IAIA21
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#iaia21

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

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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™.
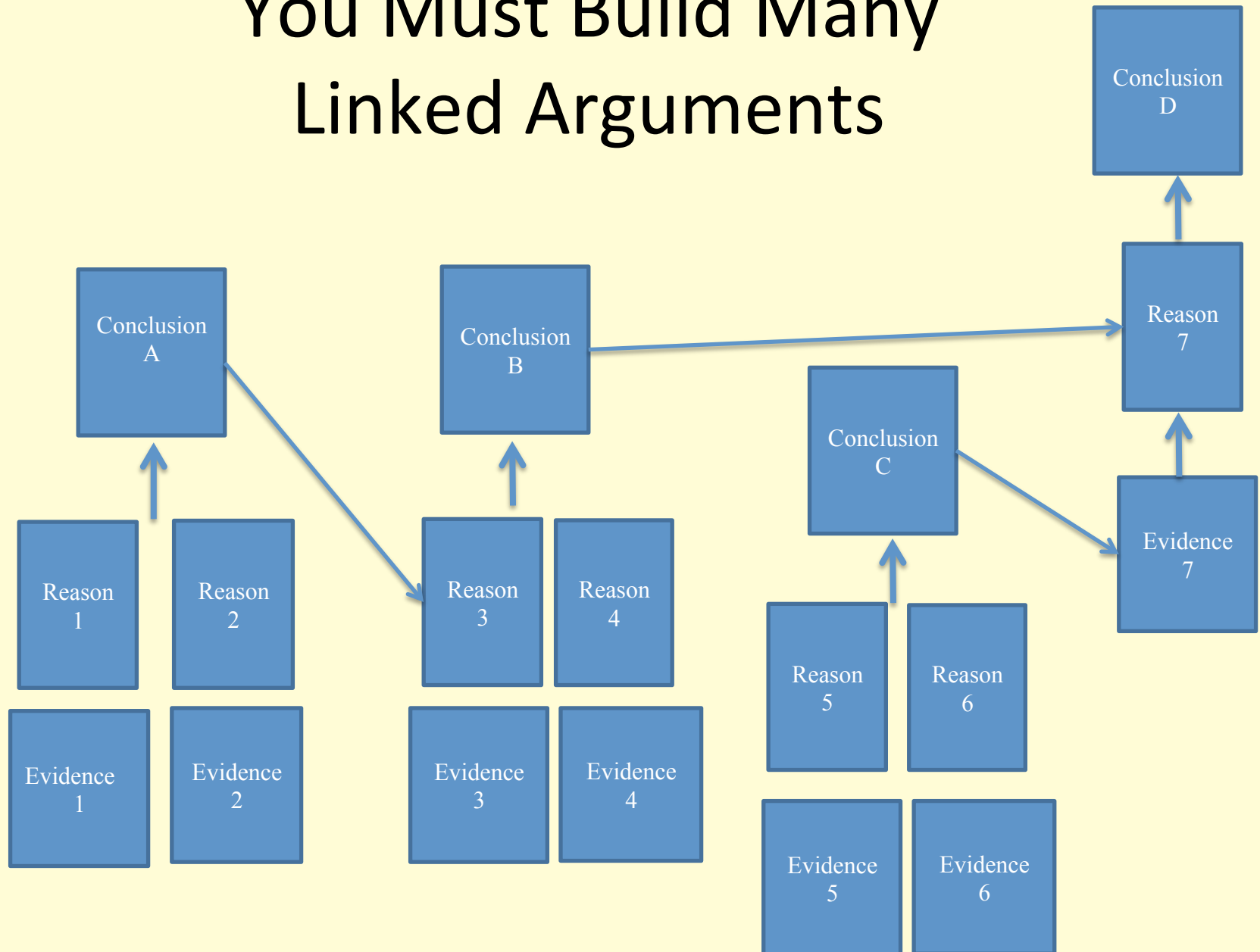
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Therefore: Organized Reasoning™ for IA Practitioners

