Making Good Arguments

Argument and Conversation

- What is my claim?
- What reasons support my claim?
- How do I back my claim?
- What evidence supports my reasons?
- On what do I base my reasons?

Do I acknowledge alternatives/complications/objections and how do I respond?

What principle makes my reasons relevant to my claim? (We call this principle a warrant)

How do I explain the principles behind my reasoning?

Discussants: How may you apply this structure to your own research?
Basing Claims on Reasons

Purpose is to support your claims

A typical way to link a reason to a claim is with the word: because

There is usually a main claim in paper with possibly a number of sub-claims

Each claim (main or sub) should be supported with reasons

Reasons in a piece of research is typically expressed in a sentence or two

Basing Reasons on Evidence

For research, reasons (unless prima facie) need to be backed with evidence

Typical form:

Claim based on Reasons supported by Evidence

You think up reasons and search for evidence

What kinds of evidence should you use in your research?

Acknowledging and Responding to Alternatives

What kinds of alternatives may you have to consider for your research?

To reasons?

To evidence?

To results?

Why do you need to generate alternatives?

How may you generate alternatives in your research?
Warranting the Relevance of Reasons

Warrants connect reasons to your argument by establishing the relevance.

Warrants typically offer a general principle relating the particular reason to the particular claim (or kind of claim).

![Diagram showing the relationship between claim, reason, and evidence.]

General Structure of Warrants

This General Circumstance predictably leads to This General Consequence

When an area has few hard freezes

It will pay more to combat diseases carried by subtropical insects no longer killed by hard freezes

This is a good instance of this

Global warming is moving the line of extended hard freezes steadily north (reason)

We are facing significantly higher health costs (reason)

This Specific Circumstance lets us infer This Specific Consequence

Building Complex Arguments Out of Simple Ones

The claim-reason-evidence, warrants for reasons, response to alternatives structure may be recursively applied to build complex arguments.
Arguments and Your Ethos

Thoroughness and carefulness in building and presenting arguments establishes a researcher's ethos (image of self as a researcher) and therefore reputation.