PERQ'ing up Student Writing

Improving the Scientific Writing Skills of Doctoral Students through Pre-Emptive and Reflective Questioning

When writing think about the series of questions that **the text needs to answer**, **what questions the text generates**, **and what a reader/reviewer would ask of it.**

Be pre-emptive and address potential reviewer questions

At the doctoral level, communicating and publishing science is central to the success of the student and the university. However, most doctoral students never receive any formal training for writing and are often assumed to pick these skills up as they go along. Perhaps this is because training doctoral students in the art of writing academic output is a highly demanding and continuous process; with most students requiring substantial and often repeated feedback in order to produce international quality output.

Be reflective and consider what questions arise and what questions are not answered

PERQ challenged the students to **independently reflect upon their own writing**, as if they were the reader or reviewer.

Examples:

We used model A with parameter setting x=1.

PERQ: Why A and, why 1?

Bloggs proposed A, and it did X. Doe did B using Y.

PERQ: How do these relate to each other and to current work?

Students found PERQ to be helpful and they felt their writing quality improved.

I found that their work, **both writing and science, was more critical**, with better structure, and with much more thought.

PERQ'ing up Students

- Work with students to form sets of common questions that are explicitly and implicitly asked.

- Provide questions as feedback, and answers questions with questions

- Have students practice questioning the work of others and their own work

- Have students consider the order and structure the questioning to produce an engaging narrative.

- Continually remind students to ask questions of their work.

The students felt that by taking on the role of the reviewer/reader and **empathizing with the reviewer/reader** they could refine and **improve their work independently.**

One student commented,

"I asked myself what would Leif ask, and then I would go off and address those points."

The feedback cycle becomes internal to the writer.

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