WHAT SHOULD ACCOUNTING DOCTORAL PROGRAMS FOCUS ON? AN ECONOMIC PERSPECTIVE.

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ABSTRACT

I examine calls to add teaching training to accounting doctoral program content using the lens of economic analysis. My analysis of key determinants of demand and supply in the market for accounting Ph.D.s offers little support for calls for additional emphasis on developing teaching skills. I suggest a two-part approach to the perceived lack of teaching skills among new faculty. First, in keeping with standard economic theory, employers should re-examine the incentives they offer for good teaching before demanding changes in accounting doctoral program curriculum. Second, that the optimal locus of development of teaching skills be left to private contract between employers and faculty (as opposed to being bundled with the technical education currently imparted in doctoral programs). One way to do this might be additional, post-doctoral, teaching certification and continuing professional education.

INTRODUCTION

Doctoral education is crucial to the health of the professorate. Investing in graduate education refreshes and deepens the knowledge and skills of the teacher and develops a future generation of educators. Periodically, studies call for a greater emphasis on development of teaching skills in doctoral programs and the weight given to teaching effectiveness in faculty recruitment and promotion decisions.[1] In one such recent study for instance, the authors conclude: "the indication in this study is that a significant gap remains between the level of teacher training offered by doctoral programs and the teaching skills perceived as necessary by departmental administrators. Future research might explore different methods of closing this gap. The costs and benefits of program realignment, as well as the alternative of program expansion, might serve as a valid topics." (Gribbin et. al. 2001).

Unfortunately, knowledge expands, time available remains constant and limited resources invariably have to be stretched further with every passing year. Since doctoral programs are quite expensive to sustain, calls for reallocating resources (program realignment) or increasing the overall allocation (program expansion) should be subject to cost-benefit analysis. Yet in the call for greater emphasis on teacher training, the economic tradeoffs facing students and educators are rarely if ever made explicit. Perhaps these tradeoffs are so obvious they seem to require no formal articulation. Nevertheless, given the potential costs of misplaced program emphasis, it is important that these tradeoffs be explicitly considered in designing doctoral programs. The goal of this study is to highlight aspects of the market for academic labor that suggest a number of higher priority claims on doctoral program resources and doctoral student time other

than teacher training. In other words, given academic labor market conditions, it may in fact be counter-productive to devote more (scarce) resources to teacher training before these other priorities have been serviced.

Good teaching is certainly important. Teaching, more specifically the need for high quality material and insights to deliver to students, drives much of our production and consumption of research. Conversely, research experience contributes to better teaching because examining each day's teaching plan and its content requires the same kind of critical lens as scholarly research. What is the problem to be discussed today? Why is it important to solve this problem? What solutions are feasible? How good is the proposed solution? It is however an open question whether, given the environment in which accounting doctoral programs operate today, an increase in teaching training is the missing ingredient that would best raise teaching competence and effectiveness.

Consider, for instance, the Enron debacle, one of the most spectacular business failures in recent times. To meaningfully lead a class discussion on the derivatives, hedging and arbitrage contracts which lie at the core of Enron's business model and their fair, reliable and responsible financial reporting or effective auditing would require at least one decent graduate level course in risk management and financial economics beyond a knowledge of the accounting and auditing standards on the topic. While many doctoral programs may require some exposure to these topics, it is by no means clear that the vast majority of accounting doctoral candidates are well versed in this complex area. In such a setting, making a case for greater emphasis on teaching training in doctoral programs is equivalent to arguing to a doctoral program director that the marginal hour of

a doctoral student's time would be better spent on a teacher training course than in a graduate course on risk management.[2]

Two sets of arguments may be brought to bear on this debate. The first set of concerns is simply that survey methods and the design of survey questions are notoriously ill-suited to the production of reliable evidence on certain classes of questions. Since a survey response costs the respondent nothing, surveys tend to elicit answers quite different from the ones the same respondent would come up with when faced with a costly choice. Consequently survey research runs the risk of eliciting Utopian answers. Absent checks or manipulations to ensure that respondents report their choices under relevant cost-benefit constraints, the survey may produce data with low external validity (and hence of dubious value in policy choice decisions). The language of some survey questions may further exacerbate this bias.[3] Unless cost-benefit tradeoffs are explicitly presented to respondents, we do not have a good sense of how the market for academic labor might discipline respondents' (program administrators) responses on the design of doctoral programs. Finally, there are also reasons to question the links between teaching training and teaching effectiveness that are sometimes taken to be implicit in the call for more teaching training.

Methodological quibbles apart, even if a survey were to be designed to overcome these problems, there remains a broader question to be answered. What empirical evidence (if any) from the market for academic labor suggests the need for greater teaching training in accounting doctoral programs? The rest of this study addresses this broader question.

