Developing Capacity for Argument in Support of IA Goals and Decisions

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Today’s Topics

Challenge: Arguments are everywhere in IAs but are often presented poorly.

Response: Create an approach for building better arguments, and

Develop capacity with those tools
What is an Argument?

• An argument involves:
  – A set of reasons
  – Leading to a conclusion
  – Intended for a particular audience

Offering **Reasons** leading to a **Conclusion** for an **Audience**

The argument must be presented to
Simple Arguments

• All developments in this area have had difficulties avoiding wetland damage so this mine will have wetland issues too.

• Careful advance design is the most effective response. It is inexpensive and popular with stakeholders.

• Frog populations need to be protected so wetland preservation should be required.
Argument is Pervasive in Technical Work including IA

• Argument is reasoning that leads to conclusions
  – Fact arguments support factual conclusions.
    • Baseline studies and impact predictions are fact arguments.
  – Evaluation arguments support conclusions of ‘worth.’
    • Significance arguments are evaluation arguments.
  – Recommendation arguments are conclusions about what to do.
    • The results of screening, scoping, mitigation and restoration phases are usually recommendation arguments.
Technical Argument is about Careful Persuasion

• Arguments are only offered in situations that are not certain, in which something is unsettled or in some way contested.

• Therefore the author must show the evidence and the reasoning to convince the audience that the conclusion offered is worthy for them to accept.
Arguments and Decisions

• Arguments result in decisions.

• Decisions result from reasoning which, when organized, is an argument.

• The end point, the decision, usually gets more attention.

• Without sound argument, sound decisions are not likely.
But Argument is Often Weak

• The arguments in professional documents are often unclear. Long assessment documents are particularly complex and demanding.

• Many steps of the arguments from data to evidence and reasoning to conclusion are missing.

• Definitions, and the criteria of ‘values,’ are often missing: not stated and often not even thought of.

• Even when present, key ideas can be buried in text and not understood by readers.
Therefore: Organized Reasoning™
Tools for Stronger Argument & Clearer Writing

• There are guidelines for building arguments from Aristotle in ancient Greece to modern cognitive psychology.

• Many good ideas are in different fields, not known to each other, and not available in one place.

• Therefore, I created a package of the most useful parts. Thus → Organized Reasoning™.
Therefore: Organized Reasoning™ for IA Practitioners

• Our goal is to present data and conclusions as transparent and clear argument,

• convincing our audiences why the information and analysis are reliable and the conclusions reasonable.
So, Workshops Happen
Reminder: What People Often Provide

Conclusion A

Reason 1

Evidence 3

Reason 3

Evidence 3

Reason 5

Evidence 5

Conclusion D

Reason 7

Conclusion C

Reason 5
A Key Point

• Much of the ‘content’ of argument (the evidence and justification) is from a ‘field’. It is biology, hydrology, health, economics, rights, culture, etc.

• There are ‘field-dependent’ standards for how the evidence is used, judged, etc. That is your profession. Use those ideas and approaches.

• Our discussion about argument deals with tools that apply to every argument. They don’t depend on the field.
Therefore
Packaging Professional Tools

Logical Structure

Structured Presentation

Create your Argument

Revise & Package it for your Audience
Logical Structure

Five major elements:

- Definition and Features of Argument
- Words and Meaning
- Hierarchy and Extended Arguments
- Strong Arguments
- Three Types of Argument
  - Fact, Evaluation and Recommendation
Structured Presentation

Three major elements:

– Strategies and Tactics for Clarity and Coherence
– Microstructure
  • Integrate paragraphs within sections.
– Macrostructure
  • Link ideas across large documents.
ORGANIZED REASONING™
A Process to Create & Share Complex Technical Arguments

**Build Initial Logical Structure**
- Identify initial evidence, conclusions & data gaps.
- Identify potential issues, problems and risks. Analyze initial data and challenges.
- Gather initial information
- Create Argument Outline with initial hypotheses of main conclusions and reasoning

**Revise Arguments & Structure the Presentation**
- Tighten the argument structure and presentation format
- Write out drafts of sections and subsections
- Continue research. Tighten data and evidence & strengthen argument

**Interest in something**

DONE!
To Summarize The Big Picture

• **Approach**: Organized Reasoning™ assembles thinking and writing tools, derived from many sources, within a process to apply them.

• **Result**: Support for stronger arguments and clearer writing.

• **Benefits**: Increased efficiency, greater effectiveness and reduced risk.
How Support Capacity Development?

• Goal: make learning Organized Reasoning simple and flexible so people with different approaches can master skills and improve without GB.

• Context
  – Professional development for working practitioners.
  – Live workshops shifted to online workshops.
  – Individuals start alone at sponsored workshops (IAIA+).
  – Groups of staff start together in organizations.
  – Everything is a work in progress.
What to Offer to Develop Capacity for Organized Reasoning?

• Three Complementary Approaches
  – For different contexts.
  – To support steps from introduction through continuing implementation.
  – A more or less sequential approach.

• The goal is to support expanding individual capacity with tools and skills as applied to impact assessment.
First: Provide Useful Tools & Skills

• Provide an introduction giving usable skills.
  – Via live workshops, which are now online.
  – Knowledge and skills which stand alone.
  – Ideas which can be used immediately on the job.

• (Note: Participation is voluntary. If this step was not seen to be working, the project would end.)

• However, it is often a challenge to add new skills comfortably to one’s practice, especially for busy professionals. Therefore, more options…
Second: Support Ongoing Individual Improvement

• Any progress is good.

• Three steps permit a simple and effective start.
  – Three more steps build skills.
  – Then apply the whole double loop when practical.

• Build and monitor planned, self-directed mastery with tools from the Learning Portfolio (provided).
  – Advanced workshops and refreshers are available.
  – Join a Community of Practice.
Third: Provide Steps for Institutional Progress

• Overlaps with developing personal mastery.

• Options and tools for peer-group support.

• Steps to expand beyond a core start-up group.

• Individual and group coaching.

• Support during implementation of current projects.
What Methods for Delivery?

• Workshops for basic and follow up topics.

• Written materials for self-direction.
  – Support materials come with the workshop.
  – Learning Portfolio, checklists, etc.
  – Book (next year?).

• Personal Support: individual, peer group and whole staff coaching options.

• Group mutual support: Community of Practice.

• Online: website, etc.
Resources for Follow up

• GB website [www.glennbrown.ca](http://www.glennbrown.ca)
  – Download past IAIA conference materials.
  – Current and upcoming events, status updates.

• EIANZ (Environment Institute of Australia and New Zealand) Community of Practice at [www.eianz.org/about/organised-reasoning](http://www.eianz.org/about/organised-reasoning)
If You’re Interested…

• Contact me!

• I’d like to share ideas with anyone who wants to.

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Let’s continue the conversation!
Post questions and comments via chat in the IAIA21 platform.