



Serving Learners

Summary of Art Levine's Report: *Educating Researchers* May 5, 2007

PREFACE

This four-year study consisted of:

National studies:

- Deans Survey—deans, chairs, and directors of education. [1,206 x .53 response rate=639]
- Faculty Survey—ed school faculty [sample of 5,469 x .40 response rate=2,187]
- Alumni Survey—ed school alumni [15,468 x .34 response rate = 5,259]
- Principals Survey—school principals [1,800 x .41 response rate = 738]

Case studies of 28 schools and departments of education, chosen to reflect the diversity of the nation's ed schools by region, control, religion, racial composition, and gender makeup and Carnegie classification. Teams of journalists and academics conducted site visits at each school for several days to paint a more in-depth portrait of the education school.

Demographic Study, which was a series of studies on the characteristics of ed schools, the programs they offer, the credentials of their faculty and the degrees they award, as well as an examination of doctoral student dissertations.

There is no such thing as a typical ed school. Some offer programs only to prepare teachers; others have scores of programs in a variety of subject areas, covering education in the broadest sense—in and out of the classroom and across the lifespan. They differ in their emphases on teaching and research. Some model themselves after professional schools; others favor the graduate school of arts and sciences model; and most try to blend both.

PART I:

This study asked a single question: Do current preparation programs have the capacity to equip researchers with the skills and knowledge necessary to carry out research that will strengthen education policy, improve practice or advance our understanding of how humans develop and learn?

It used a nine-point template for judging the quality of researcher preparation programs:

1. **Purpose:** The program's purpose is explicit, focusing wholly on the prep of researchers; the skills and knowledge required of a researcher are clearly defined; definition of success is rooted in the quality of the research produced by graduates and its salience for policymakers, practitioners and/or scholars
2. **Curricular coherence:** Curriculum mirrors program purposes and goals. Rigorous and cohere, organized to teach the skills and knowledge—both theory and application—that researchers need
3. **Curricular balance:** Curriculum integrates the theory and practice of research, balancing study in the classroom with an apprenticeship
4. **Faculty composition:** Comprised of highly productive scholars with the capacity and commitment to prepare the next generation of researchers. Their research is well-funded. They receive

- competitive awards and fellowships for their work. They model high standards in research and are expert teachers, scholars, advisors and placement agents. Etc.
5. **Admissions:** Criteria are designed to recruit students with the capacity and motivation to become successful researchers
 6. **Graduation and degree standards:** These are high, students are well prepared for careers in research and the degrees awarded are appropriate to the research profession. After graduation, alumni commonly receive major research fellowships and positions in strong universities and research organization.
 7. **Research:** carried out in the program is of high quality, receives ample external funding and is driven by the needs of policy, practice and/or scholarship
 8. **Finances:** Resources are adequate to support the program, the faculty who teach in the program, the students enrolled in the program and the physical and intellectual infrastructure needed to support the program
 9. **Assessment:** the program engages in continuing self-assessment and improvement of its performance

Four themes emerged from this report:

1. **There are excellent education research preparation programs at universities across the country.** In fact, there were relatively more of these than excellent school leadership or teacher education programs (ref. the two previous studies). They are concentrated in research extensive universities.
2. **Research preparation programs in general are weakened by the condition of education research as a field.** It lacks focus and has amorphous boundaries. Agreement about appropriate research methodologies and standards is absent. And the research is little cited by scholars or read by practitioners and policymakers.
3. **Research prep programs and the degrees they award suffer from confused and overlapping purposes.** Too often, they provide the same program to meet the differing needs of future researchers and practitioners, and they arbitrarily award Ed.D. and Ph.D. degrees to mark completion of those programs.
4. **Researcher preparation programs are undermined by inadequate resources**—too little money and too few faculty qualified to teach in these programs. The result is programs attended by part-time students and staffed by professors who lack the research experience to prepare future researchers or supervise a dissertation.

PART II. AN EXCELLENT PROGRAM

The doctoral program in special education at Vanderbilt’s George Peabody College is profiled here. It meets all the 9 criteria noted in Part I above. (See pp. 19-25.)

