

Balancing Teaching and Research

Comments from an Ogden College Seminar January 17, 2007



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Table of Contents

Table of Contents	2
Why engage in research and grant writing?	1
How do you approach the challenge of balancing teaching and research?	1
Practically, how do I accomplish this and stay motivated?	2
What are some ways to get help to do research and still teach?.....	2
What do I do if I arrive with little teaching experience?	2
Part of the challenge of balancing teaching and research is that you don't know which side will be weighted. How much time do I really have to spend on engagement research?	3
How do you, the Dean, assess teaching?.....	3
What about service?	3
How do you manage students?	4
How do you get students to write?	4
You may have the data but it is hard getting a publication out. How do you get things written?.....	5

Editor's Note: This was an event requested by Ogden College to address their particular concerns. We felt the principles were general enough to be of interest to other faculty. Note as well this was an event grounded in a particular time. Due to the dynamic nature of the interaction between panelists and audience, you should not take these as literal quotes from the participants. They are my interpretation and a summarization of ideas and issues offered during the seminar. Errors should be attributed to me.

Why engage in research and grant writing?

- Grants provide variety and excitement for faculty and create opportunities for student learning. The PhD is a research degree and this is an expression of that training. Doing research can energize you for the classroom and students get excited about the discipline. Engaging students in research, either applied or basic, is one of the purest forms of teaching and impacts critical thinking. Faculty life shouldn't be teaching vs. research but rather each enhances the other. The challenge is in time allocation. Department heads do have the flexibility to determine how particular persons will allocate their time to accomplish the goals of the department but everyone must do at least some teaching, because credit hours have to be sufficient to fund the faculty. And, of course, not being a Research I university means we have to be more creative. —Ferrell

How do you approach the challenge of balancing teaching and research?

- Realize that as a junior faculty everybody (colleagues, department head, Dean) wants you to be successful. — *Davis*
- Teaching is the first priority, but you can always do more for teaching. As important as it is, don't let it consume you. — *Davis*
- Do your research all the time. It is a trap to think you will do it in the summers. Summer dwindles away. — *Davis*
- Plan as much time for research preparation as for teaching preparation. It helps to set up a particular day and time. Even if you don't always hold to it, having a plan means you are more likely to accomplish it. — *Davis*
- You have to learn to say no and you have to concentrate on what will advance your career. Your research has to engage students, advance your career, and be enjoyable. Working at Western has taught me to appreciate teaching and research. —*Scott*
- I came in with grand expectations and after the first term threw them in the trash. The thing that attracted me to this position was the room to be a multi-faceted person, the room to do something not related to your research. Although you have teaching, research, and service you have to devote attention to foresight—what's coming up next year. —*Strolger*
- When I started I had 12 hours of classes and was on 12 committees and had to do research and grant writing. I networked quickly. I determined to never be on more than 2 committees at one time. I trained a team of students to train other students each year, finding a good graduate student to be the leader. You have to let go a little—they won't do it exactly like you. —*Ferrell*

Practically, how do I accomplish this and stay motivated?

- Don't be a prisoner to your office. There are other venues in which you may be more productive, e.g., the library with a laptop. — Davis
- And realize that even if you know all this, you won't always follow it. — Davis
- Professional development opportunities can seem low on your list of priorities but going to a teaching conference with new approaches is very invigorating, especially if you feel like you aren't enjoying teaching like you used to. — Davis

What are some ways to get help to do research and still teach?

- Writing grants that hire technicians who can do some of the technical work. — Ferrell
- Do research in the area of scholarship of teaching—publish on teaching in peer-reviewed journals.—Ferrell
- Ogden has seen an increase in postdoctoral students who can free your time for the classroom. They can do some of the writing. — Ferrell
- Graduate students can do some work in the classroom and in the lab. — Ferrell
- Collaborative networking with scientists at other agencies, such as the USDA lab, can spread the challenge out. —Ferrell
- Someday Ogden may have a PhD program. —Ferrell

What do I do if I arrive with little teaching experience?

- Your first term you will have to focus on teaching. In research you may be able to plan some grants, do a little lab work but first get your teaching on track. The best thing I did my first semester was a mid-term evaluation. This showed me my notes were disorganized and needed an overhaul. In the second term I got more lab time but still was developing my teaching. In the summer I was able to do more research. I do try to never be completely in one mode. I try to have my preparation for teaching done before the term begins. —*Williams*

Part of the challenge of balancing teaching and research is that you don't know which side will be weighted. How much time do I really have to spend on engagement research?

- I was appreciative of the documents faculty submitted for promotion and tenure that indicated they cared deeply about their teaching. How much time is spent on teaching and research depends on the relative skill level. Some faculty start with poor teaching skills and have to work extra hard on them. New preparation takes time the first year when you have to develop a teaching style. Each class is different and you have to adjust. When you are hitting your stride you'll know from comments by students and peers, then you can focus more on research and assess the balance. In the final analysis you must be good at teaching and meet some level of output for research. —*Ferrell*

How do you, the Dean, assess teaching?

- As a department head we looked at exit interviews with alumni, feedback, etc. and over a few years you get the picture. Research in this college has been done on learning outcomes and improved retention by 40%. Any data you have that helps make your case is useful. We have the QEP, ADP, etc., but this is all what we are already doing. Don't think of it as “new.” — *Ferrell*
- Scholarship can be on teaching. He recommended networking with College of Education and Behavioral Sciences faculty where there are people knowledgeable about measuring pedagogy. — *Bruce Kessler, Mathematics, Asst. Dean, Audience member*
- An audience participant reported that he is tracking student progress throughout the semester using a survey and has learned what is useful and what isn't in teaching.

What about service?

