GLOBAL CONVERGENCE ON THE SCIENCE OF LEARNING



Collaboration Guidance

INSTRUCTIONS FOR SPEAKERS AND LISTENERS:

SPEAKERS: Please keep to the time given in your session. For showcase presentations, this will be 12 minutes. To insure all speakers have a chance to present and that there is time for community discussion session moderators will keep speakers to these time limits. Please remember that our audience includes a global community of scientists, foundation leaders and policy makers. Please take care to avoid the use of jargon to maximize everyone's accessibility to the presentations.

LISTENERS: We will have 3 minutes for clarification questions after each showcase presentation. Broader questions, comments or critiques will be reserved for the larger discussion section after all showcase talks.

SUGGESTIONS FOR MODERATORS OF GROUP DISCUSSIONS AND PARTICIPANTS:

Bringing together global communities of scientists with foundation leaders and policy makers provides an enormous opportunity for generating ideas and creating a community prepared to move the Science of Learning forward. As such, a great deal of our meeting is dedicated to group discussions.

Discussion groups can have different dynamics. A moderator with professional experience might be able to both capture fruitful ideas and direct the discussion in a fruitful direction to effectively gather input from all members of the group we seek to hear all voices. However, it is also common to use a few tools to facilitate idea generation, sharing, and discussion. These tools and related procedures can help focus idea generation and discussion, selecting and building upon the best ideas. These tools will be available to each group, should you choose to use them.

TOOLS: Large post-it notes for the walls; small multi-colored post-it notes for individuals; lots of differently-colored markers

Whether one chooses to use the tools or not, effective discussions can be achieved, by setting a structured timeline (you may want to appoint a timekeeper) for the discussion that iterates between directed idea generation, small group discussion of ideas and promotion of the most promising ideas, ultimately coming back together to share ideas in a large group. How exactly you do this is up to the moderator, but the method outlined in example below is a commonly used and fairly effective method for capturing ideas to seemingly thorny problems. It is vital that all work be recorded. Please assign someone in your group to take notes of discussions in a google doc. If you use the post-it tools, the note taker should also take pictures of all large and small notes generated by the group.

EXAMPLE--TAKE A QUESTION FROM THE FIRST BREAKOUT SESSION:

How can we frame research questions in the Science of Learning that are particularly amenable for convergent research?

[5 minutes] Introduce by reminding the group of NSF's definition of Convergence here (read the first paragraph of the "What is Convergence?" section. Invite others to read further if they wish.

https://www.nsf.gov/od/oia/convergence/index.jsp

[5 minutes] Each person should name some research questions in the Science of Learning that engage a broad array of other science programs and disciplines and incorporate these perspectives into something fundamentally different. The convergent research perspective may also offer unique translational opportunities not obvious previously. Paste each person's top two (or 3) on the wall near the large post-it.

[5 minutes] Identify commonalities among the convergent research ideas as a large group. Write these down on a large post-it.

[10 minutes] With these commonalities in mind, break the larger group into 2 groups. Task the first group with identifying advantages to the sorts of transdisciplinary collaboration suggested by the examples; Task the second group with identifying the challenges with collaboration in this sort of convergence research. Use the same method of small post-its to get all input and identify the top 3.

[10 minutes] Come back together in the larger group and have each group present their top 3 and clarify any questions surrounding each. Note any clarifications on the "Advantages and Challenges" post-it.

[5 minutes] Questions? Concerns? Critiques? If not move on. If yes, note on the large post-it.

[10 minutes] Break into 3 groups. Each has same task. How can we use the advantages to advance our mutual research interests? How can we best mitigate the challenges? Are there any other almost-advantages that could be leveraged to address the challenges if we invested in a particular area of the Science of Learning? Be prepared to share 2-3 ideas.

[10 minutes] Come back together as a large group to share ways to best use advantages and mitigate challenges. Be sure to wrap up in last 5 minutes asking for other ideas that bubbled up.

[Clean-up] Take photos of each of the large post-its for use in large group reporting session and for potential write-up later.

OTHER METHODS include writing a prompt that helps break apart the larger question and giving everyone 2-3 minutes to respond without interruption. Break-up into smaller groups of 4-8 and discuss responses. Select best 2 or 3 and report back in a manner similar to above.