Advising Graduate Students: Mentor or Tormentor?

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Abstract

Graduate students have many important roles in our colleges/universities, from facilitating research and teaching efforts to being our hope for the future of academia. A graduate advisor and a faculty advisory committee that possesses an interest in the student, mentor today's graduate students. The focus of this paper is to compare and contrast the perspectives of an entering M.S. student, and a senior Ph.D. student with those of their graduate mentor in a point-counter point manner. The points raised by the students were from real-life situations. Comments made by their graduate mentor were in response to each student, and took into account each student's day-to-day performance and the student's degree objectives. In general, both students expressed concerns about writing, workload, and meeting expectations, while their graduate mentor supported a central focus towards the student's incorporation of the scientific method. Further, M.S. level students possess a different level of understanding of what is meant to be a graduate student when compared to senior Ph.D. students. Although not a formal presentation, we are hopeful that others, who may presently view a graduate advisor as being a tormentor, may actually alter their perspective to identifying with the advisor as a true mentor.

Introduction

The term, mentor has been defined numerous times in the education literature. Either as a peer-mentor (Grant-Vallone and Ensher, 2000; Fugate et al., 2001), or someone such as a faculty member who is older, a mentor voluntarily (Vesilind, 2001) acts as a guide/personal teacher of a younger individual (Grant-Vallone and Ensher, 2000; Tenner, 2004; Wrench and Punyanunt, 2004). Usually, the mentor has some standing/power and the mentee does not (Grant and Graham, 1999; Tenner, 2004). However, an effective mentor is an effective communicator (Rowley, 1999), providing a voice of reason in the potentially chaotic world of a student (Casto et al., 2005) and acting as a positive role model (Shapiro, 2004). In some cases, but not all, the mentor may maintain a professional and personal relationship with the mentee for quite some time after the student leaves for other pursuits (Tenner, 2004). A graduate student mentor may be defined in a similar manner (Wrench and Punyanunt, 2004) with one exception; the graduate mentor possesses a certain amount of control as to whether a student graduates with a graduate degree (M.S. or Ph.D.; Waldeck et al., 1997). The graduate mentor has great responsibility, since at least at the Ph.D. level, graduating students enter the same field as the graduate mentor (Tenner, 2004). A graduate mentor has a responsibility to his/her discipline to put forth a quality individual.

Graduate students may feel that they are often overworked, overstressed, distracted (Nyquist et al., 1999), and underpaid (Weist, 1999; Maher et al., 2004; Malveaux, 2004). In agriculture, a competitive graduate student possesses an accredited B.S. degree and has been accepted into a viable department that has been sanctioned to award graduate degrees. Usually, one faculty member accepts a graduate student, and then allows that student to work in his/her laboratory in order to gain valuable experience, possibly generate new knowledge, and subsequently earn an advanced degree. The combination of the generation of new and focused research data (Benesh, 2001), along with writing a thesis or dissertation, forms the major component of the requirements of the graduate degree (Mullen, 2000; Offstein et al., 2004). Other requirements include being successful in a limited amount of coursework past the B.S. level and, depending on the department, being a teaching and/or research assistant (Offstein et al., 2004).

Credible graduate mentors (Wrench and Punyanunt, 2004) treat graduate students differently, depending on whether the student is an entering M.S. student or a senior Ph.D. student (Offstein et al., 2004). The focus of this paper is to expose the thoughts of students at the M.S. and Ph.D. levels and to directly compare the ideas of each student with those of their graduate mentor. We organized this paper in a point-counter point format so that students at two different places in their graduate training provide their perspectives (points) as to how they interact and are treated by their graduate mentor. We subsequently have provided the perspective (counter point) of the graduate mentor (following each student point), directly addressing the issues raised by the graduate student. This

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presentation is not a survey of a large number of students/mentors. We feel that this personal, "point counter point" format allowed the students to raise viable real-life issues that all graduate students are likely to feel/experience. The manner in which the graduate mentor has addressed the individual points did not follow any particular (formal) philosophy but was generated from practical real-life experience/interpretation. By writing the paper in this manner, we are hopeful that students interested in a graduate degree in agriculture will be more aware of what might be expected of them. Further, we think that graduate mentors may obtain a glimpse of what students feel about their own graduate school experience, as shaped by the graduate mentor or tormentor.

M.S. Student Perspectives

As an undergraduate student, I took two classes (Animal Growth and Development and Introduction to Skeletal Muscle Physiology) from my eventual M.S. advisor. Studying muscle growth and development, in particular, was exciting and interesting to me. As such, I desired an extended degree in this field. I have just completed my first year for my M.S. degree. My first semester was filled with fear of not meeting the academic expectations required and I had a sense that my research responsibilities were overwhelming. The following points represent the types of items I encountered and overcame, and involved my graduate mentor (his comments follow in italics).

