

R. HOWARD



Reform the PhD system or close it down

There are too many doctoral programmes, producing too many PhDs for the job market. Shut some and change the rest, says Mark C. Taylor.

The system of PhD education in the United States and many other countries is broken and unsustainable, and needs to be reconceived. In many fields, it creates only a cruel fantasy of future employment that promotes the self-interest of faculty members at the expense of students. The reality is that there are very few jobs for people who might have spent up to 12 years on their degrees.

Most doctoral-education programmes conform to a model defined in European universities during the Middle Ages, in which education is a process of cloning that trains students to do what their mentors do. The clones now vastly outnumber their mentors. The academic job market collapsed in the 1970s, yet universities have not adjusted their admissions policies, because they need graduate students to work in laboratories and as teaching assistants. But once those students finish their education, there are no academic jobs for them.

Universities face growing financial challenges. Most in the United States, for example, have not recovered from losses incurred on investments during the financial fiasco of 2008, and they probably never will. State and federal support is also collapsing, so institutions cannot afford to support as many programmes. There could be an upside to these unfortunate developments: growing competition for dwindling public and private resources might force universities to change their approach to PhD education, even if they do not want to.

There are two responsible courses of action: either radically reform doctoral programmes or shut them down.

The necessary changes are both curricular and institutional. One reason that many doctoral programmes do not adequately serve students is that they are overly specialized, with curricula fragmented and increasingly irrelevant to the world beyond academia. Expertise, of course, is essential to the advancement of knowledge and to society. But in far too many cases, specialization has led to areas of research so narrow that they are of interest only to other people working in the same fields, subfields or sub-subfields. Many researchers struggle to talk to colleagues in the same department, and communication across departments and disciplines can be impossible.

If doctoral education is to remain viable in the twenty-first century, universities must tear down the walls that separate fields, and establish programmes that nourish cross-disciplinary investigation and communication. They must design curricula that focus on solving practical problems, such as providing clean water to a growing population. Unfortunately, significant change is unlikely to come from faculty members, who all too often remain committed to traditional approaches. Students, administrators, trustees and even people from the public and private sectors must create pressure for

reform. It is important to realize that problems will never be solved as long as each institution continues to act independently. The difficulties are systemic and must be addressed comprehensively and cooperatively. Prestige is measured both within and beyond institutions by the number and purported strength of a department's doctoral programmes, so, seeking competitive advantage and financial gain from alliances with the private sector, universities continue to create them. As is detailed on page 276, that has led most fields to produce too many PhDs for too long.

The solution is to eliminate programmes that are inadequate or redundant. The difficult decisions should be made by administrators, in consultation with faculty members at their own and other universities, as well as interested, informed and responsible representatives beyond the academic community who have a vested interest in effective

doctoral education. To facilitate change, universities should move away from excessive competition fuelled by pernicious rating systems, and develop structures and procedures that foster cooperation. This would enable them to share faculty members, students and resources, and to efficiently increase educational opportunities. Institutions wouldn't need a department in every field, and could outsource some subjects. Teleconferencing and the Internet mean that cooperation is no longer limited by physical proximity.

Consortia could contain a core faculty drawn from the home department, and a rotating group of faculty members from other institutions. This would reduce both the number of graduate programmes and the number of faculty members. Students would have access to more academic staff with more diverse expertise in a wider range

of fields and subfields. Faculty members will resist, but financial realities make a reduced number of posts inevitable.

Higher education in the United States has long been the envy of the world, but that is changing. The technologies that have transformed financial markets and the publishing, news and entertainment industries are now disrupting the education system. In the coming years, growing global competition for the multibillion-dollar education market will increase the pressure on US universities, just when public and private funding is decreasing. Although significant change is necessary at every level of higher education, it must start at the top, with total reform of PhD programmes in almost every field. The future of our children, our country and, indeed, the world depends on how well we meet this challenge. ■

Mark C. Taylor is chair of the department of religion at Columbia University in New York and the author of *Crisis on Campus: A Bold Plan for Reforming Our Colleges and Universities* (Knopf, 2010). e-mail: mct22@columbia.edu

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