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Valuing and Evaluating Teaching in Academic Hiring: A Multidisciplinary, Cross-Institutional Study

Introduction

Within academe, there is much interest in the workings of the academic marketplace. Efforts to understand how the process unfolds occupy both researchers and participants. Clearly, the search process is complex. This article contributes to our understanding by systematically examining how teaching is valued and assessed by search committees. As part of this examination, we pay particular attention to the use and evaluation of statements of teaching philosophy. Use of such statements is common, but little is known about how they are viewed and evaluated by search committees.

Using a multidisciplinary and cross-institutional sample, we present data related to these questions:

- 1. How important is teaching in decisions about academic hiring? How does this compare to other factors under consideration?
- 2. At what stage of the hiring process are evaluations of teaching effectiveness most significant?

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3. What evidence of teaching effectiveness do hiring committees consider? In particular, why do some committees request statements of teaching philosophy, and how are such statements evaluated?

We were drawn to these questions through our work at the teaching center of a major research university. Our involvement in the Preparing Future Faculty movement led us to create programs to help advanced doctoral students consider their place in the academy. Of particular importance to this effort was helping our doctoral candidates consider the range of institutions that exist in higher education and exposing them to information and pedagogies that would enable them to be successful teachers in these varied environments. But in the process, we heard over and over from students who wondered whether and how teaching is valued during the hiring process. This work is intended to help answer their questions. In doing so, we are also able to provide additional detail to the work of others who have sought to better understand the current workings of the academic marketplace.

Literature Review

Empirical studies on the criteria used by tenure-track search committees are sparse. In an early study based on interviews with department chairs in departments that had recently hired new faculty, Caplow and McGee (1958/2001) found that hiring was based almost exclusively on the perceived prestige of the applicants. Actual accomplishments—whether in teaching or research—were less significant than reputation of alma mater and recommendations, to the point that such secondhand information often took the place of interviews or other formal steps of the job interview process.

When a similar study was conducted by Burke in the mid-1980s, the situation had already changed markedly. While prestige was still clearly a major concern, it was now linked to a metric of quality. In addition, a more systematic approach to searches (first round of applications, interviews at conferences, on-campus interviews) was in place. Research quality and potential were the most significant criteria, but teaching ability was also part of the equation, even at research institutions. As Burke states, "It is refreshing to note, in spite of the governing selection criterion of research orientation, the emphasis on teaching in these major research universities. . . . This is not to suggest that research is not the principal emphasis in hiring" (Burke, 1988, p. 65).

A 1988 survey of department chairs by the Department of Education confirmed that teaching was indeed important, but the relative weight of teaching and research in hiring varied significantly by institutional type.

Overall, three fourths of department heads said that teaching was a key factor in hiring. However, only 43% of respondents at research universities considered teaching very important in hiring compared to 73% who thought the quality of the candidates' research was very important (Russell, Fairweather, & Zimbler, 1991). Youn and Gamson's (1994) study of hiring at comprehensive institutions suggested a shift in the relative weights of teaching and research, with more attention to a candidates' research potential.

Several recent studies of the job market for English and psychology provide insight into the criteria and evidence used in hiring. Broughton and Conlogue (2001) found that teaching and teaching experience were quite significant in searches for English faculty. They reported that four of the top ten criteria used in the initial screening of applicants related to teaching. Similarly, the top ten criteria for evaluating on-campus interviews included three teaching-related items. Additional research sponsored by the Modern Language Association indicates that in English and foreign languages, the trend has shifted away from the reputation of candidates' graduate programs and recommenders to their professional preparation and the degree of congruence between the interests and skills of the candidate and the needs of the hiring department (MLA Ad Hoc Committee, 2002).²

Two studies in psychology have looked at the types of documents that search committees use in their evaluation of candidates. Using surveys of psychology search committee chairs, Sheehan, McDevitt, and Ross (1998) investigated the criteria used to screen job applicants and to evaluate candidates who came to campus. Of the top ten criteria for evaluating applicant materials, the first two were letters of recommendation and fit between research interests and department's needs. However, just as in Broughton and Conlogue's work, four of the ten (ranked 3–5 and 10) concerned teaching. Similarly, three of the top ten items used to evaluate candidates' performance at the interview involved teaching. In their analysis of open-ended responses concerning the factors that led to the final choice of candidates, they report, "Search chairs most commonly cited teaching (ability and experience), fit between applicant and department, and research (quality, potential, publications) as having the greatest influence" (Sheehan et al., 1998, p. 10).

In a different but related line of inquiry, Benson and Buskist (2005) surveyed search committee chairs in psychology to determine how teaching excellence or a commitment to teaching was assessed. The following items were cited: student evaluations (77%), letters of recommendation (57%), previous teaching experience (57%), statement of teaching philosophy (34%), and quality of the teaching demonstration (34%) or job talk (27%).

In another recent study, Schönwetter, Taylor, and Ellis (2006) analyzed job ads from *The Chronicle of Higher Education* for faculty positions at all levels across disciplines at both Canadian and U.S. institutions, looking at the items required of applicants. Over 60% of ads for U.S. positions required evidence of teaching experience. Statements of teaching philosophy were, on average, required far less frequently (14%), as were teaching evaluations (5%), statements of teaching interest (3%), and teaching portfolios (2%).

Our study expands on these works in several ways. First, while the studies in psychology and English indicate that teaching ability and experience are significant criteria in the search process, they do not reveal how faculty in these disciplines compare to their colleagues in other fields. Our research relies on data from six disciplines, representing the humanities, social sciences, and natural sciences, and thus it examines a much broader slice of academe. Second, most of these studies either rely on surveys of search committee chairs or analyses of job ads (for an exception, see Twombly, Wolf-Wendel, Williams, & Green, 2006). Our analysis incorporates data from job ads and surveys of search committee chairs, and thus it is better designed to determine priorities both at the initial application and later stages of the search. Third, by using our surveys to explore search committee chairs' evaluation of teaching statements, we add important depth and nuance to our understanding of how teaching is assessed and evaluated during job searches.