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

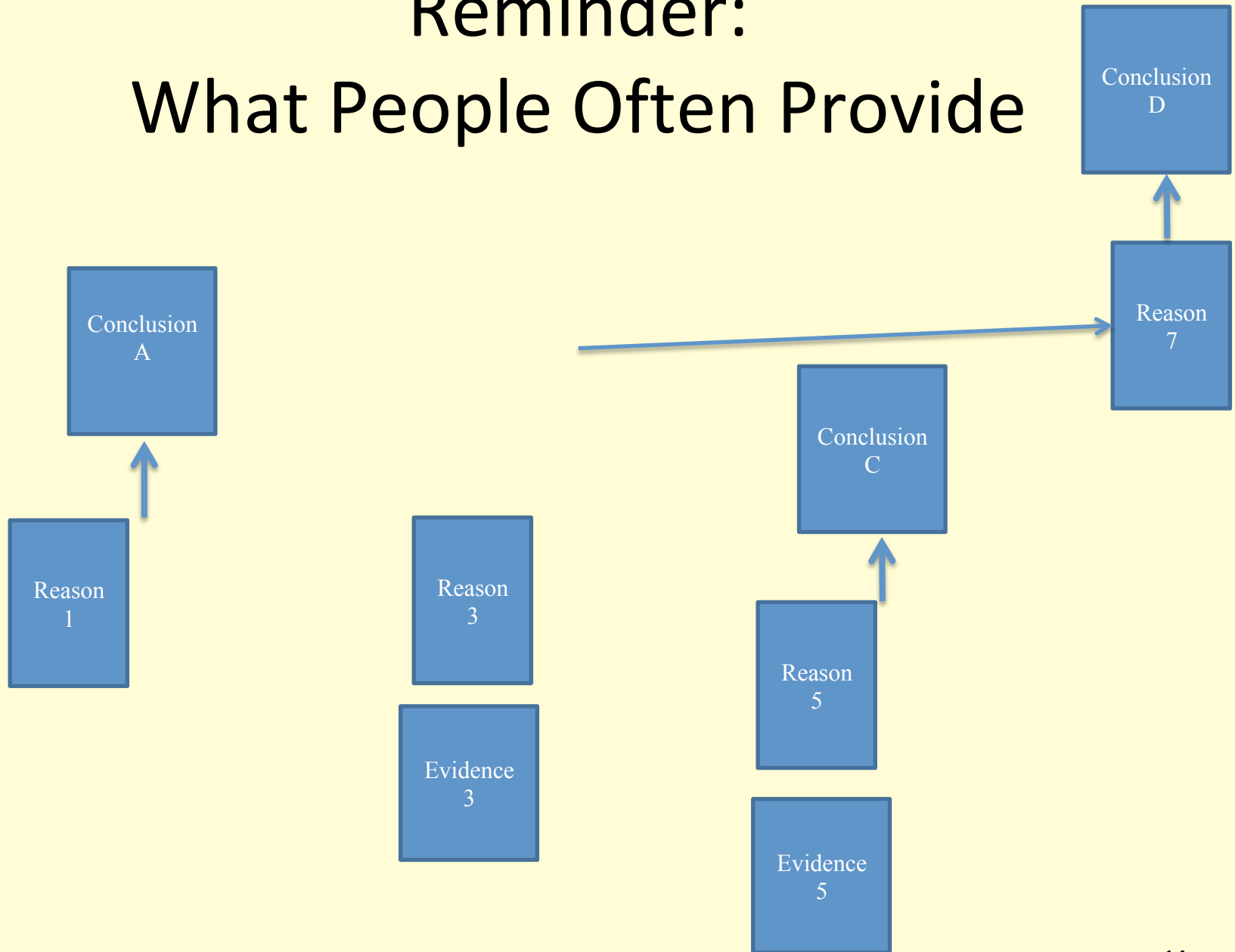- convincing our audiences why the information and analysis are reliable and the conclusions reasonable.