THE DOCTORAL PROGRAM ADMINISTRATOR'S PROBLEM

The optimality of any program of doctoral education must be assessed by reference to the objective function of the program. Two alternative objectives for doctoral programs come readily to mind: One is to perpetuate a suitably qualified labor force for Universities by using the Ph.D. as a licensing criterion (as trade associations like the AACSB do), the other is to train individuals to conduct original scholarly research in their respective disciplines. Doctoral program administrators considering investing in teaching training face two key questions: Why should we teach teaching? and Why should we teach teaching? The first question asks whether Ph.D. programs should train students to do research or to teach it? If both, then what is the optimal mix? The second question presupposes that training improves teaching effectiveness (and that teaching effectiveness is important) and asks who would be the best provider of teaching training? A number of options exist: the doctoral degree-granting institution (i.e. the upstream producer), the employer institution (the final buyer) or some other vendor contracting independently with the doctoral student (i.e. the downstream producer) can be assigned this responsibility. Depending on the goals of the Ph.D. program, one may get different answers to these two key questions.

Why Should We (i.e. Doctoral Programs in Accounting) Teach "Teaching"?

Start by granting that in the Land of Cockaigne[4], all educators would argue for state-of-the-art training in teaching effectiveness in addition to the technical and research training already built into most successful doctoral programs. However, extending a doctoral program of study by one year is quite costly: doctoral stipends, the cost of the additional educational resources (faculty time and facilities) consumed in training a

doctoral student and the cost to society of delaying the availability of the services of a new faculty member is not likely to be less than six figures. For this additional investment in teaching training to be socially optimal, employers should, at a minimum, be willing to pay a premium for more effective teaching sufficient to justify the said six-figure investment. In other words, allocating scare program resources and costly student time to teaching training requires evidence that there is effective demand for these skills.

Why Should We (i.e. Doctoral Programs in Accounting) Teach "Teaching"?

Developing the teaching effectiveness of a trained research scholar is analogous to a process of customization. The optimal locus of such customization activity may range all the way from the doctoral degree-granting institution bundling teaching training with the other components of a Ph.D. program to the final customer, i.e. the hiring institution, providing on-the-job training or some intermediate solution chosen by private contract between the doctoral student and the hiring institution. The appropriate location will depend, among other things, on the specificity of the asset created by customization as well as the expected duration of the gestation or maturation period required for the faculty member to become an effective teacher.

Accounting firms' efforts to hire the most broadly educated individuals (with relatively higher abstract intellectual skills) offer one example of such post-procurement customization of human capital by the ultimate buyer. In that case, technological advances have made it much less expensive for accounting firms to provide broadly educated individuals more detailed accounting information and to train them on the job. Correspondingly the professorate's competitive advantage has shifted to more abstract training. In a similar vein could it be that the doctoral institution's job to train

researchers and that making good teachers out of them is the responsibility of the students themselves as well as their ultimate employer who bears the direct consequences of poor teaching?

DOCTORAL EDUCATION AS AN ECONOMIC GOOD

To evaluate potential answers to these questions and in considering future research on these issues it is useful to adopt a framework with sufficient internal structure and coherence to enable a disciplined assessment of the alternatives. In what follows, I analyze accounting doctoral education as an economic good. While recognizing that a fully satisfactory discussion of the "proper" objectives of a doctoral program requires a larger project than this study, the analysis of the supply and demand for accounting faculty sketched below is helpful in evaluating answers to the two questions posed in the previous section.

Supply

Hasselback (2000) tabulates Ph.D.s granted in accounting over a number of years. There are a total of 91 schools with active or inactive doctoral programs in accounting. Of these, 82 active programs granted a total of 777 doctoral degrees during 1994-1998. Production is quite concentrated: over 80% of degrees were granted by the 49 largest programs (about 55% by 27 programs and over 25% by just 10 programs). Of these 10 largest programs, none was a private school which, during this period, was the most likely to require little or no doctoral student teaching. (Of the four private schools in the list of large producers of Ph.D.s, Northwestern, Columbia and Stanford have no undergraduate accounting programs, while Carnegie Mellon does.) With very few exceptions (e.g. Michigan and Berkeley which may require no teaching) the large

producers of doctoral degree holders as well as most of the smaller ones quite likely do require students to teach at some point in their program.

