Stepping Into the Mentor Role

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The mentorship relationship that graduate students are usually most concerned with is the relationship with their own advisor. However, there is another mentorship relationship available in graduate school that many may not have thought about — mentoring undergraduates. Many graduate students supervise undergraduates as research assistants, but taking on an undergraduate as a mentee involves a higher level of commitment, and also the possibility for greater rewards.

Why mentor an undergraduate? Most often this situation comes about when an undergraduate who already has experience as a research assistant in a lab wants to move up to the next level of learning and responsibility by completing an honors thesis. As faculty members already have primary responsibility for their many graduate students, they often do not have time to take on the task of mentoring an honors thesis without the help of their graduate students; therefore, an advanced graduate student may be asked to take on the role of primary mentor. While this may sound like a daunting task and a lot of extra work, it is worth the consideration because there are a number of benefits to be gained.

The benefits to the mentee are obvious — understanding the research process, gaining in-depth knowledge of a topic of interest, and clarifying their career goals (Lopatto, 2003) — but the mentor also stands to benefit in a number of ways. One benefit is that mentoring an undergraduate student allows the mentor to begin to refine his or her mentorship style. What is the best way to give constructive criticism? When is it best to show the student how to do something and when is it best to let him or her figure it out on his or her own? Determining the answers to these types of questions before becoming a professor will be invaluable. Second, an honors student will complete tasks such as running participants or entering data that will probably benefit the grad student too, if he or she also plans to use the data for his or her own study. Finally, mentoring someone who is just beginning a research career can remind more advanced students of the progress they have already made as a scientist by demonstrating how much knowledge of their field of study, and of the research process, that they have to offer.

There are a few things to do before taking on the task of mentoring an undergraduate student. The best way to ensure that the process will go smoothly is to understand everyone's expectations from the beginning. The first person to speak to is one's advisor to understand what he or she expects of both graduate and undergraduate students. Will the student attend lab meetings? What are the expectations of meeting with the student individually? How often does the advisor want to see drafts of the thesis, and how much do they expect the graduate student to have worked on it with the student before sending it to the advisor? Does the advisor have a particular project in mind for the student to take on, or is the student free to choose a project? Does the advisor expect the thesis to be submitted for publication or just to the department?

Once the duties for the mentoring relationship are clear, the next consideration is whether there is time to take on this task. It will be a detriment to both parties if the mentor does not have sufficient time to engage in the relationship. If the graduate student has considered all of these questions and decides to

become a mentor, the next step is to talk to the undergraduate student. Much of this conversation will be relaying to the undergrad what has already been discussed with the advisor, so that the student understands what is expected from the beginning. However, it is also important to talk to students about what they hope to get out of this experience, and to understand their background. Most undergraduates do not have a good understanding of the research process, so laying out the steps for them ahead of time (e.g., defining the problem, designing the paradigm, applying for Institutional Review Board approval, recruiting subjects, cleaning the data, running analyses, running more analyses) will help to avoid any confusion later on. It is also very helpful to understand the university's undergraduate course offerings. Most schools require psychology majors to take some sort of statistics course, but the content of that course, and how much hands-on training it provides, can vary (Alder & Vollick, 2000). What courses has the undergraduate student taken, and what skills did he or she gain from that course? Does the student know how to complete basic analyses, or will he or she need to be taught how to do that? Is there a departmental honors course that could be attended?

Most undergraduate students who are conducting advanced research hope to go on to graduate school. It is reasonable to expect that grad students will be mentoring undergraduate students not just on conducting research, but also on graduate school itself. The mentor can help the student identify career interests and aid him or her in deciding which types of graduate programs would make the best fit. Mentors may also choose to help students prepare application materials, such as personal statements, for graduate school applications.

Finally, it is very likely that the mentee will ask the advisor to write a letter of recommendation for graduate school. As the graduate student has worked closely with the undergraduate student, the advisor will likely ask the graduate student to provide the undergrad with material for the letter. This task can be easier for everyone if the graduate student remains aware that it is coming, and takes notes on things to include in the letter along the way. For example, if the student contributes a great idea on how to test a certain paradigm during a lab meeting, write that down. If the student takes the initiative to attend a workshop relevant to the area of study and then incorporates ideas into his or her thesis, make a note of it. When the time comes to write the letter of recommendation, the advisor will be able to write one that helps the student stand apart because it will contain many specific examples of the student's abilities and contributions.

At the end of the year, the undergraduate mentee should have completed a high-quality honors thesis and gained a great deal of knowledge about the research process. Graduate student mentors will have the honor of knowing that they played an important role in this student's career as well as a new skill set as a mentor to use in the rest of his or her own career.

References

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Lopatto, D. (2003). The essential features of undergraduate research. *Council on Undergraduate Research Quarterly*, 23, 139–142.