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So, Workshops Happen

You Must Build Many Linked Arguments

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Reminder:
What People Often Provide

Conclusion D

Reason 7

Conclusion A

Reason 1

Reason 3

Evidence 3

Conclusion C

Reason 5

Evidence 5

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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

Create your Argument

Structured Presentation

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
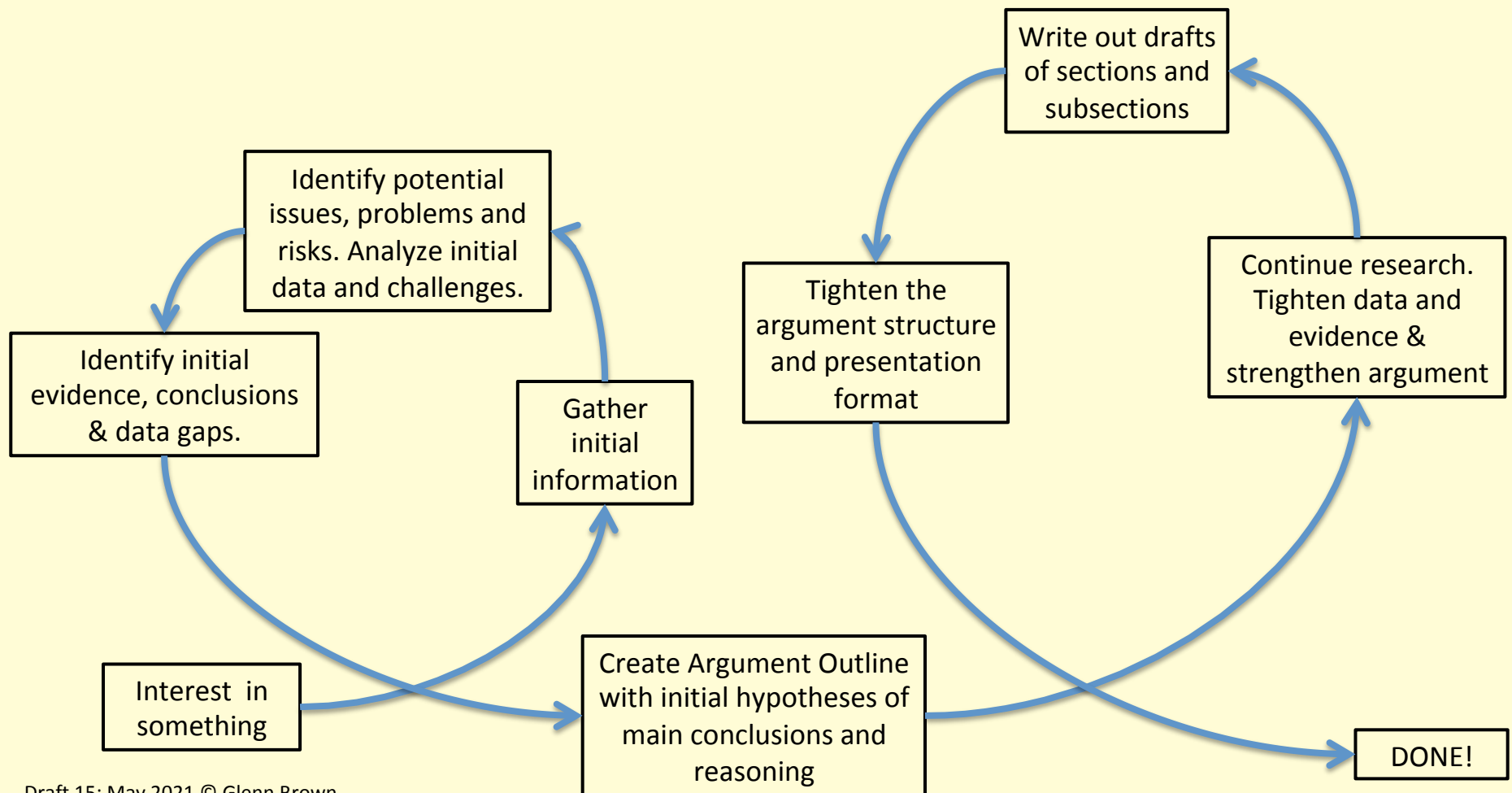
Structured Presentation

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   **Revise Arguments & Structure the Presentation**

Write out drafts of sections and subsections

Identify potential issues, problems and risks. Analyze initial data and challenges.

Identify initial evidence, conclusions & data gaps.

Gather initial information

Tighten the argument structure and presentation format

Continue research. Tighten data and evidence & strengthen argument

Interest in something

Create Argument Outline with initial hypotheses of main conclusions and reasoning

DONE!

Draft 15: May 2021 © Glenn Brown
Blue boxes link to book chapters

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.