- When it comes to service, “trade in and trade up”—you can't keep taking on more responsibilities or else you become overburdened. Say to the person who is asking you to do it “How important is this? Am I the best person? If I do this, I will have to give up something else that's less important.” — *Davis*
- My mentor gave me this advice, “Be careful about committees. I'm on a lot of them, I just never go to all the meetings.” Time is my most precious resource. Younger faculty are especially vulnerable. Be sure you are getting something from participating. — *Scott*

How do you manage students?

- See teaching and research as integrated and connected. When a student comes wanting to do research, realize that with proper training and development, they can produce for you and grow as well. Some with a weaker GPA have produced as well as those with a higher GPA. —Williams
- Recruit the best you can get. Sometimes you have to say “sorry, but I won't be using you next year.” Keep an eye out for the next one and groom them to take over. You will hit pitfalls. If you teach freshmen and sophomore classes get them interested in what you are doing. —Ferrell
- When I plan my research I have two or three key experiments at different levels. My research is modular so students can do 1 credit hour or a 15 hour work week. I try to have 2 or 3 working on similar things though I make sure each student has their own unique project so they have ownership. Some I don't give to just anyone. I don't ask them what they want to do but I'll find out their general interests and modify the project to fit better. For beginners, I may give them a little piece no one else has had the time for. Once they do this step, I see if they can do a bigger thing, like read a paper. Once I get enough data that a picture is emerging I am more directive with the next students. Once the picture is in my head, I focus the students. —Williams
- Realize that none will have the answers, but let them work on smaller or long term projects that won't hurt or help. If they develop then bring them into a main area. But if they will be graduating soon they may not have the chance. They could do something related. —Strolger
- You can use students to explore areas you aren't sure will be fruitful. Students can test prospective areas for future grants. — Ferrell
- My biggest mistake was asking what they wanted to work on and follow up on it. I discovered I had to keep up with them. I should've said, “These are the available projects.” It is suicide to ask because they aren't really clear and you end up with too much variety. —Audience member
- It is amazing what students can learn if you give them a goal. Tell them where to find the basics. —Ferrell

How do you get students to write?

- It depends on the student. Seeing their name in print usually excites them. Show them past examples. —Ferrell
- Students lack confidence and are afraid you'll find out they aren't smart. Convince them to start small—give them two sections and you can revise it. Encourage them from the beginning to write—have them write a proposal (with your help) to Sigma Xi or KAS. — Davis

- I'll remind them that learning how to write is a skill you can use in anything you'll do and that you'll help mentor them in writing. —Ferrell
- Technical writing classes in English have been good training. It's one thing to write to be understood, but also to write so you can't be misunderstood. —Elmer Gray, Agriculture. Audience member.
- It helps to show them other papers, to see font, organization, etc. —Bruce Kessler, Mathematics, Ass. Dean. Audience member
- I took students to a national conference for a poster session. Gave them the background information and asked them to make it make sense. Then had them scrap that and start again. Then the third time it made sense. Finally the fourth draft was submitted. —Strolger
- I have them do a monthly report, and significantly engage them in research activities and in writing abstracts for conferences, and then giving oral and poster presentations at the undergraduate levels for awards. So far, I have two students who obtained awards at the state level and one at the university level from Sigma XI. —Tingying Zeng, Chemistry, Audience member
- I'll give them the written task earlier so there is more time to improve. —Elmer Gray, Agriculture, Audience member

You may have the data but it is hard getting a publication out. How do you get things written?

- I write papers first at the end of the summer and second at the end of the spring. If I have 2 hours on a Friday afternoon or a 30 minute block between appointments I write. Or, if I see a piece of the puzzle begin to emerge, I'll take a few minutes and write a draft of the discussion of those experiments. I may have a student writing a draft of a current paper. —Williams
- I don't try to write it all at once. I don't try to put it on paper in one sitting. I have five papers $\frac{1}{4}$ to $\frac{1}{2}$ written. They'll develop over time. Write as you are going and before you start the experiment as soon as you have an idea of what you'll be getting. A proposal is the template for the paper. You must have a clear idea of what to expect. —Strolger
- Grants are great to focus your efforts. I like to get the data and analyze it, write up the results and then the discussion and finally, the introduction. I do the method and materials while I'm doing the research and they are fresh in my mind. I write it backwards. I hate writing the first draft but love wordsmithing thereafter. —Ferrell.
- Bob Boice has done research on faculty writing habits and finds that those who write in small amounts, just 15 minutes/ day, publish more than those who wait for a large block of time. The

short times keep you motivated and coming back. —Sally Kuhlenschmidt, Psychology and FaCET, Audience member

- Multitask your writing, so if you get frustrated on one project, you can work on another. —Ferrell
- I guide students to do a poster, with figures. Then the figures go in the paper. Talking with students causes me to explain what I'm seeing and the paper becomes a formalized version of that discussion. New ideas come from that conversation with students. —Williams
- Joe Bilotta (former Psychology faculty) had the title, citations, methods section written and was just filling it in. — Davis
- I take about 20 minutes to write an abstract. If I waited for a block of time it wouldn't happen. At the beginning of my day I have a plan but understand it may not happen. I keep a journal of what I accomplish every day. We all have days in which nothing gets done, but if you can do something positive you can get through the day. I had to force myself to learn to do tasks in small chunks and in the midst of other activities.—Scott
- Make a list every day of the things that need to be done. If you get 5 minutes, do one of the easy ones. I do need a block of time for editing. —Ferrell
- It is an important skill to work on big things in small chunks of time. The one publication I am most proud of I wrote in the waiting room coffee shop while my wife was in the hospital. I wrote it in 15-20 minute segments and I learned to work over the roar. Prior to that I'd think 15 minutes wasn't enough to do anything. —Bruce Kessler, Mathematics, Asst. Dean, Audience member.