



Online Ethics Center
FOR ENGINEERING AND SCIENCE

The Missing Step

Author(s)

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Year

2000

Description

A scenario meant to stimulate discussion about the ethical issues that arise when researchers discover a mistake in the data or method used in a paper already published.

Body

Student A was delighted when, in his final year in grad school, a joint paper with his faculty thesis supervisor, Professor B, was accepted at a competitive symposium in Theoretical Computer Science. The paper sketched the proof of a conjecture in complexity theory which had been the subject of a half-dozen prior papers. Student A's presentation was heard favorably by experts at the symposium, and afterward Student A began the detailed write-up of the proof for inclusion in his thesis.

But now, midway through the write-up, he realizes he cannot prove an essential lemma which had earlier seemed routine to both him and Professor B. He tells Professor B, and after a couple of days' work they realize that they had overlooked a serious lacuna in the proof when they published their symposium paper.

Professor B says they are obligated to publish an erratum in the following year's symposium volume. The deadline for submissions to next year's volume has

formally just passed, but Professor B thinks they can still squeeze the erratum in if they mail it promptly. Student A thinks that with a few more weeks to think about it, he might be able to fill the lacuna.

- What are Professor B and Student A's responsibilities to report the gap in their proof?
- If Professor B and Student A disagree about responding, how might they resolve this disagreement?

Notes

Caroline Whitbeck introduced methods and modules for discussing numerous issues in responsible conduct of research at a Sigma Xi Forum in 2000. Partial funding for the development of this material came from an NIH grant.

You can find the entire sequence on the OEC at [Scenarios for Ethics Modules in the Responsible Conduct of Research](#). Some information in these historical modules may be out-of-date; for instance, there may be a new edition of the professional society's code that is referred to in an item. If you have suggestions for updates, please contact the OEC.

Adapted from a scenario by Albert R. Meyer.

Contributor(s)

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Use of Materials on the OEC

Resource Type

Open-ended scenario

Parent Collection

Scenarios for Ethics Modules in the Responsible Conduct of Research

Topics

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