having their work informed by the end user of community members, educators, and students – making it more relevant and applicable – as well as an opportunity to access other collaborators, funders, and exposure.

- **Funders,** who are working to impact key societal issues that can be informed and enhanced by science. GSoLEN offers them visibility into the best-of-what exists globally (in terms of practice as well as research and access to the scientific community) to support grantees., and partners with the funding community to identify worthwhile investment opportunities and facilitate necessary participation from all sectors of the SoL global community.

Our Approach

GSoLEN is a global network for wide-scale and effective implementation of Science of Learning in education. GSoLEN identifies immediate issues critical to equity and emerging from COVID-19, connects experts, and facilitates the creation of focused working groups to provide science of learning (SoL) applications and strategies that can be adapted in different nations and cultures.

- **Multi-stakeholder, within and across disciplines.** GSoLEN allows scientists, practitioners, policymakers, and philanthropists to work together more effectively - facilitating bi-directional feedback and influence between research and implementation - to share knowledge, develop multiple strategies for implementation, and validate the effectiveness of that implementation.

- **Global.** GSoLEN leverages the global shared experience of the COVID-19 pandemic as an unprecedented opportunity to expand, learn, and apply the science of learning across national, cultural, and socio-economic differences in global context.

- **Distributed and Scalable.** GSoLEN is a network-of-networks, that unifies and complements various SoL sectors, networks, and initiatives. The global network aims to strengthen the infrastructure that supports the implementation of well-delineated projects that steadily advance children's learning and well-being, and build upon it to catalyze and accelerate new opportunities for impact.

- **Continuously improving.** GSoLEN operates as a learning community, enhanced by agility-enabling technology, in which part of doing the work is also learning (and sharing with the field) how we collectively do this work better.

Our Core Initiatives

- **Network-Building.** GSoLEN assembles and engages an ecosystem of leaders globally working to address pressing issues of education by infusing Science of Learning into practice. GSoLEN fosters collaboration and builds community and connective tissue among the network.

- **Focused Collaboratives.** GSoLEN facilitates and supports the identification and self-organization of network members around key areas for investigating, applying and implementing the science of learning. Targeted areas range from from a problem of practice in the field (e.g. digital learning), to a policy issue (e.g. social media use for minors), to a funder-driven research inquiry (e.g. science of adolescent learning), to a field-building issue (e.g. knowledge brokering).

- **Bi-Directional Translation & Dissemination/Consolidation.** GSoLEN supports and accelerates implementation of science-backed practice by elevating and helping scale participants' work. This includes elevation and dissemination of research, as well as illuminating and bringing greater awareness to science-informed strategies for implementation and bright spots of new models and schools that are working in international context and can be learned from and made systemic.

- **Infrastructure.** GSoLEN fosters and supports a SoL community by providing the human and technology infrastructure for deep collaboration and communication necessary to elevate and apply scientific principles in education. GSoLEN is developing a Community Square technology platform that will support sharing among network participants, but also facilitate bi-directional feedback between scientists and implementers. A future ambition is to promote training and collaboration of SoL "brokers;" an intellectually agile, interdisciplinary group of scientific leaders and practitioners capable of engaging in both science and education.

Key Achievements

- **Network-Building.** GSoLEN has assembled an ecosystem of over 700 researchers, organizations, and leaders from over 60 countries. The network formed a 42-member international advisory group and has hosted five international virtual symposia with consistent attendance from nearly 400 stakeholders.

- **Action Collaboratives.** GSoLEN has instantiated working groups of researchers, philanthropists, scientists, and education leaders to share the best research and strategies for implementation among the group and developed materials shared broadly with the network and field at large. Members self-organized around four topics: Teacher Support, Remote & Digital Learning, Knowledge Brokering, and SEL.

- **Bi-Directional Translation & Dissemination/Consolidation.** Through the working groups and webinars, GSoLEN has elevated and disseminated work of network members. GSoLEN has developed, hosted, and disseminated regular webinars, email updates, and newsletters with and for the network, and experimented with new methods such as a presentation via Facebook on key elements in teacher student relationships and a Twitter town hall on adopting a modern classroom schedule

- **Infrastructure.** In collaboration and as a network partner with the Center for Applied Cognitive Science at the University of Texas and the Temporal Dynamics Learning Center at the University of California San Diego, GSoLEN received a planning grant from the US National Science Foundation to write a grant addressing critical gaps in the knowledge of how learning proceeds in different cultures, beginning with self-regulation. Together, we are planning an international sharing platform and data-grid infrastructure to meet the needs of our communities of users and to guide large-scale, data-driven innovation aligned to the science of learning.

Upcoming Priority Objectives

Global Science of Learning Education Network

- **Network-Building.** Expand membership to >1,000 participants. Deepen engagement via network events and regular communications. Includes monthly virtual events (e.g. the Learning to Learn Webinar and Knowledge Brokering Town Hall in Q4 2022), quarterly newsletters, network engagement surveys, and facilitation of collaborative funding opportunities.

- **Action Collaboratives.** Deepen and expand Focused Collaboratives currently underway, and facilitate the development and launch of 2-4 new Focused Collaboratives, all with the throughline of Knowledge Brokering.

- **Bi-Directional Translation & Dissemination/Consolidation.** Develop a series of resources for GSoLEN's participants including outputs from the Focused Collaboratives such as Knowledge Brokering Video Series (Q4 2022), synthesis of exemplary learning models, SoL consensus statements, and science-backed strategies globally. Translate Virtual Events and Publications into language translation other than English (starting with Spanish & Mandarin as requested by the network, and adding as demand builds).

- **Infrastructure.** Build a proof-of-concept of a first-of-its-kind large-scale cyber infrastructure platform, incorporating consultation and co-design with experts (e.g. submit grant for initial prototype of Community Square for Self-Regulation Q4 2022).

- **Administration.** Hire a full-time Executive Director (Q4 2022) and develop 3 year Operating Plan.

*Through 2023 noting Q4 Priorities.