

How to get a “teaching” position with an “R1” Ph.D.

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When I began my job search, I was concerned that, as a Georgia Tech Ph.D. student, my research focus and limited teaching experience would make it difficult for me to draw the interest of “teaching-focused” universities. Fortunately, thanks to the advice of many different colleagues, I had no trouble attracting the attention of search committees.

In this document, I share my experience and offer advice on how students from Ph.D. programs at “research-focused” universities can effectively apply for “teaching-focused” academic positions. Specifically, I’ll discuss (1) how to choose where to apply, (2) how to write a cover letter, (3) how to write a teaching statement, and (4) other ways a teaching-focused application and interview will differ from a research-focused application and interview.

Keep in mind, however, that every situation is unique. I based my advice on only one job search. Techniques that worked for me will not necessarily work for you.

1 Apply to the right places

When I began my job search, I naïvely assumed that any university with a Ph.D. program strongly emphasized research and every other university strongly emphasized teaching. I was very surprised to learn that the teaching/research balance is a continuum from 99.9% research to 99.9% teaching. In this section, I first describe several schools in the middle of this continuum, then discuss how to use that information when choosing where to apply.

1.1 The “middle ground”

My naïve pigeonholing of all universities into “teaching” and “research” bins negatively affected my first interview: I had a good answer for every teaching question, but nothing intelligent to say about my long-term research plans. To help you avoid this mis-

take, I describe here two example points in the middle ground: 50/50 and 75/25 (that is 75% teaching and 25% research). I assume that everybody knows about the stereotypical 100% research and 100% teaching universities, so I won’t discuss them further. Also, because teaching is my primary interest, I don’t have any experience with universities whose primary focus is research (e.g., “25/75” universities).

1.1.1 50/50 balance

Several schools (including the University of Richmond, Kalamazoo College, Colgate University, and Illinois Wesleyan University) actually maintain a 50/50 balance between teaching and research. A 50/50 balance does not mean mediocre teaching and mediocre research. Instead, these universities expect excellent teaching and excellent research. Of course, there are not enough hours in the day to do “R1”-level research (MIT, Berkeley, Stanford, CMU, etc.) and teach three or four classes every semester. Therefore, 50/50 universities expect professors to produce a lower *quantity* of high *quality* research. For example, these schools expect the same quality of research that is done at the top-tier research universities; however, they will expect about half as many publications.

Universities with a 50/50 balance do provide both the teaching and research resources you will need to be successful. First, the teaching load is typically four or five courses per year. (Labs typically count toward the course load; therefore, the actual course load is three to four courses per year). In addition, the university will provide ample startup funds. The 50/50 universities at which I interviewed all offered enough startup funds to keep my Ph.D. research going at full speed. Several also offered guaranteed summer support for research.

50/50 universities are very good matches for those who enjoy R1-level research but want to have more teaching opportunities than they would have at places like Georgia Tech. Realize, however, that these universities are not “Georgia Tech Lite”; instead, they

are more like “Georgia Tech with Extra Teaching”: The workload is not any easier or lighter than at an R1 university; instead professors at 50/50 schools simply trade some research output (in terms of papers and research dollars) for additional teaching opportunities. You will need the the same long-term research vision and grant-writing skills you would need to be successful at an R1 university. Therefore, 50/50 universities are probably not the best match for you if you would not enjoy working at a school like Georgia Tech.

1.1.2 75% teaching / 25% research

I accepted a position at Grand Valley State University, which (in my opinion) has a 75% teaching emphasis and a 25% research emphasis. Indiana/Purdue at Fort Wayne (IPFW), Kettering University (Flint, Michigan), and Siena College (Loudonville, New York) also have a 75/25 balance.

At GVSU, there is no question that teaching is valued above all else. At 50/50 schools, you need to know when your teaching is “good enough” and focus on your research. In contrast, GVSU does not expect professors to sacrifice teaching quality for research output. Research is not yet officially a tenure requirement at many 75/25 universities. Instead, excellent teaching and excellent service will make a decent tenure case. However, department chairs and deans are actively seeking faculty who will choose to do research. (If they hire you to do research, I don’t recommend you try to make your tenure case based on service.)

Personally, the most important benefit of working for a 75/25 university is that my career fate is almost 100% under my control: I can build a strong tenure case by teaching well, working hard, and including undergraduates in my research. I need not worry about how many grants I receive or how many papers are accepted for publication (which are decisions made by committees and are out of my control). As long as my students benefit from taking my classes and participating in my research projects, I will make the type of contribution that will earn me tenure.