Methods

During the 2004-2005 academic year, we collected on-line job postings in six academic disciplines: English, history, political science, psychology, biology, and chemistry (see Table 1). We consulted with colleagues in the relevant disciplines to determine sources and timing of our data collection. To be included in our study, eligible postings came from U.S. institutions granting bachelor's, master's, or doctoral degrees as indicated by the 2000 Carnegie Classification. All postings were either for tenure-track assistant professor or open-rank positions.

To obtain our research sample, we took a random sample of postings in each discipline (with the exception of chemistry, where due to the small number of postings, we used them all). We then proceeded in two ways: (1) We coded these postings in order to gain descriptive data of the application materials institutions request from job candidates; (2) We identified search committee contacts in each posting and administered an on-line survey between June and August of 2005. The

TABLE 1	
Data Sources for Academic Job	Postings in Six Disciplines

Discipline	Source	Collection Dates
English	Modern Language Association	10/27-28/2004;
	http://www.mla.org	11/3-5/2004
History	H-Net: Humanities and Social	11/9/2004
	Science Online	
	http://www.h-net.org/jobs	
Political Science	American Political Science Association	9/2004-11/2004
	http://www.apsanet.org	
Psychology	American Psychological Association	12/31/2004;
	http://www.psycareers.com	1/26/2005
Biology	American Association for the	11/9/2004
	Advancement of Science	
	http://www.aaas.org	
Chemistry	Chemical and Engineering News	11/11/2004
	http://www.cen-chemjobs.org	

TABLE 2 Sample Sizes and Survey Response Rates

Discipline	Postings Meeting Criteria	Random Sample	Surveys Sent (records with full contact information, duplicate contacts removed)	Surveys Returned	Response Rate (completed surveys as % of surveys sent)
English	719	248	217	139	64%
History	221	140	117	73	62%
Political Science	315	170	133	83	62%
Psychology	229	131	104	58	56%
Biology	251	147	120	68	57%
Chemistry	72	72	64	36	56%
Total	1807	908	755	457	61%

initial request was done by e-mail, and we sent two follow-up requests to nonresponders. At the conclusion of the survey period we had achieved an overall response rate of 61% (see Table 2 for additional detail).3

Tables 3 and 4 present information about the composition of the ad sample, survey sample, and survey respondents. Overall, doctoral institutions constitute the largest portion of the three samples, followed by master's and then bachelor's institutions.4 In terms of discipline, English constitutes the largest portion of the three samples. The distributions of ad and survey samples across Carnegie classifications and disciplines were virtually identical; clearly, attrition between the ad sample and survey sample due to lack of contact information or duplicate contacts was not concentrated in any discipline or institutional type. The composition of our survey respondents generally mirrors that of our original survey sample; however, English comprises slightly more of the survey respondents, while psychology and biology comprise slightly less. For ease of presentation, in the analyses that follow we combine our six disciplines into three divisions: humanities, social science, and natural science, noting where necessary any significant disciplinary exceptions.⁵

Results

How important is teaching to the academic hiring process? We know from the research on faculty work-life that teaching is a significant piece of most faculty careers, regardless of institutional type (Boyer, 1990; Cook, Wright, & Hollenshead, 2000; National Center for Education Statistics, 1999). Thus it is not surprising that our respondents indicated that potential teaching ability is crucial to the hiring process (see Appendix: Tables A and B). In fact, in our overall sample, our respondents gave

TABLE 3
Percentage of Three Research Samples, by Carnegie^{6,7}

Carnegie			Survey Respondents	
Doctoral	48.5%	47.5%	49.5%	
Master's	36.8	36.0	32.4	
Bachelor's	13.4	13.1	14.7	

TABLE 4
Percentage of Three Research Samples, by Discipline

Discipline	Ad Sample	Survey Sample	Survey Respondents
English	27.3%	28.7%	30,4%
History	15.4	15.5	16.0
Political Science	18.7	17.6	18.2
Psychology	14.4	13.7	12.7
Biology	16.2	15.9	14.9
Chemistry	7.9	8.5	8.0

teaching ability a mean importance rating of 5.5 on a 6-point scale, higher than any other characteristic (and significantly different, using paired t-tests, from the mean importance placed on research potential). Put another way, 91.5% of our respondents ranked teaching ability as important or very important to the academic hiring process.

Differences by institutional type followed predictable patterns. Respondents from bachelor's and master's institutions gave teaching ability a higher mean rating than they did research potential. There was no statistical difference between the mean ratings of teaching ability and research potential for respondents from doctoral-intensive institutions. Finally, respondents from doctoral-extensive institutions had higher mean ratings for the importance of a candidate's research potential. But even here, teaching clearly mattered, with 85.3% of respondents indicating that teaching ability was very important or important to the hiring process.

There were also differences by division. In the humanities, teaching ability has a higher mean importance ranking than that of research potential. In the social sciences, there were no statistical differences between the mean importance ranking of research potential and teaching ability. In the natural sciences, the mean importance ranking for research potential is higher than that of teaching ability. It is worth noting that in our analysis of individual disciplines, over 90% of the respondents from English, history, political science, and chemistry indicated that teaching ability was important or very important to the academic hiring process.

Finally, looking only at teaching ability, we see statistically significant differences in the mean importance ranking by both institutional type and division. Respondents from the humanities rank teaching ability higher than do their colleagues in the social sciences or natural sciences. Similarly, respondents from bachelor's institutions rank teaching ability as more important than do their colleagues from other institutional types (see Appendix: Table B for additional data on statistically significant comparisons.)