Student Points (Mentor Counter Point Response Immediately Follows Each Student Point)

1. I initially had difficulties with goal setting. The anxiety of not being successful in graduate school ensnared me for more than one semester before I felt self-confident with being capable to both study and perform sufficient research to stay on task.

A common problem with entering M.S. students is their confidence level and it does not appear to have anything to do with their undergraduate grade point. My approach to all M.S. students is to have them form a M.S. advisory committee, prepare a program of study, take two to four graduate classes (6-8 graded credits, plus research and thesis credits to make an overall 12-18 credit load) and become acquainted with the research laboratory during the first semester. At Washington State University (WSU), a M.S. student is required to complete 21 graded credits past the B.S. degree; along with research, thesis and other (P/F) credits during their (usually) two-year time working on their degree. As the M.S. degree in Animal Science is based (on a large part) on research performance, the student must initiate some research effort during their first semester. Loading a new M.S. student with a full load (> 12 graded credits) seems to be more than most entering M.S. students can handle.

2. I initially had little confidence in my writing skills. During my first year, I expected my graduate mentor to provide me more guidance about my writing.

As this person graduated with an undergraduate degree from a university that stressed writing both within the major, and across the university curriculum, I did not think it was my responsibility to help the student learn to write. However, I did introduce scientific writing, which initially baffled the student. Knowledge of the scientific process (including writing) is required of all of my M.S. students. Conduct of research experiments using the scientific process, and then condensing the experimental data into a "scientific story" is vital to those expecting to proceed onward to the Ph.D. degree. If an entering student has difficulties in writing simple sentences, paragraphs, or moreexpanded amounts of text then they will have added problems with writing in the scientific manner. Not only do I instruct all students on the scientific method, when I hold laboratory meetings everything said is couched in terms/phrases consistent with the scientific method.

3. Even if I felt I was successful in my writing assignments, my graduate advisor provided little input. At times, I felt as though I was "writing in the dark."

One area that I have experienced on a number of other occasions, with other entering M.S. students, is their difficulty in writing anything. Students have not so politely informed me that as an individual, (s)he should be allowed to write assignments (progress reports, research proposals, etc.) their way. I usually present a stern lecture in which I inform the student that writing in the scientific manner will be the only acceptable manner of writing allowed in the laboratory. With this in mind, I provide all students with drafts of manuscripts, grants, reports, and outlines for them to use as models for their work. In addition, I try to involve all students in my writing efforts in an attempt for the students to learn how to write scientifically. Either students learn scientific writing expediently, or I ask them to leave and do their M.S. degree elsewhere.

4. When I did get comments back from my graduate mentor, sometimes the critical critique of my work felt like a personal attack. If this occurred, I had difficulty in continuing to put in quality effort into my work.

When it comes to science, I expect everyone in the laboratory (students, technicians, postdoctoral fellows, and myself) to take scientific criticism. Red marks on a manuscript, or any writing assignment, are meant to make the science (and the budding scientist) stronger. When focusing on the science, there is little personality involved. Entering students need to understand that science is different from any other profession, and in order to address important questions in science, the students need to be super critical.

5. The ability to discuss my research was a problem, as I was never previously exposed to the scientific method. Keeping in mind that as a graduate student I was a "professional in training," I wanted to
“rise to the occasion” and learn everything about the scientific method that I could from my mentor.

Perhaps the one thing I always appreciate about entering M.S. students is that they possess considerable enthusiasm. However, enthusiasm alone does not get a student a degree. When discussing data in a scientific environment, M.S. students must, as quickly as possible, learn that there exists only one method of data presentation—the scientific method. After identifying a hole in knowledge that exists in the scientific literature (knowledge base), I expect students to be capable of formulating scientific questions (presented as hypotheses statements), organizing experiments into objectives, determining the statistical model to be used (prior to conduct of the research), designing experiments (in concert with me), running the experiments (and repeats), reducing and collating the data, then interpreting the results. Students learn how to conduct the “scientific method” through organization of a literature review, conceptualization of a research idea through development of a research proposal (presented to their advisory committee), generation of research reports (written and oral) to other laboratory members, and by participation on writing efforts with others in the laboratory. Finally, there is one part of the scientific method that is some times missed by the M.S. advisor/mentor—writing a scientific manuscript (in addition/in lieu of the student’s M.S. thesis). My opinion is that all graduate students should write their scientific paper and actually have it submitted before their final defense.

6. There seems to be two people within my mentor. The first is a funny, friendly, and productive person who gives great suggestions about research. The second is a rather unapproachable person who is extremely critical and expects things to be more perfect than I could possibly provide. You can see both within in the same hour, and it is hard to say what could “trigger” the second mentor (tormentor?) to appear.

