Author's Commentary on "The Hardware Lab"

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This case study deals with a situation that can easily occur given a few seemingly reasonable institutional policies. The policies regarding the financing of graduate students can create various ethical problems if other policies are not already in place to resolve them. In this situation, first-term graduate students are being asked to be teaching assistants in undergraduate classes; their training is concurrent with their assuming teaching responsibilities.

The secondary issue is that of Mike, a student with a special-learning waiver. While handling such situations may not be considered difficult, the fact that this situation has arisen during Laurie's first (untrained) experience as a TA can create several ethical problems that may not be realized until later. A tertiary issue is the role of the professor who is teaching the class. In this case study, the professor is largely absent. This possibility is realistic; if no standards or requirements specify the appropriate level of oversight by the professor, then the level of involvement can vary dramatically.

Part 1 focuses primarily on a generic problems-between-partners issue, which allows the introduction of Laurie, Fred and Mike before the issue of the special-learning waiver is introduced. Given that Laurie has not been informed about the waiver, this part is reported primarily from her point of view.

Question 1 focuses on the uncertainties of the untrained TA, Laurie. She would certainly like to help resolve problems, but is not sure how to do so. To a very limited degree, however, this is the same problem as personally working to stop world hunger or war, or to save the environment. People know they should help, but they are limited by means and/or motivation. Laurie knows that it is important for the students to learn how to work with partners they do not enjoy working with, given the likelihood of this experience in the workplace. She also believes that Fred is doing an unfair amount of the work. Ethically, what is the balance point, if one

exists?

Question 2 introduces the possibility of going to an authority figure to resolve the issue, given the small likelihood that any solution will be provided. However, Laurie is being short sighted here; she is under the impression that the only solution is allowing Fred and Mike to change partners. The position of a TA, however, does require some degree of independence and the use of personal judgment. Is a full policy regarding the extent of problem solving between the professor and TA necessary or even useful?

Question 3 focuses on other resources that might be available for Laurie. However, the need to protect Mike's privacy will impact some of the ideas brought up in discussion.

Question 4 has two sides. First, Laurie is giving Mike an opportunity to air his concerns. Second, Mike fails to mention the special-learning waiver at this point. If readers have not read Part 2, the discussion will be limited to refining the issues discussed in Question 3 to include Mike's opinion of his performance.

Question 5 directly addresses the impact of the school's financing and training policies on Laurie. Frequently, fiscal limitations or timing constraints cause people and institutions to cut ethical corners when creating such policies. In this case, what ethical issues have been overlooked? What happens to the students who need first-term funding if they are not able to serve as TAs during that time? Should TAs be trained before they are allowed to work with undergraduates? Are mentorship programs a viable alternative, if enough experienced graduate students are available? Trials by fire are a common occurrence in the workplace; should academic institutions be held to a higher standard?

Part 2 introduces the special-learning waiver, which specifically requires special consideration for Mike in reading-based tests. The conflict here arises because of the nature of this lab; a hands-on practical test does not fall into the same category as a reading-based test. This difference sets up a conflict between Laurie's personal judgment that this difference is both logically and ethically correct and Mike's concern about his ability to pass the test. Fred's concerns in Part 1 are important to remember here; both Fred and Laurie know that Mike has not been using the equipment enough to become familiar with it. Is it possible that this knowledge may bias Laurie against Mike? Could she be inappropriately limiting his extra time on the

test to 10 minutes because of bias?

Question 6 reflects on Question 4 in that the issue of personal responsibility would have required that Mike inform Laurie about the waiver earlier than the end of the term. Apparently, he has not relied on her knowing about the waiver, as he does eventually tell her after the test has been written. Should this issue be covered by policy? Should the professor have informed Laurie about the waiver before it had become obviously relevant?

Questions 7 and 8 again address an untrained TA's development of personal judgment. The existence of the waiver implies the existence of an office that issued the waiver; Laurie has not used this resource. Is it ethical for her to fail to ask for guidance from this office, given what appear to be explicit instructions on the waiver? Is it possible for her to determine how much extra time is reasonable without such guidance? What would be required of Laurie to ensure fairness to Mike?

Part 3 Both new TAs and experienced professors might misjudge the length of time required for a given exam. A common resolution to this problem is to curve the grading scale to prevent this misjudgment from affecting the students' grades. Does Laurie's misjudgment apply unequally to Mike as compared to the rest of the class? Part 3 also returns to the issue of dealing with learning disabilities -- even disabilities considered minor -- in the classroom; Laurie may feel vindicated that Mike demonstrated a lack of understanding of the hardware, as she may have expected, but her lack of effort to do everything she could have done to help Mike can still provoke strong reactions in the discussion group.

Questions 9-10 create a parallel between the allotment of extra time for Mike and the other student (who did not have a known learning disability) who failed the exam. While issues of fairness for learning disabilities are discussed, the definition of the extent of a disability is not in Laurie's hands. Suppose the other student had a migraine on the day of the exam. Would that be a good reason to allow extra time? To what extent do considerations for a specific learning disability (reading, in this case) apply to other applications (e.g., use of equipment)? Who is responsible for making these decisions (e.g., the office that issued the waiver, the university, the professor, the TA, the student)?

Question 11 addresses the perceived impact of special considerations on other students. What would happen if Fred had just managed to pass the exam, after doing more than 90 percent of the work in the lab, and Mike managed to pass the

exam (with extra time) after doing only 10 percent of the work in the lab? What could be the impact on the profession that these two students will enter? What could be the impact on the reputation of the university with respect to the quality of the engineers it graduates, or with respect to how it treats students with learning disabilities?