But the academic hiring process unfolds over time. Is teaching equally important at all stages of the process? Respondents provided data on this question, too. Looking at our entire sample, it seems that assessments of teaching ability are particularly important at the latter stages of the interview process—during campus visits and as part of the final decision among a small pool of candidates. This basic pattern holds across all institutional types and disciplinary divisions, though the relative degree of importance of teaching ability at each stage varies in predictable ways (see Appendix: Tables C and D for data on statistically significant differences).

Initial Job Postings

With assessments of teaching ability so significant to the hiring process, how exactly is this done? We answer this question using two sources of information. First, we analyzed job postings to see what materials committees requested from candidates. Then, we asked our survey respondents to tell us which materials they used to judge a candidate's teaching effectiveness—giving us information about additional data that committees use beyond those received with the initial application.

Job postings are written in a variety of ways and request many different types of materials from job applicants (see Appendix: Tables E1–E3). As Table E1 reports, the three materials requested most often are CVs, cover letters, and letters of recommendation. Obviously, these materials are very important to the hiring process, yet job postings rarely include explicit directions about what material to include in these "general" documents. For example, a respondent from English wrote that they use "letters of recommendation that mention teaching. Actually, we didn't specify this [in the ad], but everyone in our field of English Literature knows to include at least one such letter."

Beyond these materials, there is much more variation in what is requested, and the terminology used often leaves applicants needing to exercise their interpretive skills. We divided the requests into those related to research and those related to teaching. Surprisingly, given the widespread concern with research, none of the research-related items were requested by more than 15% of institutions. As Table E2 details, the most requested research items were statements of research interests, copies of publications, and a research plan.

Given our focus on the assessment of teaching ability, we were particularly interested in the teaching materials institutions require from candidates. As Table E3 details, the single most commonly requested item was a statement of teaching philosophy (16.6%). Using a more expansive definition of a teaching statement (encompassing any reference to teaching philosophy, teaching goals, teaching interests, research and teaching interests, cover letters addressing teaching, or teaching experiences), the percentage of postings requesting such information rises to (32.8%). Other requests were much less frequent. Only 7.8% specifically requested student ratings, 4% requested sample syllabi, and 0.9% requested teaching portfolios. The undefined and open to interpretation "evidence of teaching effectiveness" was requested in another 7.6% of ads. With the exception of the teaching statement, these low numbers accord with a recent study examining job ads in *The Chronicle of Higher Education* (Schönwetter et al., 2006).

In terms of these teaching documents, there are differences by institutional type and discipline (see Appendix: Tables F and G). Master's and bachelor's institutions were much more likely to ask specifically for a teaching philosophy than were postings from doctoral institutions. The natural sciences were more likely to ask specifically for a teaching philosophy (defined narrowly or broadly) than were their counterparts in the humanities or social sciences. One reason for this seems to be that natural science search committees expect junior candidates to have more limited teaching experiences, so a teaching philosophy becomes an important indicator of a candidate's approach and orientation to teaching. For example, a survey respondent from chemistry noted:

The search was for an assistant professor. At this rank in chemistry the candidate probably does not have much teaching experience, if any. The purpose of the statement was to make sure the candidate has thought through the teaching aspect of an assistant professor position.

Postings from the social sciences were more likely to request "evidence of teaching effectiveness" or specifically asked for student evaluations. This was particularly driven by results in political science: 22.9% of postings requested evidence of teaching effectiveness and 23.5% asked for student evaluations. No other discipline came close.

Materials Used to Judge Potential Teaching Effectiveness

While an analysis of these postings is useful, it only gives a narrow picture of the information that committees actually request. We know from our survey data that search committees evaluated considerably more material related to teaching, either because they reviewed whatever individual candidates sent (sometimes explicitly looking to see whether a candidate would think to include material on teaching) or because they solicited other types of material later in the hiring process. In fact, 56.9% of our sample indicated that they had requested teaching philosophies at some point in the hiring process, considerably higher than the 16.6% of job postings that specifically requested a teaching philosophy.

Tables H and I report other commonly used documents and interactions to judge a candidate's potential teaching effectiveness. Most common were interview questions about teaching, having candidates meet with students, and the candidate's description of his or her teaching interests. Over half used course syllabi, teaching philosophies, or student evaluations. Just over 40% of our respondents required a candidate to teach a class on campus, while almost 39% required candidates to give a teaching job talk.

Were there patterns by institutional type or division? As Table H reports, master's and bachelor's institutions were more likely to use these documents and interactions to judge teaching effectiveness than were doctoral institutions. Having a job candidate teach a class on campus reflected the biggest discrepancy across institutional types: Only 21% of our doctoral-extensive respondents indicated using this method to judge potential teaching effectiveness, while 60% of our master's respondents did so. In terms of discipline, respondents from the humanities and social sciences were more likely to use these documents and interactions than were those from the natural sciences. As Table I details, the biggest disciplinary differences involved the usage of course syllabi, student evaluations, and teaching a sample class. As a respondent from history wrote:

We discuss teaching extensively during the campus visit and require candidates to teach a class at that time. Classroom performance was the deciding factor in determining who we hired. A few strong candidates were eliminated because they did not do well in front of a class.

Open-ended responses to our survey uncovered one other piece of data used to evaluate effective teaching: the research talk. While we can't provide any estimates of how prevalent this is, comments we received from respondents suggest that all job candidates need to be thinking about the message their research talk sends about both their research and teaching abilities. The following comments illustrate this well:

Our entire basis for evaluating teaching effectiveness is how well they do on their job talk, especially in conveying the major concepts to people outside of their field.—Biology

Even if not described as such, the department colloquium should be regarded as a teaching opportunity. DO NOT simply read a critical essay; teach its brilliant insights to the audience.—English

Clearly, these data show that committees are using multiple avenues to judge teaching effectiveness, including interactions not explicitly labeled as such. Moreover, search committees infer effectiveness when they see that candidates have teaching experience, especially more varied experiences. Many referenced this in their open-ended advice to job candidates and degree-granting programs:

Any teaching experience (labs, tutorials, case discussions, etc.) is helpful especially if the faculty member overseeing this activity can provide a reference re: the applicant's performance.—Biology

Give opportunities for candidates to practice, e.g., as guest lecturer "substitutes" for faculty members on occasion.—Chemistry

PhD-granting institutions should prepare their students to teach by giving them opportunities to teach courses—complete courses, not just T.A. or guest-lecturing. There is no substitute for experience.—Political Science

Teaching Philosophies

We turn our attention now to the use of teaching philosophies as part of the academic job search. A significant percentage of search committees (approximately 57% of our respondents) request statements of teaching philosophy at some point during the hiring process. On the other hand, many search committees choose not to request them. What can we learn about how teaching is evaluated and assessed from our respondents' perspectives on teaching philosophies?