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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.

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Resources for Follow up

- GB website 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

If You're Interested…

- Contact me!

- I'd like to share ideas with anyone who wants to.

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END

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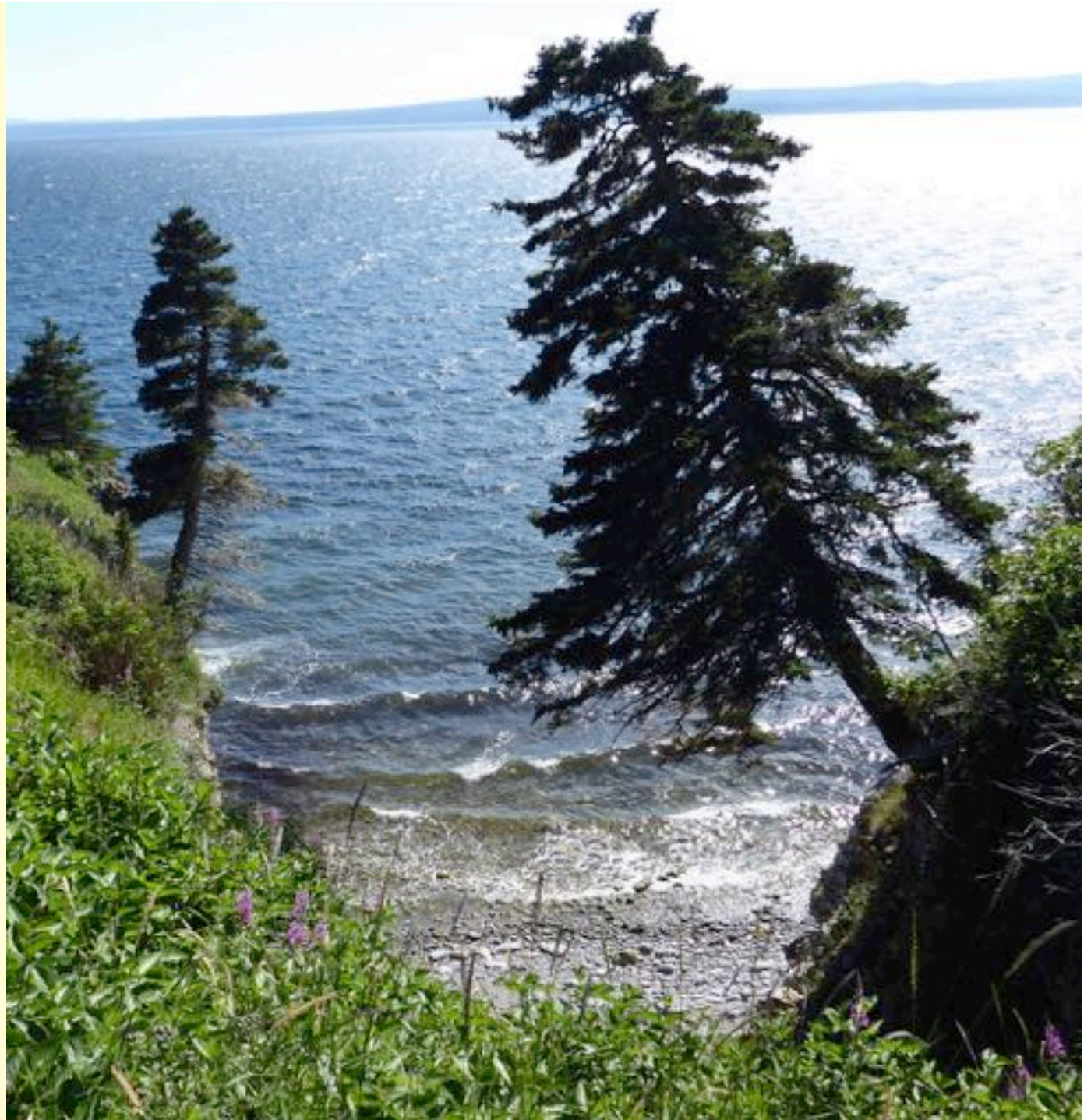
Let's continue the conversation!

Post questions and comments via chat in the IAIA21 platform.

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