The tradeoff is that the amount of financial support for research is much lower at 75/25 schools than at 50/50 universities. There is little or no start-up funding or money for summer salary (other than to teach summer classes). In addition, the teaching load will be three to four courses per semester. The comparatively low funding levels and higher teaching load,

of course, limit the type of research that is feasible. Fortunately, my current research can all be done in simulation on commodity hardware.

At many 75/25 universities, a full load is officially 12 hours (about four courses) per semester, with a handful of teaching reductions for research-active faculty. One main benefit of working at a larger university like GVSU is that the large number of faculty more easily cover the teaching load, thereby allowing the dean to offer reduced loads to more research-active faculty.

1.2 Where to apply

Because the teaching/research balance is a continuum, do not fall into the trap of dividing all universities into a “teaching” bin and a “research” bin then applying to all the universities in one of the two bins. Instead, send applications to the schools that lie within about 35% of your ideal balance. There are three reasons for applying to a variety of schools. (1) It can be difficult to determine a school’s teaching/research balance. (2) You don’t really know what balance is best for you until you interview. (3) The teaching/research balance is just one of many factors that influence which position you accept.

1. It can be difficult to judge a school’s teaching/research balance without actually interviewing on campus. The university’s and department’s web pages are good places to begin your investigation; however, they can be misleading. Some departments will over-emphasize research on their web pages to attract more high quality students and professors. Other departments are more interested in *doing* research than bragging about it. Consequently, they have a stronger research emphasis than their web site indicates. You will get a better sense of the school’s research opportunities and requirements during a phone interview; but you won’t get a very good feel for the teaching/research balance until you interview in person.
2. You don’t really know what you want until you interview. Going into interview season, I was convinced I wanted a 50/50 job. It wasn’t until I had visited several 50/50 and several 75/25 universities that I realized I would be happier at 75/25 university. Similarly, visiting places and deciding you do not want to work there helps

you more confidently decide where you *do* want to work.

3. The teaching/research balance is just one of many factors that influence which position you accept. The university's location and culture will have more influence on your happiness in a position than the department's teaching/research balance. Living in your ideal community will almost certainly more than make up for a slightly less than ideal job. Similarly, your potential colleagues can make the job "feel" harder or easier. For example, the right colleagues and collaboration opportunities may make a 50% research component feel much "lighter", thereby making a 50/50 school a better fit than your desired 75/25.

In summary, apply to schools, even if they don't meet your ideal, because your ideal will change as you interview. However, don't waste time applying for every posted position. If you are looking for a 75/25 job, you almost certainly will not enjoy a 100% research job, regardless of the school's location, salary, or culture. As I will explain in Section 2.1, I found that the ease with which I could write a personalized cover letter was a good indicator of whether I should apply for a given position. Don't bother applying for a position unless you can come up with three good reasons why you would be a good fit. On the other hand, if you aren't sure about the suitability of a position, but can still write a good cover letter, go ahead and apply.

2 Cover letter

Send a customized cover letter with every job application. Your cover letter is important because it gives you an opportunity to clearly explain why a reviewer should allocate some of his or her very limited time to the careful consideration of your entire application. You will hear many people claim that "cover letters are just formalities" and "nobody reads them". While not everybody reads the cover letters, those who do will often be scanning a large pile of applications and have only a few seconds to make a decision. By not including a cover letter, or simply including a "form letter", you run the risk of having your application summarily rejected.

I used my cover letter to emphasize (1) the fact that I was searching specifically for a teaching posi-

tion, and (2) that I wanted opportunities to do undergraduate research. I also mentioned one or two facts about each department that I found particularly attractive or complimentary to my career goals. (In many cases, this was the department's undergraduate research opportunities.) Consequently, a hiring committee member could determine at a glance that (1) I had taken time to research the position and the school, and (2) that I was definitely interested in the position (as opposed to simply applying for every open position).

2.1 Help deciding where to apply

The process of writing the cover letter provides an opportunity to determine whether to apply to a given department. I wrote a personalized cover letter for every job application. Each cover letter specifically stated why I would be a good match for the university and the position. Some letters were very easy to write because my suitability for the position was obvious.

In other cases, I really struggled to find good reasons for the search committee to consider my application. For example, I applied to several Tier II research schools. Looking back, I wasted my time and theirs. I didn't see how my research complemented their current research or advertised research needs. Worse yet, the only reason I wanted to work for the department was "I need a job *somewhere*". As a result, I simply sent a form cover letter: "Please consider my application for your open assistant professor position. My research is ..." None of these applications resulted in even a phone interview. In summary, if you can't come up with three good reasons why you are a good fit for a position, don't bother applying.