Ninety percent of those respondents requesting teaching philosophies provided information on their rationale for doing so. They overwhelmingly cited two factors: (1) a desire to communicate their institution's/department's commitment to teaching excellence and their interest in finding a candidate who would be a good fit for such an environment, and (2) a desire for evidence that a candidate has thought about teaching and to learn details about the candidate's perspective on teaching. The following are illustrative responses:

Teaching is the primary responsibility of faculty members as stated in our collective bargaining agreement. . . . We're proud to have effective teachers in our department and feel it is of primary importance to bring in new faculty members who value teaching to the degree we do.—Political Science

To better understand the candidate's interest in teaching, view of teaching, and experience in teaching. Teaching is one of several aspects evaluated for tenure, so we only desire to hire assistant professors who we are confident will do well as a teacher, in addition to everything else they are related to doing.—Biology

But what of those who did not request them? Eighty-eight percent of our nonrequesting respondents explained their rationale. Reasons here vary more, but they can be grouped into three general categories. First, some are interested in the general content of a teaching philosophy but assume candidates will address this in general materials (cover letters, personal statements) or will voluntarily submit one. In fact, some are intentionally vague about the materials they request in order to use the candidate's selection of what to send as further indication of a candidate's priorities. These comments are typical:

We have found that those who are truly interested in teaching will submit a statement of teaching philosophy without being asked to do so; therefore we never asked for it specifically.—Psychology

Frankly, it did not occur to us to separate this from the candidate's personal statement overall. We want to see what the candidate's research agenda and teaching commitment are. We haven't asked these things separately.—Political Science

A second common theme was search committees' skepticism about the value of these statements and a belief that other materials are more useful for judging potential teaching effectiveness, particularly for those who expect candidates to have relatively limited teaching experiences. These comments are typical:

At initial stages it is hard to make differentiations on the basis of these statements; the candidates we bring to campus must teach a class and here we can observe them as a teacher.—History

English faculty have little difficulty talking philosophically about teaching, whether they teach effectively or not. We think we get better information from student evaluations and comments in candidates' letters of reference, both of which are required. We also commonly invite campus interviewees to teach a class.—English

Third and finally, some choose not to request them because they do not want to make the application process too burdensome, particularly where the hiring emphasis really is on research. This comment from a biology respondent reflects this perspective: "Not requested in order to not scare away highly qualified researchers."

While search committee chairs have conflicting feelings about the value of teaching statements, it is still clear that candidates' have compelling reasons to include them. As our data shows, many committees specifically want them—whether solicited or not. Moreover, in response to a specific question on unsolicited statements, search chairs responded that they view as generally positive a candidate's submission of an unsolicited teaching philosophy (see Appendix: Tables J and K).

Search chairs also have developed clear opinions about the qualities of successful teaching statements. As we report more fully in Kaplan, Meizlish, O'Neal, and Wright (2007), respondents told us that successful statements provide concrete examples of teaching practice. These chairs placed little value on statements full of boilerplate language that lacked any evidence from a candidate's actual teaching experience and lacked any appreciation for the varied contexts in which teaching takes place.

Discussion and Conclusions

Returning to the questions we posed at the outset, the answer to the first one—how important is teaching—is clear: Teaching is an important

component of the job search across disciplines and institutional types. Even the high response rate to our survey (approximately 60% overall) indicates that faculty find the importance of teaching a compelling issue. The current study also revealed both predictable and unexpected patterns with respect to this question. The former includes the tendency for research universities to rank teaching as somewhat less important than research, in contrast to liberal arts and master's campuses in which teaching plays a more important role in the hiring process. More interesting is the fact that doctoral institutions' emphasis on research did not come at the expense of teaching; doctoral institutions, like their sister institutions, gave teaching an average importance rating above 5 on a 6-point scale. Disciplinary differences also exist, but they too are not as great as one might think, with all three divisions giving teaching ability an average importance rating above 5.

In terms of the stage at which evaluation of teaching effectiveness is most significant and the types of evidence used to determine teaching effectiveness, it was clear that committees pay closer attention during the latter stages of the process and that they use a range of evidence. Even so, faculty do make inferences about candidates from the materials they choose to submit, particularly with respect to the teaching philosophy. Some search committee chairs interpret the absence of a teaching statement in initial application materials as a sign that a candidate does not value teaching. Based on this conclusion and the finding that unsolicited teaching statements are seen as mostly positive, job candidates are well advised to prepare and send teaching statements early in the search process.

In fact, we found that teaching philosophies are requested by search committees in all disciplines and institutional contexts, though, surprisingly, this is most common in the sciences. Search committees are also developing clear opinions of the genre itself. While many view them as an important window into a candidate's perspective on teaching, others remain skeptical about their quality and usefulness. Valued statements are those that provide concrete evidence of teaching experience and avoid vague platitudes. Clearly, Preparing Future Faculty programs and departmental advisors need to be aware of these criteria and develop processes to help graduate students write statements that conform to the expectations of search committee chairs. For an outline of a process to help graduate students write such statements, see Kaplan et al. (2007).