PART III. AN AMORPHOUS FIELD

- **A field without focus or boundaries**
- **A Lack of agreement on methods and standards**
 - Ed research is perceived as low quality. Only 24% of faculty rate schools of ed “excellent” or “good” in terms of their professors’ scholarship. .

- Minimum agreement about what constitutes acceptable research practice. No base standards and no quality floor.
- **Little utility or impact**
 - Journals infrequently cited, read
 - Volume of ed research so large as to be inaccessible and incomprehensible
 - Impractical, bias, self-promotion
- **Conclusion –**
 - Doctoral curricula don't equip students for the dissertation
 - Professor dissatisfaction with student knowledge of research methods, how to interpret data
 - Lack of rigor relative to other fields
 - The real issue is there's no agreement within the ed school community about how to prepare doctoral-trained researchers.
 - Although 86 percent of doctoral alumni rate their research methods courses as valuable, and 84 percent said they were high-quality. (p. 35),
 - Almost half (47%) of ed school doctoral recipients thought their curriculum lacked rigor, and over a third (35%) believe ed schools do not adequately prepare their graduates academically.

PART IV: UNCERTAIN PURPOSES AND DEGREES

- Two different populations enroll in doctoral programs in ed schools—one seeking preparation for professional careers in areas such as school leadership and the other seeking jobs in research. Two different programs are required to educate students for these purposes—one focusing on practice and the other on scholarship. Two different degrees are awarded for completing a doctorate in education (Ed.D. and Ph.D.)
- Doctoral programs offered and the degrees awarded by education schools are a mishmash.

The simple fact is that so long as the ed schools at eminent universities such as Harvard persist in awarding the Ed.D. to researchers as well as practitioners and the University of Wisconsin grants the Ph.D. to practitioners in addition to scholars, there will continue to be more confusion than clarity about the meaning of a doctorate in education.

- There are really no incentives—and many disincentives—for institutions to clarify the purposes of the doctorate or distinguish clearly between the two degrees. Disincentives include:
 - **Financial:** The higher market for practitioner doctorates—with their larger admissions and enrollments—overshadows that for research doctorates. Yet the costs of preparing scholars are considerably higher. These factors create incentives to continue practitioner doctorates.
 - **Availability:** It is generally easier to obtain state approval for a new Ed.D. than a Ph.D. But once authorized, an Ed.D. can be used fungibly for both practice and research purposes.
 - **Control:** Unlike the Ph.D., which is generally under the purview of the A&S graduate school, the Ed.D. tends to be the domain of the school of education.
 - **Prestige:** There is a natural gravitation to the more-prestigious Ph.D. than to the Ed.D., regardless of whether students are planning careers in research or practice.
 - **History:** Certain schools at institutions often have a long history of awarding certain degrees (“We have always done it this way”) and are reluctant to change.
 - **Politics and Inertia:** Equal treatment tends to trump differentiation and distinction in academe. Maintaining what a school has is a lot less work than changing it.

PART V: INADEQUATE RESOURCES

- **Faculty quality. The most glaring weakness in doctoral programs for education researchers is the quality of their faculty.**
 - Inadequate numbers of professors are qualified to educate researchers
 - The most able faculty are at Doctoral Extensive universities, and these universities raise >2.5 times as much in extramural research support
 - Yet most education school faculty are more interested in teaching than research. This is true at every type of institution.
 - Faculty predilections correspond to how they actually spend their time: professors at Doctoral Extensives teach less than their colleagues at other types of institutions, pending more time in research.
 - Doctoral programs for researchers are found at Doctoral Extensive, Doctoral Intensive, and Masters I universities, many of which lack the institutional commitment—finances, philosophy and climate—to support doctoral education, as well as the quality and critical mass of productive faculty members necessary to sustain doctoral programs

- **Insufficient Faculty Resources**
 - Doctoral Extensive ed schools are the only institutions at which a majority of professors (55%) can be described as more or most productive (as researchers)
 - By contrast, at Doctoral Intensives and Masters Is, fewer than 1/3 of the faculty are so rated.
 - The numbers suggest an education school climate that does not make research a priority, does not put a premium on research productivity, does not provide the resources to support research, and does not have the critical mass of faculty to mount a doctoral program.
 - Dr. Levine quotes a junior professor from a high-ranking Doctoral Extensive ed school who had moved from a much lower-ranked institution, regarding the difference between the two: “there is far less emphasis on service, and junior professors get a strong message to limit service until you get tenure.” The research focus dominated.
 - The conclusion is that most Doctoral Intensive and Master I universities do not have the faculty resources to offer doctoral programs to prepare education researchers.