This supply configuration coupled with the normal hiring (market-clearing) process has at least four implications. First, even without a formal teaching requirement, the vast majority of doctoral students' probably do get some experience at independently teaching a course. In all likelihood, this process ensures that the really bad teachers are weeded out while others are encouraged to remedy their deficiencies. Were this not to happen, department heads would find lots of irate students camped at their doorsteps protesting incompetent teaching. I am not aware of deficiencies of graduate student teachers so large as to raise systematic objections to their use in the classroom. Second, doctoral students' teaching or research assistantships often involve considerable faculty mentoring which allows students opportunities to learn by observing successful faculty. Third, reputation capital plays an important role in the recruitment process: advisors and dissertation committee chairs who write systematically misleading references are likely to be punished in future periods. Consequently a subtle but highly informative truth-in-advertising equilibrium most likely prevails in the small-number multi-period setting of the market for accounting faculty. Finally, the interviews and job talks that candidates give during the recruitment process are quite powerful signals of their class-room performance so that truly bad candidates can be readily screened out. Some schools require a candidate to present a lecture to undergraduates and then obtain feedback from the students. If teaching is truly a matter of grave concern, then one would expect more schools to apply this simple technique to assess teaching ability!

Demand

Of the 795 programs listed in Hasselback that might hire accounting doctorates, the vast majority are not research schools. Surely this argues for more emphasis on teaching since that what is most doctoral students will be expected to do. In fact, between 1987-1994, publication requirements at *non-doctoral* institutions, which is where the bulk of the doctorates will work, have *increased* (Read, Rama and Raghunandan, 1998) while those at research institutions have increased even more dramatically.

It is common belief among faculty and students that teaching is at best a hygiene factor. (Being bad at teaching will get you fired, but being great at it will not get you tenure). This belief has been formed in light of a time-series of tenure decisions made by many employers: most faculty fail to make tenure because they do not meet the research threshold of their respective schools. Since the past success of a program's graduates is a key determinant of its attractiveness to future students, to remain viable, doctoral programs must of necessity then focus on training current students to succeed at research.

Incentives For Investing In Teaching "Teaching"

The literature on incentives and performance suggests that performance is a function of ability, knowledge, training and environmental factors as well as incentives. The evidence to date on the teaching vs. research focus of doctoral programs does not adequately identify which of the multiple factors affecting performance might be the principal culprit. On the other hand, criteria used in faculty compensation contracts, promotion and tenure decisions and in conferring professional recognition suggest that

ineffective teaching by new faculty may lack incentives rather than ability, knowledge or skills to be effective teachers.

Consider the radical notion that teaching effectiveness may be a matter of motivation and therefore of incentives than of lack of teaching skills. Apart from the intrinsic rewards of teaching, which are no doubt personally valuable, it would be helpful to obtain some data on how faculty compensation (broadly defined) varies as a result of teaching effectiveness. If compensation contracts do not reward teaching effectiveness, surely a minimally invasive policy response might be to require that employers fix the compensation scheme and stand ready to pay more for greater teaching effectiveness. While it is entirely understandable that program administrators will and do perceive teaching effectiveness as an important criterion for faculty performance, a key determinant of the optimal response by doctoral programs and students to this perception depends on the employers' willingness to pay for it. Indeed, if administrators can get doctoral programs to upgrade the skills of the doctoral students for the same price, why would they not want the better product?[5]

In fact, casual empiricism suggests that by and large universities do not usually compensate differentially for good teaching. This leads to the conclusion that either (a) good teaching is not valued, or (b) that even if it is, it is common enough (relative to research skills) that it does not differentiate faculty members or (c) teaching evaluation instruments are so unreliable as to be useless for faculty compensation contracts. Given these realities of employment contracts, if faculty compensation (again, broadly based to include offices, carpeting, support staff, access to key resources, decision rights and not least access to graduate students as junior research partners) is based on relative

performance evaluation, then the importance of good research training for doctoral program administrators who care about doctoral student placement and for students themselves increases even more compared to increased teaching training.

In sum, absent a good understanding of the links between training, incentives and effectiveness, one simply cannot make judicious choices about the design of doctoral programs of study. One might argue that in an evolving, dynamic labor market for educators, the meta-skill of relevance becomes training doctoral students (future faculty members) to *identify* when they have a teaching effectiveness problem requiring attention (e.g. a significant gap between their students' needs and their own endowments of skills, knowledge or solutions), to *structure* solutions that have a high likelihood of success and to *select* the best solution based on all available evidence. This sounds a lot like the process of designing and conducting an independent research project.[6]

The Optimal Locus Of Production

Even if we have a good operational model of the entire process outlined above, the optimal configuration of a doctoral program also must take into account where the least-cost locus of production lies. If training in teaching effectiveness has a short, steep, learning curve beyond which further gains require considerable investment, one can make a stronger case for bundling. However, if there is a strong component of "maturation effects" in developing teaching effectiveness, then perhaps these skills can only be truly internalized by considerable on the job experience. As the doctoral program experience lengthens for other reasons unrelated to teaching effectiveness, adding on additional burdens when the returns will be long delayed seems to be less desirable than training the

student in more portable, abstract reasoning that will serve them well and provide much more immediate payback to them personally.