I was once told “there is a time for work and a time for play.” For the most part, if a student is making progress I see no reason not to be friendly. However, if a student tries to turn in poor work, I view it as a lack of respect, not necessarily for me but for science. I will not allow that to happen. I once had a graduate student work with me that really only wanted to teach classes (as a teaching assistant) and did not possess any desire to go into the laboratory. For one year, I attempted to get this student into the laboratory even by suggesting numerous changes to the research project. This particular student still did not want to go into the laboratory but did want the M.S. degree. Needless to say, (s)he never did put in the work and did not stay in my laboratory. Further, my reaction to this student’s presence was one of personal dejection, not encouragement.

7. Time seems to be the last thing on my mind as a student. My graduate mentor has tried different ways to provide motivation and get me to make some sort of forward momentum. However, I continue to struggle balancing tasks in a timely fashion.

M.S. students are pulled in different directions. However, if students inform me that they are using this degree as a terminal one and are not planning to pursue a Ph.D. degree, I have a bit more patience with them. However, as a faculty member who has plenty to do, I will not “baby-sit” students. For students who inform me that they are interested in proceeding onward for a Ph.D. degree, I expect them to be on time, perform quality work, and "rise to the occasion."

If a student expresses a desire to continue towards the Ph.D. category and cannot manage time effectively, I ask them to leave the program. I have an obligation to my discipline to produce only solid, laboratory-trained individuals. Students are not entitled to receive a graduate degree without (consistent) hard work.

8. I am a social person. I like to spend time with my relatives and friends. Outside encouragement from family and friends, however, has not helped me to get over some of the remarks made by my graduate mentor. Sometimes, I lack self-motivation and confidence in my work.

Family comes first, and if the student has a legitimate problem, I encourage them to get things resolved. However, I am troubled when an entering M.S. student informs me that they need time off; are planning some social event, or can only work for a limited number of hours due to a social commitment. If a student is on a specific time schedule and desires to finish on time, the student needs to put in hours of quality time on their M.S. project. Students who do not do this should not expect me to be supportive of their leisure time—especially if they are not working in the laboratory or on their writing efforts. For sure, I let marginal students know my philosophy on this topic. Does this make me a “tormentor?” I think not, especially as I allow all B-level students and above in the laboratory to pursue a graduate degree. At WSU, a B-grade point average is required in order to pursue a graduate degree with a research emphasis. However, many B-level students are not ready for the work required of them (laboratory or writing) in order to be successful. These students often look for distractions. My belief is that B-level students need an opportunity to succeed, or fail, and I offer them that chance. The most rewarding part of my career has been to see B-level students graduate with their M.S. degrees and move on into either industry or into a Ph.D. Program.

In summary, I believe that the only way for me to be successful in obtaining my M.S. degree is to be prepared for hearing things I do not like or necessarily agree with, learn to keep a schedule of tasks that need to be completed ahead of time, and be stubborn and plan to struggle for my degree. Overall, the work on my M.S. degree (thus far) has at least shown me in detail who I really am. I have gained some confidence in my scientific abilities, and I think that as I continue to gain experience in my field, that my confidence will continue to mature. I am thinking of competing for a Ph.D. degree.
Advising Graduate

**Perspectives of a Ph.D. Student**

In that I have returned to school from many years in the workforce, I am considered a "non-traditional" graduate student. When the company in which I was employed closed its doors, I was forced to rethink my life path. I chose to pursue a lifelong desire, and I returned to the university to earn a degree as a Doctor of Veterinary Medicine (D.V.M.). To supplement my student loan during my first year in the veterinary program, I worked as a laboratory technician in the department in which I had obtained my B.S. degree, and I began to envision a life beyond clinical medicine. On graduating with my D.V.M., I remained in school to earn a Ph.D. Anxious to re-enter the work force in a new role, I am consolidating a three-year program into two. I believe that I have one more year to go. A few issues are appropriate to this discussion, as I enter my last year of study.

**Student Points (Mentor Counter Point Response Immediately Follows Each Student Point)**

1. When admitted into the department to compete for the Ph.D. degree, I already had an advanced degree, albeit a professional degree (D.V.M.). I felt that such a degree should allow me to garner a bit of respect. However, in my graduate mentor’s laboratory I was/am still viewed as a student.

   *This particular student is shown respect for possessing D.V.M. abilities. However, this program is not in the veterinary school. Whether one possesses a D.V.M. or any other professional degree does not matter to me, in terms of how I interact with the student working towards a Ph.D. degree. The student needs to take classes and perform some novel research in order to be qualified for the Ph.D. degree. In the case of this student, the D.V.M. allowed the student to be offered a non-competitive graduate stipend, and the department (also) offered the student a top-off scholarship. Furthermore, a few of the classes from the D.V.M. program of study were used for Ph.D. credit obligations. In all other respects, this student is required to fulfill the requirements of the Ph.D. degree. As such, I treated this student like a Ph.D. student, and not as a D.V.M.*

2. Finalizing my research project so that I can complete the work needed to graduate has been a difficult undertaking. Whereas many graduate students are handed a specific project to complete (i.e., a portion of a grant proposal, or a manuscript), I have been challenged by my graduate mentor to carefully examine the scientific literature for a research project. To learn, simultaneously, all there is to know about a subject and devise a truly novel research plan from scratch is a frustrating process.