2.2 How to write the cover letter

When I wrote my cover letters, I put my reasons for applying in a numbered list in the middle of the page. That way the letter's most eye-catching elements were the statements

1. "I *want* to teach",
2. "I *want* to do undergraduate research", and
3. "I see from your website that ...".

Thus, the reader could determine at a glance that my application was serious: I had researched the uni-

versity and I was not using it as a “backup” application.

I applied for many jobs near family in Michigan. People had very strong opinions on whether to mention my ties to the area in the cover letter. Almost every Georgia Tech person I asked recommended against it because they were concerned people would think I was applying only to be near family. Almost every GVSU person I asked recommended I do mention the family ties because it was a sign that I intended to stay at the position, as opposed to using it as a “stepping stone” to a more prestigious university.

In my opinion, you really need to know your audience. If the school regularly receives many qualified applications and has few retention problems, don’t mention any ties to the area: The school gets and keeps good employees regardless of any family ties. On the other hand, if professors regularly use the university as a “stepping stone” to better positions, then the university will consider your application more seriously if they know you want to stay in the area. Similarly, if you apply to a school that rarely receives applications from graduates of top-tier schools, mentioning ties to the area may help convince them you are serious about applying. In either case, however, mention your family ties only if you are very clearly a good fit for the position. If you are not a good fit, any mention of ties to the area may send the message that you’re applying only because family is nearby.

3 Statement of teaching

After reading your cover letter, most search committee members will turn to your statement of teaching. You should spend most of your job search preparation here. *Start early!* You should start writing your teaching statement as soon as Fall semester begins. It will take you much longer than you think to find just the right words to describe your motivation for, and approach to, teaching.

Avoid reading other people’s teaching statements until you have a complete draft of yours. Writing your teaching statement is your opportunity to reflect upon (1) why you want to teach, (2) how your teaching approach is unique and interesting, and (3) what you believe sets great teachers apart from good teachers. You want to find your own answers to these questions. It is vital that your answers be original and sincere. If you read somebody else’s statement, you

run the risk of getting his or her ideas stuck in your head.

- **Why you want to teach:** Put considerable thought into this. Avoid trite answers like “where would the world be without teachers?”, or “I want to give back to the community”. Many careers are vital (doctors, teachers, firemen), and there are many ways to give back to the community. Try to figure out why teaching is the important career you have decided to undertake. Think about which of your qualities will make you a good teacher (as opposed to a good doctor, policeman, or fireman). Also, think about which aspects of teaching you find satisfying, and why you wouldn’t find other careers as satisfying. (You need not include the answers to these questions in your statement. Just use them to help you better understand why you want to teach.)
- **How your teaching approach is unique or interesting:** What will set you apart from the 300 other people who applied for the same job?
- **What sets great teachers apart from good teachers:** Hiring committees are looking for excellent teachers, not just competent teachers. Therefore, discuss those qualities that set great teachers apart from good teachers. After you demonstrate that you know what it takes to be a great teacher, discuss which qualities you possess and how you will develop them. (Your development plans are especially important if you have limited teaching experience.)

You may find it helpful to use professors as examples. One technique is to cite a professor’s best quality, and explain how you plan to incorporate that quality into your teaching. Although our strongest memories of teaching may be examples of what not to do, *never* use a professor as a bad example. Making derogatory comments anywhere during the application and interview process may cost you the job. Instead, you need to identify and discuss the corresponding good quality. For example, instead of saying “To avoid boring my students during lecture”, you need to say “I will keep my students interested in lecture by . . .”.

Your teaching statement should be approximately two pages long. Some schools will allow more, and others will request less. The best strategy is to put

your most important points first. That way people can read as much of the statement as they want and will have read the most important information, regardless of where they stop.

Have many different people from many different backgrounds critique your teaching statement. Your reviewers should include people from

- research schools,
- teaching schools,
- big departments,
- small departments,
- many different research areas, and
- many different disciplines (math, biology, chemistry, engineering, humanities, etc.)

In addition, your set of reviewers should include

- new professors,
- full professors
- graduate students, and
- undergraduates.

Hiring committees often comprise faculty from several different departments. Obtaining comments from reviewers with different backgrounds will help you discover more of the many different possible interpretations of your statements. Utilizing a diverse set of reviewers will also help assure that your statement doesn't unknowingly contain any controversial statements.

