Reach

Global Coverage

Question option 1: Diversify participation

Reach out to people from underrepresented groups and ask them to join. Make clear what the effort is and how much time commitment can be expected, as well as the benefits.

Be aware of Tokenism

+1

+1

go beyond twitter & mailing lists

+1

+3

Offer more participation options than being a coauthor on publication. For instance public outreach, producing education material, use the arts as a form of communication.

Examples?

E.g. advertise project on SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science)

Geography dictates demographic

Advertise in different languages.

How to engage non-native English speakers or even non-English speakers?

Diversity in advertisement/engagement from the start

Exhibition events during conferences and outreach

Skills (field/data/other?)

targeted invitations through regional organizations -- African, Asian limnology, biogeochem, microbial ecol orgs

We must reach out to Native American (native every country) groups. Reach out to them through strategic partnerships

Target gaps in participation from current demographics

Must consider other commitments (e.g. family) that create hurdles for participation. Identify ways to adjust meetings. Make sure everyone is comfortable with interruptions, for example. Talk about these challenges.

Society for Advancement of Chicanos/Hispanics and Native Americans in Science

Explore more channels to advertise this event to reach out to underrepresented groups

engaging citizen science programs

+1

Very interesting idea

Create groups of ambassadors who can reach out to colleagues in other countries to increase sampling and intellectual diversity

Outreach & Community

Development seminar based projects that engage students from multiple institutions (e.g. geographic, institution types).

Encourage undergraduate/graduate students to lead communication efforts

+1

What are other networks are we part of that may have other who are interested? E.g. do you have a network that includes minority serving institutions?

Asynchronous events might help improve the participation of the underrepresented groups.

Students engagement

Community engagement (those who collected the data)

Yes, to student lead efforts and horizontal leadership designs

+1

Career Coverage

Question option 2: Ensure that all voices are heard

Code of Conduct

Make sure that not only one person dominates the conversation. Casual regular reminders if anyone has a different opinion/view point/idea to share to the group.

Tracking individual contributions would be better than small groups to ensure no ideas are cut-off prematurely.

+1

Ask questions and encourage feedback.

Start with and revisit code of conduct to reinforce positive collaboration from start and throughout process. Set expectations and keep accountable to them.

Ensure that everyone on the project agrees that this is needed and a priority, and isn't just the purview of a designated subset/committee. Code of Conduct helps with this expectation.

Language

Language break-out rooms? Maybe create groups of people that speak the same language to clarify questions etc.?

It seems this is English; options for translating language.

utilize online forum that allows multiple languages to be used/translated

Agree with this one! Hard to get participation from non-English speaking nations otherwise, but this is a real challenge to tackle!

Build trust

Take time to build supportive group atmosphere.

have social events to know more about each other?

Do more of these same workshop-style meetings to gather feedback, just like we are doing right now

Build a small group to stay with for the duration of our contribution to build relationships/trust

Cocktail/social science chats

Medium

+1

+1

Allow silent contributions (e.g., jamboard/google doc'ing, async time to contribute)

Multiple avenues of communication (verbal, written, visual)

Flexibility in time of when group discussions happen

Have meetings accomodating different time zones.

Leave open documents for contributions later

Provide alternative modes of communication that emphasize accessibility including increasing discussion times

Asynchronous contribution

What questions are we not asking?

Citizen science

Is there a role for "non-scientist" participation? Or observation?

Conduct Issues and Accountability

What will happen if there is negative conduct (either micro or macro in extent)? What process will there be to address this that is equitable and just?

If a code of conduct is used, what will the the process for being accountable to it?

Question option 3: Keep people engaged throughout the project

Coordination

+1

Different stages of paper development

identify leaders for leading the major ideas and efforts

don't be afraid to have a core group of "leaders"

+1 Sometimes useful to have a section leader that wrangles a few people to develop/polish content

Once we have a tentative outline, we can ask each participant to indicate in which section they would like to contribute. Then we can have a leader for each sub-group

+1

Provide templates for paper sections to give consistency

sample diverse ideas first, then some grouping / classification of ideas needs to happen, in order t have a paper with sharp ideas.

Clear Expectations: Establish and revisit clear expectations throughout project. find ways to keep contributors accountable for those expectations.

set milestones

grab the lowest hanging fruit; set priorities

And deadlines

separate administrative from data analysis/writing tasks

Divide people into groups based on interest. Proceed as multiple small groups.

detailed and specific tasks, divide larger tasks into smaller easier tasks for those doing this on voluntary basis

if asking for volunteers for tasks, predict the amount of time it will take to complete the tasks and communicate this

Give people the opportunity to be creative and try out new analyses which advance science and help people feel connected to the project

Provide the opportunity to gather in groups according to the questions we are interested in

Plan a workshop or webinar series where presentations can be recorded and posted or given in real-tim

Seek feedback from participants often to assess engagement and address issues/hurdles for engagement.

Chat board where people post draft figures for discussion

+2

Diversify the means of communications so everyone can find its best way to engage with the project and team

Have different people lead different manuscripts, with ancillary contributions from others, so everyone is engaged with several related projects that reinforce each other.

Slack channel for continuous conversation.

Send emails regularly to summarise what have been done and what is next

+1 - this could be a special issue of a journal?

setup mailing list

Provide options for communication other than fixed-time meetings.

Encourage ways for people to talk to each other about their interests in this project.

GatherTown hangouts - regular times and/or spontaneous

Communication methods

DATA

+2

+1

Make data & metadata usable

Prepare tutorials to learn about data/code usage

read-me files to explain data organization/code usage

+2

Share simple analysis codes to allow anyone play/learn from the data

data hack-a-thon for squeezing data

Reproducible code for analysis and figure generation that allows people to learn new techniques from experts.

Post/share underlying data (spreadsheets, codes/scripts, inputs/outputs), not just the resulting plots

Develop subsets of data that are preprocessed in ways to make them more accessible and usable

data notebooks (github, jupyter?)

Acknowledge failed data analysis

Questions option 4: Tracking progress

Brake into small writing groups and designate one "leader" for each topic. The leader of each section can then more easily interact together to share progress.

+2

To have the organized (monthly?) group meeting will be a good way to keep the project on track.

Can we use a strategy to ICON-FAIR methodology?

?? Please see: https://eos.org/editors-vox/special-collection-on-open-collaboration-across-geosciences

Have group leaders that can help guide the group through process and hitting milestones

Set up the specific deadlines/timelines for each step (i.e., data collection, data analyses, writing...)

Using some project management tools, like Notion, get everyone involved and acknowledged the project progress and what contribution they can make

Set up shared google doc(s) to track progress and group discussions

Two tools that might be of help to track progress could be Trello and Slack.

Have a sort of project scheduling visual (like a Gantt chart) so that everyone can keep track of the timeline

Github insights and issues for script development

Establish management, responsibility tiers, and deadlines

Set up different topics/sections, and have folks in a small group to work together on a specific topic/section

+6

yes, best approach based on my past experience

For each topic/section, establish roles that individuals can fill (e.g., data aggregation, analysis, writing, literature review, etc) .

+2

Deadlines are good motivator. E.g. Please comment/develop content for the Outline by May XX. Then check in meeting after the deadline

What questions are we not asking?

What happens when folks are not accountable for tasks/actions? Will their be a clear procedure/process?

Conflict resolution – how to handle opposing ideas or ideas group members may not be comfortable with?

Intercultural communication

These are both addressable with a code of conduct/collaboration agreement.

Abstracts and articles accompanying paper in multiple languages