   *When informed that the student desired to pursue a teaching/research faculty position, upon completion of the Ph.D. degree, I determined that the student needed to become independent as quickly as possible. By allowing the Ph.D. student the freedom to perform independent research, my thought was that the student could see what might be involved in a new assistant professor position.*

3. I am pulled in many directions. There never seems to be sufficient time in the day for me to complete all I am required to do. My mentor is a prolific writer and, because of this, there are great demands placed on me to help write papers (of all types) as well as grants. Although my writing skills have evolved greatly with my time under my mentor's tutelage, I still necessitate more time than (s)he would like for me to formulate my thoughts and put them on paper.

   *If one is to be a successful junior faculty member, one will be required to write proficiently and abundantly. As a Ph.D. student, more is involved than simply overcoming the fear of writing. A Ph.D. student needs to learn how to service numerous constituencies with scientific writing. A Ph.D. candidate who finishes the degree and graduates without any papers at all has missed out on a huge portion of their future work. When I was a new assistant professor, I was informed by my department chair that the time I consumed in the laboratory made me miss numerous chances at writing grants and scientific papers. With my present Ph.D. students, I expect them to write numerous papers of all types, as well as participate on writing of grant proposals, during their stay in my laboratory. My opinion is that this is the best training that I can provide Ph.D. students.*

4. Many graduate students are on a teaching (assistant) stipend, which is a drain on their valuable time. My position as a D.V.M. afforded me a special privilege. For my stipend assignment, I was asked to develop a class (from scratch) in an area in which I was uniquely qualified. Never having taught or assisted in teaching an entire class before, however, resulted in this project depleting my emotional and time stores. No established faculty member aided me in this effort, except for a few comments from the Department Chairman and from the head of the Teaching Committee.

   *Teaching is a critical component of a new assistant professor. For a Ph.D. student to be allowed to design, organize, and develop all aspects of any class, is an exceptional opportunity. As this student was trained in this department for her undergraduate B.S. degree, (s)he was familiar with classes taught. Knowing how much time and energy is required to prepare lectures; I eased the writing and lab workload and allowed the student the time needed to fulfill her obligations to the class.*

5. Feelings of inadequacy have made the thought of my oral and written preliminary examinations daunting. My mentor and I often discuss past experiences with the preliminary examination process and potential pitfalls for my examinations. These "horror stories," coupled with the knowledge of how much science has advanced since my mentor's preliminary exams and now, has left me feeling incompetent.
Preliminary exams should be a bit scary. I believe that it is healthy for a Ph.D. student to feel a bit overwhelmed at this hurdle. What the student does not realize at this point, as the preliminary exam is quite a bit of time from now, is that I prepare all Ph.D. students with sample questions (for them to ponder) and practice oral sessions (with the laboratory group) for them to obtain an idea of the experience.

In summary, my work to this point has given me confidence in many aspects of life both within academe and without. I understand the trials put upon me are to strengthen me as a future colleague as well as to make me competitive in the job market. Finding a job before I finish my Ph.D. degree, so that I might transition straight from student to faculty without any gaps, seems to be a monumental task in this tight job market. My mentor's stories of the "job hunt" initially left me feeling confident in my ability to procure a tenure track position at a university until (s)he revealed that there were only three people consistently vying for eight open positions. I dutifully scan the job listings daily, but I am disheartened by the lack of positions for which I am qualified. Just another day in the life of a D.V.M. who is trying to get a Ph.D. degree.

Summary/Conclusions

While a few formal papers are now emerging regarding faculty mentoring of graduate students, we have provided a more personal view of the graduate mentor/mentee relationship. While the perspectives of both a M.S. and a Ph.D. student are presented, both distinct differences and similarities exit in how these students view their interaction with their graduate mentor. One similarity is that students working towards both degrees are required to perform at maximum effort levels and are expected to rise to new teaching/research goals. Another similarity is that, regardless of degree aspirations, both types of students consider their graduate mentor to be one who both inspires, and frustrates, at the same time. Differences in perceptions of the mentor/mentee relationship include depth of program requirements and expectations upon successful completion of the degrees. Usually, M.S. students are treated differently than Ph.D. students, but individual assessment of graduate mentor and mentee relationships appear normal for the specific degree goal. On some occasions, a graduate advisor may be viewed as a valued mentor and at other times a tormentor by the same student.

Literature Cited


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