Along with our questions about the documents or processes that helped faculty evaluate teaching, we learned from open-ended responses that faculty make inferences about candidates' teaching abilities based on the amount of teaching experience they have and their performance during the campus visit, especially the job talk. This finding supports previous research (Benson & Buskist, 2005; Burke, 1988) and has interesting implications for graduate students and graduate programs that prepare them for the job market. Clearly, hiring departments are interested in candidates who have more experience and in a wider range of teaching contexts. Obviously, the possibilities for full-course responsibility may be limited in some departments. However, having graduate students prepare and offer guest lectures with faculty advisors present is certainly feasible. In addition, graduate students who are interested in positions at teaching-focused institutions would be well advised to seek out opportunities for greater classroom experience, if not at their home universities then at other local colleges or universities.

The use of the job talk as a proxy for evaluating teaching was a common refrain from our respondents in all six disciplines. Similarly, Bruff's (2007) study offers additional empirical evidence of this trend in math. Yet, using the job talk as a proxy for teaching skill does raise some interesting questions. Are the two situations parallel?¹⁰ In fact, it could be argued that they are quite different, particularly at the undergraduate level, for at least two reasons. First, job talks are designed for audiences of experts, if not in a particular specialty, at least in the field more broadly. Experts can follow and comprehend these talks on a very different level than students in a first-year, introductory course or even those in an advanced course in the major.

Second, many candidates rightly assume that their job talk is a chance to highlight various aspects of their research: the significance of their current work, the fit between their work and the direction of the department, their potential for the future. Candidates may be unaware that faculty-and perhaps students-in the audience are using the job talk and other parts of the on-campus interview as a means of evaluating their competence as teachers. Yet the job talk is not usually seen as a venue to demonstrate pedagogical innovation. For example, while many graduate students are gaining greater training and comfort with active learning approaches, the job talk is traditionally not a venue for such pedagogical techniques. Moreover, the role of questioning is quite different in a research talk than it is in most classrooms. From a candidate's perspective, the main goal is to be able to answer the questions intelligently, to show fluency with the material beyond what is on paper, and perhaps most important, not to be caught off guard by unexpected questions. Questioning in teaching serves the very different function of helping students deepen their understanding of the material, clear up misconceptions, and apply the information to other settings.

Of course, the job talk does show candidates' ability to lecture, present complex information in a short time, talk about rather than write about their research, and show the extent to which they can think on their feet. But it is problematic—both in terms of implicit expectations and fit—to overread the congruence between the talk and teaching competence.

More broadly, using the job talk this way makes clear the need for greater transparency on the part of search committees and better mentoring for graduate students. Some of the survey responses indicate that committees do not specify particular requirements (e.g., sending a reference letter that discusses teaching or sending a teaching philosophy) because "everyone knows this is required" or because the candidate's ability to figure out the hidden requirement is somehow significant. Obviously, these attitudes can be problematic, especially for students who are not familiar with academic culture (first-generation college or graduate school attendees) or those who receive less mentoring (often underrepresented minority students and women in the sciences). While it is not realistic or desirable to create formalized rubrics for searches, we would suggest that it behooves departments to make their expectations clear from the outset, especially at a time when there is a strong desire across disciplines and institutional types to diversify the faculty. Toward that end, search committees can, for example, tell candidates that their job talks will be judged not only for their content but also for what they say about teaching ability. Similarly, faculty mentoring PhD students and postdocs should think carefully about their own implicit assumptions and how they can make the unspoken more explicit for their mentees. Such communication levels the playing field so that candidates are judged on their performance rather than their ability to decipher the culture of the discipline or the academy.

So where to go from here? While the findings from the current study can inform the advice and preparation given to graduate students, there are limitations and more to learn. Replicating this work in additional settings and for additional slices of the academic job market is an obvious next direction. Derek Bruff (2007) has replicated our work in mathematics, with similar findings. Information from other fields, both in the traditional liberal arts and in the professional schools, would provide a broader picture. Similarly, expanding this work to include searches beyond those considered here—assistant professor and open-rank tenure-track positions—would provide insight into how teaching is valued and assessed in other sectors of the academic job market. Moreover, our study focuses on faculty positions at U.S. colleges and universities. Aca-

demic cultures in other countries vary tremendously. For example, the British and Australian systems often have far higher degrees of institutional accountability and oversight built in. How do such differences affect what is requested of applicants vis-à-vis teaching? In what ways (if any) do standards for evaluating such evidence differ from standards in the United States?

In addition, future studies could focus on specific types of evidence of teaching effectiveness. For example, how widespread is the use of the research talk as a proxy for teaching ability? How do search committees structure and evaluate teaching demonstrations? Evidence from Grubb (1999) at the community college level raises serious questions about the way such presentations are set up and what they really show about a candidate's ability.

Finally, our work raises a more fundamental question for academe. We believe the evidence presented here challenges the lore of the academy that research always determines who is hired. Do studies such as this offer convincing evidence to challenge the prevailing wisdom? If not, what would? Both the prevalence and endurance of the belief that teaching is not valued are worthy of continued study.

APPENDIX

TABLE A

Mean Importance of Each Factor to the Hiring Decision, by Institutional Type Respondents rated each item on a 6-point Likert scale ($6 = \text{Extremely Important} \dots 1 = \text{Extremely Unimportant}$)

	Teaching Ability	Publication Record/Potential as Researcher	Collegiality	Potential for Obtaining External Funding	Service Record
Bachelor's	5.90*	4.91	5.07	3.03	3.80
Master's	5.73*	4.98	5.10	3.35	3.86
Doctoral-Intensive**	5.47	5.53	5.06	3.92	3.84
Doctoral- Extensive**	5.18*	5.77	4.79	4.24	3.5
		n = 440			

Notes: $^*p < 0.05$. Paired-Sample T-Tests conducted within institutional type between teaching ability and publication record/potential as researchers. ** Difference in Means between Doctoral-Extensive and Doctoral-Intensive was significant at p < 0.05 for all categories except Collegiality. Additional difference of means tests revealed the following: All differences between Doctoral-Extensive and Master's respondents were significant. Differences between Doctoral-Intensive and Master's or Bachelor's respondents were significant for teaching, research, and funding. Differences between Master's and Bachelor's were significant at p < 0.05 for teaching and p < 0.1 for funding.