In effect, when there are significant maturation effects, we have a classic investment problem under moral hazard problem: the agent (the current student/future faculty member) would like to obtain cash flows from readily marketable skills. The employer would, however, prefer the employee to invest in skills that pay off over a much longer horizon but for which the agent may not foresee earning sufficient return. Moreover, if there are "soft" components to learning to be an effective teacher, then formal courses or training may not be as useful as on-the-job mentoring by senior faculty who share syllabi, assignments, warn of pitfalls and generally help rookies survive the first few years of academe.

The objective of accounting education (trade-school drilling in professional standards vs. broad intellectual curriculum), one's own goals as an educator, and the goals and target market of one's employer institution all play significant roles in determining the incentives to be an effective teacher. In other words, given the considerable ex ante uncertainty about the market value of formal training in teaching skills, the customization activity may be best carried out not in the doctoral program but later, perhaps on the job, once the employer's needs as well as one's own job-market incentives are known with greater certainty. A third possibility is for faculty at select schools to choose voluntarily or as a condition of employment to participate in an independent, post-doctoral, teaching certification program.

It is not at all clear, therefore, that once doctoral students have taught a couple of semesters and shown that they can survive in the classroom, it is worthwhile to insist they

spend scarce time and energy on formal training in teaching skills. This is particularly the case when tenure decisions hinge on their research output, rewards to teaching excellence are less salient and often significantly more transient than rewards to research excellence. Put another way, a call for more teaching training in doctoral programs is a call for "product bundling." For the call to be heeded, proponents of bundling need to establish that there is in fact effective demand for the proposed bundle.

SUMMARY AND CONCLUSIONS

Teaching effectiveness is a complex phenomenon. Calls for reallocating resources here or there absent a better description of the perceived links among effective performance and ability, knowledge, incentives and environmental factors such as the employer institution's objectives and target market are unlikely to be fruitful investment of scarce university resources. We need to understand the relative importance of various impediments to teaching effectiveness before making these changes.

Fierce competition for the best and brightest students and for ensuring their eventual placement and long-term academic survival and success has led doctoral programs over the last thirty years to invest in precisely the elements that the market rewards. Second, if resources were unconstrained, it would be nice if every doctoral student were trained to be an effective teacher. However, the current structure of doctoral programs at least at the large producers, coupled with the informal advising and screening that goes on in the market for new faculty most likely detects, identifies to potential employers, and therefore most likely weeds out, the most ineffective teachers.

Absent any serious evidence on the willingness of the market to pay more for more effective teaching either in cash wages or in terms of evaluating faculty for tenure,

calls to re-allocate Ph.D. program resources to teaching training seem counter-productive. Surveys can document desires or preferences, but they are notoriously poor assessments of effective demand and far too inconclusive a basis for making general inferences about the future allocation of doctoral program resources. Barring convincing evidence to the contrary, a labor market analysis suggests an equally viable alternative hypothesis: the optimal level of teaching effectiveness the market is willing to pay for *is* what doctoral programs are set up to provide.

The perspective that doctoral education is an economic good is useful in identifying a number of questions for future analysis: Are employers truly willing to pay for better teaching effectiveness? Are incentives for good teaching effective in motivating skill development and teaching effectiveness? Or are incentives alone insufficient to motivate faculty to voluntarily acquire the skills improve effectiveness? What is the relationship if any between teaching training and teaching effectiveness? Finally and perhaps most difficult, where does the efficient production locus lie? To make a case for the arguments favoring greater teaching training in doctoral programs one needs far more reliable answers to such questions.

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NOTES

1. See for instance Gribbin, Sobery and Braswell (2002), Edwards, Ingram and Sanders (1981).

2. Risk management happens to be a particularly salient example given recent events. It is easy think of other areas of discipline-specific knowledge with similarly high priority claims on doctoral student time and attention.

3. For instance, the respondents in the surveys could be asked "What areas of doctoral training would you suggest could be reduced in order to make room in the doctoral curriculum for increased training in teaching effectiveness?" This formulation would make explicit the costly trade-offs involved in the design of a successful doctoral program. Rather, the surveys seem to have asked respondents whether there was adequate emphasis on teaching training in doctoral education. Its easy to see why answers to the two questions might be qualitatively different.

4. Cockaigne, also spelled COCKAYNE, imaginary land of extreme luxury and ease where physical comforts and pleasures are always immediately at hand. References to Cockaigne are especially prominent in medieval European lore. These accounts describe rivers of wine, houses built of cake and barley sugar, streets paved with pastry, and shops that gratuitously give goods to everyone. Roast geese wander about inviting people to eat them, and buttered larks fall from the skies like manna (http://www.britannica.com).

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