It is important to choose your words carefully (and have your choices carefully reviewed) because some hiring committee members pick apart applications and read between the lines to find subtle differences between candidates. You want to limit the extent to which an over-zealous committee member can distort your message.

With many different reviewers, you are almost certainly going to receive conflicting advice. It is not possible to please everybody, but you should be aware of what issues are controversial and avoid them when possible. If you do decide to take a controversial stand, be sure to be as clear and precise as possible. Then, be prepared to address the issues

should they come up during an interview. Don't try to make everybody happy: Either avoid a controversy completely, or take a clear, unequivocal stand. When you receive conflicting advice about whether to mention a particular issue, give the most weight to reviewers from schools like those to which you are applying.

Finally, when you are trying to reconcile all conflicting advice, make sure that the resulting documents still reflect your beliefs and personality. You don't want to end up with an application that has a "walking on eggshells" or "I'm telling you what you want to hear" feel.

4 The rest of your application

The rest of your application (CV, research statement, letters of recommendation, etc.) will be very similar to that of an application to a research university. The major difference is that an application to a teaching university should emphasize your teaching experience: The CV should list teaching experience before research experience. Likewise, when taken as a whole, your letters of reference should emphasize your teaching.

4.1 Letters of Reference

I realize that few professors at a research-focused university will have much to say about your teaching. Therefore, I offer the following guidelines:

- Most of your letters of reference should at least mention teaching. More than half of your references should recognize your desire and enthusiasm for teaching enough to mention it in their letter. The remaining references may be, for example, advisers with whom you interact only in a research setting.
- At least one out of three (or two out of five) letters should emphasize teaching. Obtaining these letters requires some advance planning. If your primary adviser is 100% research-focused, establish a relationship with a more teaching-oriented faculty member. More importantly, when you get the opportunity to teach, make sure somebody observes you and offers feedback. I taught an entire semester and never had anybody observe me. This lack of observation made it dif-

difficult to get a strong teaching recommendation. Fortunately, I had saved my course evaluations and had a professor write his recommendation based on the evaluations.

4.2 Statement(s) of research

Your statement of research should be of R1-quality. All universities, even those that primarily emphasize teaching, seek to hire the best faculty. Therefore, they will want to see that you have the same research vision as somebody hired by an R1 university. The only caveat is that, if you want to work at a 100/0 or 75/25 university, you need to demonstrate that you understand the potential of your thesis research without sounding like you have your heart set on completely fulfilling your research vision. (Most 50/50 universities will provide the resources to fulfill even the most ambitious research vision.) In other words, you need to be clear that you will be perfectly happy working on only a small piece of your vision.

One technique for presenting a complete, yet reasonably scoped, research vision is to write two statements of research. The first is the full, long-term vision — the statement you would send to an R1 university. You can even spin this as a “collaborative vision” — the type of research you would do in collaboration with professors at other universities. The second is a “statement of undergraduate research” in which you discuss those aspects of your research that are accessible to undergraduates and outline several potential summer research projects. The first statement demonstrates that you have a long-term vision and research direction whereas the second demonstrates how you can use your vision to contribute to the teaching-oriented nature of the university.

4.3 Job talk

As with your statement(s) of research, your job talk should be similar to the one you would prepare for a research school, with one important difference: You will be evaluated on both your research and teaching potential; therefore, forget the “third, third, third” rule (that the first third of your talk should be understandable by everybody, the second third understandable by only people in your area, and the final third understandable by nobody). Instead, everybody should be able to understand at least two thirds of your talk; and, any computer scientist should be able to understand the entire talk. At a teaching

university, you are not trying to impress them with your technical knowledge. Instead, you are trying to demonstrate that you can take a complicated concept (i.e., your research) and make it accessible to an audience. Even if a university asks you to both give a research talk and teach a lesson, they will evaluate your teaching at both talks. Therefore, avoid turning on the “fire hose of information” during your research talk.

Because you will be evaluated from a teaching perspective, your talk should reflect your personality more than a traditional research talk would. Humor and other embellishments that would cause a candidate at an R1 school to be dismissed as “not serious” are more likely to be well-received by teaching universities looking for professors who will deliver interesting lectures. Be sure, however, that your talk reflects *your* personality. If you are not a comic by nature, adding jokes to your job talk will do more harm than good.

As with any job talk, the key is practice. You need to do *at least* three practice talks before your first interview. Two of them should be in front of an audience. In addition, your talk at your first interview will probably be terrible. (I changed almost a third of my talk after my first interview.) Therefore, avoid scheduling your dream job as your first interview.