TABLE B

Mean Importance of each Factor to the Hiring Decision, by Division

Respondents rated each item on a 6-point Likert scale (6 = Extremely Important . . . 1 = Extremely Unimportant)

	Teaching Ability	Publication Record/Potential as Researcher	Collegiality	Potential for Obtaining External Funding	Service Record
Humanities	5.74*	5.26	4.98	2.86	3.85
n=212	(.502)	(.851)	(.860)	(1.198)	(1.007)
Social Sciences	5.39	5.31	4.98	3.93	3.57
n=140	(.726)	(.864)	(.905)	(1.249)	(1.052)
Natural Sciences					,
n=104	5.15*	5.55	4.97	5.25	3.6
	(.879)	(.652)	(.810)	(.973)	(1.057)
Overall				,	· · · · · · · · · · · · · · · · · · ·
n=456	5.5*	5.34	4.98	3.73	3.71
	(.714)	(.820) n = 456	(.861)	(1.5)	(1.039)

Notes: *Significance p < 0.05. Paired-Sample T-Tests conducted within division between teaching ability and publication record/potential as researchers. Numbers in parentheses are standard deviations. Additional difference of means tests revealed the following: The difference in means between the Humanities and Social Sciences were significant at p < 0.05 for teaching, funding and service. The difference in means between the Humanities and Natural Sciences were significant at p < 0.05 for all categories except collegiality. The difference in means between the social and natural sciences were significant at p < 0.05 for teaching, research and funding.

TABLE C

Mean Importance of Teaching Ability at Each Stage of the Hiring Process, by Institutional Type Respondents rated each item on a 6-point Likert scale (6 = Extremely Important). 1 = Extremely Unimportant

	Initial Review	First Round	Campus Visit	Final Decision
Bachelor's	5.48	5.60+	5.91*	5.88*
Master's	5.33	5.37	5.76*	5.77*
Doctoral-Intensive**	5.0	5.15*	5.60*	5.50*
Doctoral-Extensive**	4.58	4.78*	5.26*	5.23*
Overall ^a	5.00	5.15*	5.57*	5.54*
	N = 437	N = 392	N = 445	N = 444

Notes: "Overall includes specialized institutions. *Significance p < 0.05 (+Significance p < 0.1). Paired-Sample T-Tests conducted within Carnegie classification between means on Initial Review and means for First Round, Campus Visit, and Final Decision. **Mean differences between Doctoral-Extensive and Doctoral-Intensive were statistically significant at p < 0.05 level for Initial Review, Campus Visit, and Final Decision. At p < 0.1 level (.052) for First Round. Additional difference of means tests revealed that differences between Doctoral-Extensive and Master's institutions were all significant at p < 0.05 level. Similarly, differences between Doctoral-Intensive and Bachelor's institutions were all significant at p < 0.05 level. Differences between Doctoral-Intensive and Master's institutions were significant at p < 0.05 level for Initial Review and Final Decision. There were no statistically significant differences between Master's and Bachelor's Institutions.

TABLE D

Mean Importance of Teaching Ability (on 1-6 scale) at Each Stage of the Hiring Process, by Division Respondents rated each item on a 6-point Likert scale (6 = Extremely Important . . . 1 = Extremely Unimportant)

	Initial Review	First Round	Campus Visit	Final Decision
Humanities	5.19	5.46*	5.76*	5.75*
Social Sciences	4.96	4.97	5.49*	5.44*
Natural Sciences	4.65	4.63	5,28*	5.25*
Overali	5.00	5.15*	5.57*	5.54*
	N = 440	N = 395	N = 448	N = 447

^{*}Significance p < 0.05. Paired-Sample T-Tests conducted within Division between means on initial review and means for First Round, Campus Visit, and Final Decision. Additional difference of means tests revealed that differences between the Humanities and both the Social Sciences and Natural Sciences were all significant at the .05 level. Differences between the Social and Natural Sciences were significant at the .05 level for Initial Review and First Round and significant at the .1 level for Campus Visit and Final Decision.

TABLES E1-E3

Percentage of Initial Job Postings in Six Disciplines Requesting the Following Materials from Job Applicants, Overall Summary

TABLE E1
General Information Required of Applicants

	# institutions (N = 908)	% of institutions ($N = 908$)
CV	864	95,2%
Cover letter	623	68.6%
Letters of recommendation	615	67.7%
References	162	18.0%
Writing sample	180	19.8%
Transcripts	281	30.9%

E2
Research Information Required of Applicants

	# institutions (N = 908)	% of institutions (N = 908)
Copies of publications	123	13.5%
Research interests	138	15.2%
Research plan	102	11.2%

E3
Teaching Information Required of Applicants

	# institutions (N = 908)	% of institutions (N = 908)
Teaching philosophy—narrow	151	16.6%
Teaching philosophy—expansive*	298	32.8%
Evidence of teaching effectiveness	69	7.6%
Sample syllabi	36	4.0%
Student ratings	71	7.8%
Teaching portfolio	8	0.9%

Note: a Included here were statements of teaching philosophies as well as other documents variously described as statements of teaching goals/teaching interests/teaching and research interests/cover letters addressing teaching/teaching experiences.

