

# Feedback on IC Letter

3.155J/6.152J Fall 2005

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# **Go beyond superficial discussion.**

## **Ask yourself questions.**

Why did I get unexpected results? Form theories.

Does my theory make sense with my data?

How likely is my theory to be true?

Can I use my theory to extract information from my data?

## **Data carries information.**

Don't dismiss data prematurely.

**Be realistic: consider time, resource, and space limitations.**

# Use structure to manage complexity.

## Disjoint Topics

**Introduce** A, B, C, D.

A.

B.

C.

D.

**Conclude** A, B, C, D.

Take care with introduction  
& conclusion.

## Logical Development

P



Q



R



S

Take care with transitions.  
Link details to bigger picture.

Use **familiar** ideas to introduce **new** ones.

## Example

After a paragraph about internal waves:

**Writer inclination:**

**Internal tides** are **internal waves** that occur at the M2 frequency.

**Easier for reader:**

**Internal waves** at the M2 frequency are called **internal tides**.

Put in the **topic** position the **old** information that links backward;  
put in the **stress position** the **new** information you want the reader  
to emphasize.

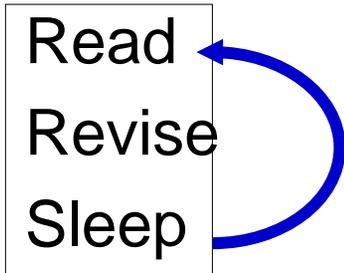
--Gopen and Swan, "The Science of Scientific Writing"

## An example of poor information order:

Our calculated value for glype was 10 orders of magnitude greater than expected. The mass flow controller was probably responsible—it broke shortly after the polysilicon deposition. Too much phosphine would have caused the foo to shurble the glype if the controller, which controls phosphine flow, allowed too much phosphine into the chamber before it failed. Shurbling is known to dramatically increase the value of the glype.

# Revising your report

**Allow time over several days.**



Print & proofread.

**The Results and Discussion are the most important sections.**

# Writing Help

**“The Science of Scientific Writing”** by Gopen & Swan

A Google search will generate many hits.

**The Mayfield Handbook** of Scientific and Technical Writing

<http://www.mhhe.com/mayfieldpub/tsw/home.htm>

**Academic Integrity** at the Massachusetts Institute of Technology: A Handbook for Students

<http://web.mit.edu/due/handbook.pdf>

**The Writing Center**

[web.mit.edu/writing](http://web.mit.edu/writing)

**Writing Tutors**

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