Memo To: Global Science of Learning Education Network
From: Bob Wise, GSoLEN Coordinator and Andrea Chiba, GSoLEN Co-Founder
Re: Update for Winter 2021

Brief Network Overview

Last March, 1.5 billion students and 66 million teachers were suddenly torn out of their classrooms. In a GSoLEN videoconference, the OECD's Andreas Schleicher noted the responses---differing and similar--- in each part of the world created a global laboratory for observing what was working and developing approaches for transforming education as the pandemic receded. With vaccines now being administered, education and policy leaders across the U.S. and the globe are moving from performing systems triage to planning what learning will look like as in-person classes resume. The GSoLEN network identifies immediate issues critical to equity and emerging from COVID-19, connects experts, and creates working groups to provide science of learning (SoL) applications and strategies that can be adapted in different nations and cultures.

Progress Made by GSoLEN

Expanding Network

During 2020, the GSoLEN network has grown steadily and its 400 members represent a broad cross-section of international scientists, education leaders and practitioners, policy experts, philanthropists, and education technology companies from 26 countries: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Denmark, Finland, France, Germany, India, Iran, Israel, Italy, Kenya, Mexico, the Netherlands, Nigeria, Spain, Qatar, Uganda, United Kingdom, United States, and Zaire. Members bring to GSoLEN their own networks that engage in various ways to share and support SoL- informed activities within the network and across the world.

The network has formed a 42 member international advisory group and an initial steering committee comprised of leaders from Argentina, Brazil, China, and the United States. With participation from the advisory group, GSoLEN is developing this strategic plan while addressing tactical issues such as global partnerships, communication, fundraising, and topic-focused working groups.

Conducting Global Videoconferences and Building Partnership

Global Science of Learning Education Network

Since its inception, GSoLEN has conducted four international webinars on specific topics and played a major role in another reaching an audience of 20,000. GSoLEN and its members participate in forums with the global community and collaborate closely with numerous global partners and other organizations to plan events and share resources. Global videoconferences have involved numerous international organizations and their representatives including International Mind, Brain, Education Society (IMBES), Forum for World Education (FWE), World Education Frontiers Forum, OECD, and UNESCO.

Forming Working Groups for Key Issues

The steering committee has also collected and analyzed data from network participants about their interests for deep exploration. The data resulted in four key topic areas of interest for the network to explore: teacher support, digital learning, social emotional learning, and parent and community engagement.

The first working group, the Teacher Support Network (TSN), began in 2020 to maximize the practical knowledge of the science of learning for teachers and educators across nations and cultures. The TSN currently has a team of experts who have synthesized the science on "relationship," especially stemming from COVID-19, and are working on relevant working papers and videos to make this knowledge readily available to teacher preparation and in-service programs around the world.

The Digital Learning working group during is being launched in April with a series of webinars about how COVID-19 has affected the science of learning for technology enhanced learning. How People Learn II; Learners, Contexts, and Cultures, published in 2018 by the US National Academies of Sciences, Engineering, and Medicine, will provide an important foundation for comparison for both confirmation and changes of science of learning application resulting from the COVID experience.

Additionally, GSoLEN will begin hosting discussion groups on

specific topics that are requested. Just make a request, and GSoLEN will put out a global call for anyone else interested in exploring the research and application.

Finalizing Strategic Plan and 2021-22 Work Plan

Reflecting greatly increased activities and partnerships, GSoLEN has undertaken a strategic planning process and the development of a work plan to cover 2021-22. A committee of 8 international leaders has completed the first draft which has been sent to the Advisory Group for further refinement and will be shared with the overall membership.



Upgrading Website and Building a "Community Square" Infrastructure

Based at the University of California San Diego (UCSD), the GSoLEN website (https://tdlc.ucsd.edu/GSLN/overview.html) hosts news, highlights from the network, a library of resources, recordings of webinars, and upcoming events. To support many more organizations, researchers, and educators, GSoLEN has begun a major website upgrade. GSoLEN cofounder Andrea Chiba, Ph.D, has created a partnership with the University of California San Diego (UCSD) Qualcomm Institute and the Halicioglu Data Science Institute to begin hardware and software integration planning for a science of learning "Community Square" to support rapid sharing of information, ideas, and resources among network participants. The redesign will provide designated areas for sharing, collaboration, and for working groups addressing key topics and issues. Policymaking experts, philanthropists, and other influencers and actors will share, learn, and apply science to their work. Using the

Community Square infrastructure, the necessary information, strategies, and actions for implementation will result in much more rapid impact on systems of learning that produce greater success in education around the globe.