TABLE F
Percentage of Initial Job Postings Asking for Each of the Following Materials, by Institutional Type

Institutional Type	Cover Letter	CV	Teaching Phil. Narrow	Teaching Phil. Expansive	Evidence of Teaching Effectiveness	Student Evaluations	Teaching Portfolios
Doctoral Master's Bachelor's Specialized	58.9% 77.4 81.5	96.8% 93.6 93.3	8.6% 25.7 22.7	30.4% 37.3 32.8	6.0% 8.6 11.8	6.0% 11.0 7.6	1.2% 0.9 0.0
Medical Overall N = 908	9.1 68.6	100.0 95.2	0.0 16.6	18.2 32.8	0.0 7.6	0.0 7.8	0.0 0.9

Note: almost described as statements of teaching philosophies as well as other documents variously described as statements of teaching goals/teaching interests/teaching and research interests/cover letters addressing teaching/teaching experiences.

TABLE G
Percentage of Initial Job Postings Asking for Each of the Following Materials, by Division

Division	Cover Letter	CV	Teaching Phil, Narrow	Teaching Phil. Expansive ^a	Evidence of Teaching Effectiveness	Student Evaluations	Teaching Portfolios
Humanities Social	88.4%	95.6%	10.6%	16.5%	4.9%	3.1%	1.8%
Sciences Natural	72.1	95.0	13.3	33.2	15.6	19.3	0.3
Sciences Overall N = 908	28.8 68.6	94.5 95.2	32.0 16.6	61.2 32.8	1.4 7.6	0.5 7.8	0.0 0.9

Note: aIncluded here were statements of teaching philosophies as well as other documents variously described as statements of teaching goals/teaching interests/teaching and research interests/cover letters addressing teaching/teaching experiences.

Percentage of Survey Respondents Indicating Use of the Following Documents and Interactions to Evaluate Teaching Effectiveness, by Institutional Type TABLEH

			Documents				Іптетас	iteractions	
Institutional Type	Description of Teaching Interests	Course Syllabi	Teaching Philosophy	Student Evaluations	Teaching Portfolios	Interview Questions on Teaching	Candidate Met With Students	Candidate Taught Class on Campus	Candidate Gave Teaching Job Talk
Doctoral-Extensive 75 Doctoral-Intensive 77 Master's 79 Bachelor's 85 Overali ³ 77 Nore: ^a Excludes Specialized Inst	75.1% 77.6 79.7 85.1 77.2	50.8% 57.1 64.2 64.9 57.8	53.4% 54.2 61.5 61.5 57.4	47.5% 51.0 53.7 66.2 54.3	22.0% 30.6 20.9 31.8 26.0	77.4% 83.7 89.2 92.5 84.4	74.6% 69.4 82.4 86.6 78.5	20.9% 36.7 60.1 56.7 41.3	29.4% 34.7 44.6 50.7 38.3

Percentage of Survey Respondents Indicating Use of the Following Documents and Interactions to Evaluate Teaching Effectiveness, by Division TABLEI

			Documents				Intera	nteractions	
Division	Description of Teaching Interests	Course Syllabi	Teaching Philosophy	Student Evaluations	Teaching Portfolios	Interview Questions on Teaching	Candidate Met With Students	Candidate Taught Class on Campus	Candidate Gave Teaching Job Talk
Humanities	81.6%	77.8%	50.2%	58.0%	34.9%	89.6%	79.7%	51.4%	44.8%
Social Sciences	79.4	58.2	49.6	74.5	23.4	81.6	80.9	42.6	39.7
Natural Sciences	65.4	16.3	79.8	19.2	11.5	75.0	71.2	16.3	26.0
Overall	77.2	57.8	56.9	54.3	26.0	83.8	78.1	40.7	38.9

TABLE J

Mean Favorability of a Candidate's Submission of an Unsolicited Teaching Philosophy, by Institutional Type

Respondents rated each item on a 6-point Likert scale ($6 = \text{Extremely Favorable} \dots$, 1 = Extremely Unfavorable)

Institutional Type	Initial Application	First-Round Interview	Campus Visit
Doctoral-Extensive**	4.73	4.70	4.79
Doctoral-Intensive**	5.05	5.12	5.05
Master's	4.93	4.93	4.99
Bachelor's	5.00	4.89	4.90
Overalla	4.88	4.85	4.90

Note: "Excludes Specialized Institutions. **Difference of means between Doctoral-Extensive and Doctoral-Intensive were statistically significant at p < 0.05 for Initial Application and First-Round Interview, and statistically significant at p < 0.1 for Campus Visit.

TABLE K

Mean Favorability of a Candidate's Submission of an Unsolicited Teaching Philosophy, by Division Respondents rated each item on a 6-point Likert scale (6 = Extremely Favorable . . . 1 = Extremely Unfavorable)

Division	Initial Application	First-Round Interview	Campus Visit
Humanities	4.81	4.90	4.98
Social Sciences	4.95	4,86	4.82
Natural Sciences	4.88	4.68	4.80
Overall	4.87	4.84	4.89

Notes

¹On hiring criteria in the community college sector, three valuable studies are Grubb (1999), Gahn and Twombly (2001), and Twombly (2005)

²See Twombly, Wolf-Wendel, Williams, and Green (2006) for an analysis of hiring in teacher education.

³We were very pleased with this response rate. It exceeds the response rate others have achieved using mail surveys on this topic: Sheehan, McDevitt, and Ross (1998) had a 49% response rate in psychology, and Broughton and Conlogue (2001) had a 55% response rate in English. It also exceeds the response rates reported in several reviews of Web-based surveys (Couper, 2000; Crawford, Cooper, & Lamias, 2001).

⁴What is the relationship between our data and the universe of positions in higher education? While doctoral institutions are a minority in the higher education world (Carnegie 2001, Summary, Table 1), they have over 40% of all full-time instructional faculty and staff among the institutional types considered in this study (NCES 2005, Table 238). According to NCES (recalculated to fit the parameters of our study), comprehensive institutions represent another 30% of full-time instructional faculty and staff, with another 10% at private liberal arts institutions. Given the slippage between study methodologies and classifications, these percentages seem fairly consistent with our research samples.

⁵Contact the authors for further disciplinary detail.

