

IoS Integration Workshop @ Tvärminne, Finland 2023

Suggested activities and guidelines for discussion leaders on running the sessions

Suggestions for promoting the participation of all attendees

Each group has 8 or 9 participants: an invited discussion leader, two IoS members, and 5 - 6 group members who were selected from an application pool. Importantly, the selection committee for this workshop aimed to maximise participant diversity across multiple axes: research approaches employed, taxonomic group researched, evolutionary scales (micro / macro) considered, and demographic factors (e.g., career stage, country of origin). Because of both the relatively large size of the group & the diversity of its members, discussion leaders will need to be thoughtful in how to engage their groups.

Here are ideas on activities that can be used to help facilitate open conversation. These have been borrowed from well-defined collaborative writing & active learning approaches and we propose that discussion leaders together with IOS members will structure each session using these approaches. Expectations can be set before each session in terms of the goals of the session, but also in terms of inclusive participation.

- **Activities to develop and expand ideas and write an outline of the section (mostly sessions 2 & 3 but can apply to other sessions)**
 - When initiating a discussion point, take enough time to make sure everyone has understood (language barrier), has had time to think about the point, and had the opportunity to express some ideas.
 - Encourage independent generation of ideas – e.g., silent whiteboarding on a chalkboard or [jamboard](#) or independent writing – so that people can share their ideas before groupthink ensues
 - Consider splitting the group up into pairs (or trios) and have them discuss challenges & solutions in the group - have pairs then report back to full group about possible edits to the list
 - To give everyone a formal role during each session, you can designate a time keeper and a note taker per session to record ideas in the shared google doc, and rotate these roles between sessions. If the group finds it helpful, give a formal [role](#) to each group member - e.g., initiator (someone who asks questions), time keeper (someone who tracks the time), clarifier (someone who asks clarifying questions).
 - You can also use brainstorming to collect ideas where one person is assigned to make a mindmap and everyone contributes ideas:
<https://www.mindtools.com/acv0de1/brainstorming>
- **Activities to write an outline of the section**
 - Review what has been discussed so far, then discuss in small groups for five minutes to fill in gaps and develop joint questions
 - Consider creating a debate-like atmosphere for discussion of potential solutions
 - Assign participants to different solutions and they have to argue for why the solution is the “right” one or the “wrong” one

- If you feel you have enough time for this during one session, you could use a “jigsaw” approach to review the literature in the field - give each participant ~20 - 30 minutes to review 1 paper (either predetermined or self-identified) and have them report back key points to the group
- Organize group discussion around more tangible questions; consider answering these in a round-table format where everyone is forced to give an explicit opinion or pass to ensure all voices are heard
 - “What figure, if any, would help us illustrate our main points?”
 - “What sort of informal or formal meta-analysis, if any, would help us illustrate our main points?”
 - “What theory is relevant to our arguments?”
 - “Which key papers do we need to cite?”
 - “Do our arguments show any taxonomic bias?”
 - “Do our arguments consider both micro- and macro-level patterns?”
 - “Are there any natural subsections in our section, and if so, what are they and how long should they be?”
 - “Which of the terms we use are jargon and need to be defined?”
- Keep track of main discussion points during the activity, write down an outline for your section
- **Activities to draft section including figures (sessions 5 & 6)**
 - Try some collaborative writing techniques
 - One person talks, the other person says nothing and types (they can choose to edit what the person says lightly, or they can just transcribe)
 - Two or more people work simultaneously on a section in a GoogleDoc (aim to pair people across career stages)
 - Or, do what is more standard in our field: divide the section into subsections & figures and assign to individuals
 - Engage in a group discussion on “muddy points” of the section - what are unstated assumptions of our text? What are we assuming people know? Where is our logic unclear?
 - Consider doing this in an anonymous way (jamboard or similar) so that people might feel more comfortable offering dissenting opinions
- **Activities to review and revise (sessions 7 & 9)**
 - Try some collaborative revising techniques
 - Put the draft up on a screen and discuss it sentence-by-sentence
 - Assign subsections of the text your group has written to a pair of people within your group, and exchange subsections so that each pair discusses each subsection. This activity is not meant to act between the five theme groups, but within one group.

Suggestions for reporting intermediate progress during the workshop

- **Prioritize junior scientists** (group of two) to report progress in joint sessions (sessions 4 and 10) if they feel like doing it (start with offering this option, assess if they feel comfortable in doing it, and if not, choose another option combining one junior/one more senior for

example); there are two sessions with reporting, so four junior scientists could be involved. DLs, IOS members and the other participants will help prepare these reports.

- To facilitate discussions across topics and give consistency in the way that topics are structured, **standardize as much as possible the way progress is reported** across groups, following these possible guidelines:

◆ *Discussion leaders' preparatory document (shared before the workshop):*

Provide a short document (in the shared folder 'preparatory reading') with the key challenges that you have identified about your topic. The main purpose is to get people thinking about the topic beforehand. Please follow this common approach of formulating the challenges as questions because questions naturally invite discussion and make it easier for people to contribute. The list of challenges does not need to be exhaustive (max 3-5) - it is actually better if not all your ideas are presented so that participants can expand this list of challenges during the workshop with your help. The document could be structured as follows:

- A paragraph with a general description of the topic
- A few major challenges (3 -5) in the topic area formulated as questions, with 2 or 3 clarifying sentences if needed

◆ *Discussion leaders' introductory presentations (session 1, joint):*

The 10-minute presentations by the discussion leaders planned to kick start the workshop. They should also be based on these core challenges/questions, perhaps hinting at some possible ways forward, but leaving plenty of space to workshop each topic.

◆ *Group progress report 1 (session 4, joint):*

The 5-minute progress report should be given by two group members for each group. Discussion leaders should prioritize junior scientists for this task. This first progress report will focus on presenting the current outline for each topic in the form of the working document. The outline presented should contain bullet points of the different ideas gathered for each group organised into two brief sections : (1) questions/challenges and (2) solutions.

◆ *Group progress report 2 (session 10, joint):*

The 5-minute progress report should be given by two group members for each group. Discussion leaders should prioritize junior scientists for this task. This second progress report will focus on reporting the first draft (text, illustrations) of each section and any points to consider in the final draft. Each group will show their progress in the working document.