4.4 Interview

Again, the standard interviewing advice applies to both teaching schools and research schools. There is more than enough interviewing advice in the literature, so I will offer only a few suggestions:

1. **Be yourself:** Of course, you want to be on your best behavior, watch your mouth, and avoid arguments. However, you won't be happy with your job unless you like your colleagues and they like you. Therefore, it doesn't do you any good to tell people what they want to hear, or act the way you think they want you to act (i.e., don't pretend to be quiet and reserved if you are loud and boisterous).
2. **Don't ignore research:** Even if you are interviewing at a 100% teaching-focused university, people will ask you about your research plans. Have answers ready. I really botched my first interview by not being prepared to discuss my long-term research vision. Instead, I was pre-

pared to talk about potential independent research projects only.

- 3. Don't worry about the dinner tab:** When faculty take faculty candidates out to dinner, it is their chance to have a nice meal courtesy of the Dean; therefore, they will spend a lot of money by ordering appetizers, desserts, and occasionally drinks. Relax and don't go out of your way to keep the bill down. If the Dean is going to get mad at the size of the bill, he'll get mad at the faculty who took you out. Of course, do try to follow the lead of your hosts: Don't be the first to order alcohol or dessert, and don't order the \$30 lobster and steak if they all order the \$8.95 blue-plate special.
- 4. Interview length:** If possible, try to schedule one hour for each individual interview. In my experience, the "formal" part of individual interviews lasted twenty to forty minutes. After that, the interview usually switched to a "conversation" mode where we just chatted about topics of common interest. I got the best impression of what my job would be like during this "conversation" time. For this reason, be wary of one-day interviews. Unless the department is very small, a one-day interview will comprise many half-hour interviews. In my opinion, a half an hour is not enough time to get to know somebody and have anything deeper than a technical discussion and small talk. You will be done talking with some people in well under an hour. That's not a problem. Use the extra time to check e-mail, use the bathroom, or just relax. However, if you find yourself done talking to almost everybody in well under an hour, you are probably not a good personality fit for the department.

4.5 Student meeting

I got my best feel for a school by meeting with students (usually over breakfast or lunch). Most schools organize a private meeting with students as standard procedure. Some, however, will merely invite students to your talk or to one of the lunches; therefore, soon after you are invited for an interview, ask the school to set up a *private* one hour meeting (i.e., no faculty invited) with four to ten students. I believe you need at least four students to provide a sufficiently broad perspective. (When you have only two or three students, they are usually the department's top two or three students. Larger groups tend to

include more average students.) For reasons stated above, the student meeting should be at least one hour. Better yet, ask for a 90 minute lunch.

If you're lucky, the students will have a lot of questions for you. More often, however, you will need to lead the discussion. Make sure you come prepared with questions that will engage the students and get them talking. (The same applies to interviews with faculty.)

My goal was to get the students discussing among themselves what they like and dislike about their university. You can tell a lot about a school by the students' complaints. The number of complaints is not important. In fact, if they complain about a lot of petty things (e.g., parking, the condition of dorms), it is often an indication that the university is well-run. Beware of schools where the students are primarily complaining about a few fundamental issues. For example, very few students pay any attention to tenure, appointments to the board of trustees, or building contracts. If the student body as a whole has concerns about such things, then there has likely been a major problem that brought the issues to their attention. In contrast, major issues (such as the impending appointment of a new president) that don't generate much student angst are probably (but not necessarily) well in hand.

5 Summary

With a little preparation and a lot of enthusiasm, graduates of research-focused universities, such as Georgia Tech, should have no trouble getting a job at a teaching-focused university. Most "teaching" universities welcome the opportunity to hire faculty with strong research experience and interest. Such faculty provide useful advice and experience to those students who have aspirations for a career in research. In addition, research helps raise the university's profile. You need only demonstrate a serious interest in the position. By this, I mean (1) a genuine enthusiasm for teaching, and (2) a realistic research plan that incorporates undergraduates. Together these points should convince anybody on the hiring committee that you are seriously interested in working at a teaching university and not simply using the school as a "backup".

Only your statement of teaching will differ greatly from an application to a research school. However, your entire application should reflect an emphasis on

teaching. This teaching emphasis should not, however, exclude research. Schools will expect you to demonstrate a long-term research vision, even if your actual research opportunities will be limited.

Finally, throughout the application and interview process, remember to be yourself. All universities, especially smaller universities, are looking for a good “fit” as well as technical competence. Therefore, make sure your application materials as well as your interview reflect your personality.

Happy hunting.