⁶Totals do not add to 100% because we excluded those institutions classified by Carnegie as specialized institutions. Thirteen postings were for institutions classified as specialized. English had four such positions (two classified as art and music, one as engineering, one as business); biology had five (all five classified as specialized medical). The remaining disciplines had one each classified as a specialized institution-other. In reporting our results, we include specialized institutions only in our disciplinary analysis.

⁷In many analyses, we present results separately for the two doctoral classifications. There were many statistically significant differences between the two, and one doctoral category masks these differences.

⁸Grubb (1999) raises questions about whether teaching demonstrations are always valid criteria. Regarding community college hiring, he writes, "most hiring committees do not gather any valid information about teaching. It has become common to require a "teaching demonstration," but in every case we learned about, it is so short and artificial as to be laughable" (p. 289).

⁹This critique of teaching philosophies is also reflected in opinion pieces in the higher education press (see Montell, 2003; Pratt, 2005)

¹⁰One of our respondents from an English department also raised this issue: "We drew conclusions from the candidate's job talk (about their research) on how they might be in the classroom. For the record, we'll be reconsidering whether this is [sic] appropriate comparison before we do searches this year."

References

- Benson, T. A., & Buskist, W. (2005). Understanding "excellence in teaching" as assessed by psychology search committees. *Teaching of Psychology*, 32(1), 47–52.
- Boyer, E. L. (1990). Scholarship reconsidered. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Broughton, W., & Conlogue, W. (2001). What search committees want. *Profession 2001*, pp. 39-51. New York: Modern Languages Association. Retrieved January 15, 2007, from http://www.mla.org/resources/jil/jil_jobseekers/jil_jobseekers_pro
- Bruff, D. (2007). Valuing and evaluating teaching in the mathematics hiring process. *Notices of the American Mathematical Society*, 54(10), 1308-1315.
- Burke, D. L. (1988). A new academic marketplace. New York: Greenwood Press.
- Caplow, T., & McGee, R. J. (2001). The academic marketplace (Rev. ed.). New Brunswick, NJ: Transaction. (Originally published 1958)
- The Carnegie Foundation for the Advancement of Teaching, (2001). The Carnegie classification of institutions of higher education: 2000 Edition. Menlo Park, CA: Carnegie Publications.
- Cook, C. E., Wright, M. C., & Hollenshead, C. S. (2000). More than a research university: The importance of teaching at the University of Michigan (Occasional Paper No. 14). Ann Arbor: Center for Research on Learning and Teaching, University of Michigan.
- Couper, M. (2000). Web surveys: A review of issues and approaches. Public Opinion Quarterly, 64(4), 464–494.
- Crawford, S. D., Couper, M. P., & Lamias, M. J. (2001). Web surveys: Perceptions of burdens. *Social Science Computer Review*, 19(2), 146–162.
- Gahn, S., & Twombly, S. B. (2001). Dimensions of the community college faculty labor market. Review of Higher Education, 24(3), 259–282.

- Grubb, W. N. (Ed.). (1999). Honored but not invisible: An inside look at teaching in community colleges. New York: Routledge.
- Kaplan, M., Meizlish, D., O'Neal C., & Wright M. C. (2007). A research-based rubric for developing statements of teaching philosophy. In D. R. Robertson & L. B. Nilson (Eds.), To improve the academy: Resources for faculty instructional and organizational developers (Vol. 26, pp. 242–262). Hoboken, NJ: John Wiley and Sons.
- MLA Ad Hoc Committee on the Professionalization of PhDs. (2002). New York: Modern Language Association, pp. 187–210. Retrieved January 15, 2007, from http://www.mla.org/professionalization
- Montell, G. (2003, March 27). What's your philosophy on teaching, and does it matter? The Chronicle of Higher Education, Chronicle Careers. Retrieved January 15, 2007, from http://chronicle.com/jobs/2003/03/2003032701c.htm
- National Center for Education Statistics. (1999). Teaching workload of full-time post-secondary faculty. In *The condition of education* (NCES Publication No. 1999-022, p. 70). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- National Center for Educational Statistics. (2005). Table 226: Number of instructional faculty in degree-granting institutions, by employment status and control and type of institution: Selected years, fall 1970 through fall 2003. Digest of Education Statistics, Tables, and Figures. Retrieved January 15, 2007, from http://nces.ed.gov/programs/digest/d05/tables/dt05_226.asp
- Pratt, D. (2005, January/February). Personal philosophies of teaching: A false promise? Academe, 91(1), 32–35. Retrieved January 15, 2007, from http://www.aaup.org/publications/Academe/2005/05jf/05jfprat.htm
- Russell, S., Fairweather, J. S., & Zimbler, L. J. (1991). Profiles of faculty in higher education institutions, 1988. Washington, DC: National Center for Education Statistics. (ERIC Document Reproduction Service No. ED336058)
- Schönwetter, D. J., Taylor, L., & Ellis, D. E. (2006). Reading the want ads: How can current job descriptions inform professional development programs for graduate students? *Journal on Excellence in College Teaching*, 17(1&2), 159–188.
- Sheehan, E. P., McDevitt, T. M., & Ross, H. C. (1998). Looking for a job as a psychology professor? Factors affecting applicant success. *Teaching of Psychology*, 25(1), 8-11.
- Twombly, S. B. (2005). Values, policies, and practices affecting the hiring process for full-time arts and sciences faculty in community colleges. *The Journal of Higher Education*, 76(4), 423-447.
- Twombly, S. B., Wolf-Wendel, L., Williams, J., & Green, P. (2006). Searching for the next generation of teacher educators: Assessing the success of academic searches. *Journal of Teacher Education*, 57(5), 498-511.
- Youn, T. I. K., & Gamson, Z. F. (1994). Organizational responses to the labor market: A study of faculty searches in comprehensive colleges and universities. *Higher Educa*tion, 28(2), 189–205.