Developing Professional Support

GSoLEN has been able to secure quality support in fast growing areas. Winsome Waite, Ph.D, is providing invaluable academic and research engagement, including being the liaison with the fast-growing working groups. Other volunteers and contractors are providing increased involvement in the website redesign, creation of the Community Square, and expanding the social media presence. Dr. Chiba has been able to secure intern assistance for GSoLEN activities.

Areas for Additional Effort

- The network needs to reach out to the education community in additional countries and regions to ensure a more complete representation of diverse leaders representing science and research, policy, practice, philanthropy, technology, and cross sector agencies and organizations. GSoLEN seeks to increase participation from Africa and Latin America.
- Meeting the requests that are coming in for additional working groups---early childhood development, learning disabilities, and conditions for transformational leadership---to connect science of learning to building learning systems
- A fast-growing need is being able to provide audio and written translation in different languages.
- GSoLEN needs to accelerate one of its objectives to develop a program for creating and training a cadre of science of learning "brokers" who are able to be bridges between researchers, educators, policy makers, and the public.
- GSoLEN must expand its fundraising base beyond the existing sponsors and funders.

Network Strategy for 2021-22

GSoLEN strategy in the upcoming year is to take advantage of the worldwide transition from COVID triage to actual transformation of education and learning. GSoLEN will continue to focus on developing post-COVID-19 response through the working groups, the network information sharing, and the development of an infrastructure to support maximum efficiency. Experts will continue to deliver timely science of learning knowledge through our videoconferences, webinars, virtual institutes, and discussion groups. GSoLEN will support other global and national networks and organizations in disseminating information, tools, and resources.

The network will continue to host international virtual seminars to educate the science of learning community and educators and to share information across nations, particularly as information becomes available with respect to various nations' return to school. Also underway is the design of large-scale cyberinfrastructure to support international collaboration amongst stakeholders and to strengthen organic network growth around topics of interest to GSoLEN participants. A program will also be designed 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 to continually meet the changing needs of each generation of learners.

GSoLEN will also be exploring whether to create a virtual institute that would be the learning and synthesis hub for the global network. It can be the academic repository for sharing information and create opportunities for fellowships.

Financial Status

With extensive volunteer and in-kind assistance, GSoLEN has been able to mount the current level of operations for almost \$175,000 per year. Three foundations have provide this basic support.

To meet the increasing need for information from education leaders and researchers as the world's school systems make critical decisions about meeting heightened learning and job training needs, GSoLEN should raise an additional \$200,000 during the next year. This would enable at least one senior fellow working full time as well as expanding the part time contractors' work for current initiatives. A full buildout of the envisioned Community Square infrastructure will require a much greater amount, and this will be determined as the infrastructure is built in phases.

Goals of GSoLEN

The goals of GSoLEN are to:

- 1. Curate and codify science of learning findings that can be applied to global education policy and practice.
- 2. Develop a cadre of science of learning specialists to act as "brokers" between scientists, researchers, and leaders of policy and practice who seek to apply SoL to their work.
- 3. Build a team of translators to support diffusion of SoL in various languages in documents and communication initiatives.
- 4. Identify and support essential areas of work for the network to address the impact of COVID 19.
- 5. Promote strong partnerships and collaboration among organizations, industry, and research institutions to ensure the next phase of science and research is collaboratively designed with experts and practitioners, including leaders of policy, education, cross sector agencies, and philanthropy.
- 6. Strengthen knowledge sharing and implementation practices for science of learning principles through a network of networks model.
- 7. Connect with world economic organizations and networks to continually adapt our learning goals to the changing demands for the workforce.
- 8. Partner with the philanthropic community, private sector, and government agencies to identify worthwhile investment opportunities, including research, to develop a more integrated and informed global infrastructure that supports GSoLEN members of countries across the world.
- 9. Develop a virtual institute that can be the learning and synthesizing hub that GSoLEN participants use to advance learning in their nations and regions.