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Toward better argument for clearer communication and more effective IA

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The following is a draft which will be expanded after the conference has taken place

Abstract
IA is not effective if not well communicated. IA documents are noted for being long and difficult to understand. Tools called Organized Reasoning™ were presented to over 1400 IA practitioners via workshops from IAIA, its western and northern Canada affiliate, the Environment Institute of Australia and New Zealand, and 16 organizations. The tools focus on arguments-reasons arranged to lead to conclusions directed to a target audience. That is, they help authors organize data to explicitly link evidence to specific conclusions. The goal is to make documents more focused and easier for practitioners to create, and shorter and more coherent for readers to follow.

There are steps and tools for building clear arguments. There are separate tools for presenting arguments by using specific structural and linking features in documents. Feedback after training has been very positive and use of some tools is widespread, but deep application has been limited. How can we lead to more effective practice? We've helped people use different follow-up steps, based on theories of change, and on their priorities. At increasingly detailed scales, these have included explicitly altering organizational priorities to include OR, promoting the tools to clients and other agencies, providing additional training to expand use within an organization, and offering coaching on specific applications from letters and information requests to different sections of IAs. We discuss efforts to lead and support implementation with examples from government agencies and the private sector in Canada and Australia.

What is Organized Reasoning™

Organized Reasoning™ (OR) is a process, and a set of tools, for building strong arguments and sharing them in writing. It is a compendium of ideas and tools from a variety of sources. While there are good ideas about how to prepare and share arguments from the field of philosophy, from ancient Greece to today, philosophy is not the only field that seriously considers human reasoning. Cognitive psychology has made great strides in the last fifty years and has new ideas about how people reason, learn reasoning and understand ideas, all of which are relevant to argument. But the philosophers and psychologists do not share the same literature and do not discuss the same topics with the same language. Likewise, there are good ideas about argument and communication in the fields of English Composition, formal debate (called Forensics), Law and Speech Communication. But those ideas are not all the same, and are not

always known across those different fields. Hence there is no one place to find the best ideas about creating and writing arguments. Organized Reasoning™ draws together a selection of the most useful tools from multiple fields, and packages them in a way to be useful to technical professionals. And in this case, especially to support the field of Impact Assessment.

The Goal: Sharing skills for Better Argument via Sponsored Workshops

Since this compendium of tools is not taught at university (except the university where GB taught for 15 years), the prime means to share them is the professional workshop. We created a short (13 hour) package of ideas in a format to reach working professionals. It has been offered by three organization to their members or non-members. The Environment Institute of Australia and New Zealand has offered the most workshops, 45 as of May 2023. The Western and Northern Affiliate of IAIA has held 24 workshops and IAIA international has sponsored 7 training courses. All organizations have had both live training and, since Covid, mostly online courses. Another 30 training sessions have been provided to different government and corporate organizations.

Efforts to help effective learning: Theories of Change

An older model of teaching and learning, widely discredited but still widely practiced, can be called variously 'lecturing', 'direct teaching' or the 'sage on the stage' approach. Simplifying, the principle is that providing facts leads to their acquisition and use. While having some effectiveness with simpler factual information, this approach was never very effective for more sophisticated understanding of conceptual matters. It had very little influence on learning intellectual skills, that is, the ability to do things. Organized Reasoning™ involves some knowledge of principles and practices and some skills in applying them to written practice in different contexts. But it is primarily about skills. We adopted more current teaching models to deliver it.

The design and implementation of the training and follow up activities represents our effort to move people "Toward better argument for clearer communication and more effective IA"

The processes undertaken to help share and implement OR can be divided into two groups: those steps provided by the process / instructors and those steps suggested to or undertaken by the participants.

The presentations were called workshops because they involve a substantial amount of interaction among participants and practice with ideas and tools provided. The content has been continuously refined over ten years. A functionally complete core set of ideas and practices is provided to participants, with modest practice and feedback. Written support (handout) materials provide a route forward to further implementation and improved practice, with steps to guide self-directed improvement. (In more technical terms, the teaching and

learning model is designed to build 'metacognitive self-regulating practice' of building arguments and communicating them in writing.)

To mention some details, the workshops provide practice in a directed set of skills that can be implemented at various levels of detail. We suggest three levels of increasing detail but individuals can customize their use of tools as they see fit. We provide examples or practice with several steps in the creation of arguments. We also work through building arguments in writing with examples of realistic situations in environmental and assessment practice, from baseline studies, to Information Requests / Requests for Further Information and letters rebutting a counterargument. We provide guidelines for implementation as well as a 'Learning Portfolio' approach to planning, implementing and monitoring personal performance.

Individuals and organizations, after the training, have several routes towards implementation. The most immediate is that any individual can apply the knowledge and skills to their own efforts or projects, independent of other people. However we encourage small groups or larger teams or whole organizations to embark on new practices together. In some cases organizations have been able to change their institutional approach / rules /templates to support newer practices

Examples from Canada: Government agencies

Steps and procedures applied by the Project Assessment Branch of the Government of the Northwest Territories.

Steps and procedures applied by the Yukon Environmental and Socio-economic Assessment Branch.

Examples from Australia: Consulting company, corporation

Steps and procedures applied by JBS&G consulting company.

Steps and procedures applied by mining company.

Literature Cited

To be added