- **Poor Dissertation Advising**
 - Many faculty members advising doctoral students today are not productive scholars and lack the skills, knowledge and experience necessary to mentor student in preparing a substantial piece of research
 - Professors supervise too many dissertations, making it impossible to give them the scrutiny they deserve
 - Advisors and ed schools set low standards. When this is the rule, rather than the exception, the name given to that ed school is “degree mill.”
 - Excellence in dissertation supervision is punished by being asked by large numbers of students to advise them
 - Some schools are willing to diminish quality for the money produced or the peace that is maintained

- **Weak Dissertations**
 - We examined >1,300 dissertation descriptors and the most troubling finding: A number of institutions routinely produced bad dissertations.
 - Two problems: (1) The proportion of very poor dissertations rises significantly at the less research-oriented universities, and (2) Although a class of faculty who produce many dissertations of low

quality can be found at Doctoral Extensive universities, their numbers grow substantially at the least research-oriented ones.

- Conclusions:
 - Our country has too many under-resourced doctoral programs for the preparation of education scholars.
 - Inadequate resources range from insufficient facilities and equipment to a lack of financial aid and research support
 - Doctoral Extensive universities have the strongest resources for offering researcher preparation programs
 - This study suggests that, as a class, Doctoral Intensive and Masters I universities are not strong enough to sustain such programs in terms of their missions, hiring practices, faculty quantity and quality, research funding and climate.
 - As a rule, we believe Masters I institutions should not be in the business of offering research doctorates.

PART VI A PERFECT STORM: ANATOMY OF A FAILING PROGRAM

A storm in 1991 off the coast of Gloucester, MA – the strongest storm in recorded history—came to be called the perfect storm because three separate storms combined to form on disastrous event. Something similar has happened with the nation’s programs to prepare education researchers. [The above amorphous character of ed research; confusion over the purposes of doctoral programs and degrees; and inadequate resources.]

The result is research training programs staffed by faculty who are not very productive scholars and who lack the experience and expertise to impart to students the skills and knowledge required of productive scholars. These programs lack high, clear and agreed-upon standards for judging the quality of education research. Their resources are insufficient to provide faculty and students with the support necessary to engage in productive scholarship.

This section presents a case study of such a school and compares it with a neighboring school noted for its strong doctoral programs in education. [These institutions are not named. See pp. 63-69.]

PART VII STRENGTHENING RESEARCH PREPARATION IN EDUCATION

The answer to the study’s initial question as to whether current preparation programs have the capacity to educate researchers with the necessary skills, etc., is: A minority of programs does, but most do not. The three obstacles to strong programs are as discussed above: (1) the field is amorphous (2) programs have conflicting purposes and award inconsistent degrees, and (3) research prep programs are under-resourced.

The result is a body of research of very mixed quality, more weak than strong, with low readership by practitioners and policymakers and low citation rates by scholars. The price we pay is an endless carousel of untested and unproven school reform efforts, dominated by the fad du jour. Ideology trumps evidence in formulating educational policy. And our children are denied the quality of education they need and deserve.

FIVE RECOMMENDATIONS

- 1. Award the Ph.D. and only the Ph.D. to students who have successfully completed doctoral programs to prepare researchers.** The present interchangeability of the two degrees was unintended. The primary difference between the two degrees is that the Ph.D. has greater status, causing practitioners to seek what should be a research degree. As a result, ed schools must make their programs do double duty, enrolling

both practitioners and scholars. In the end, neither group receives the education that will best prepare them for their careers.

2. **Diversify the research missions of America's colleges and universities; offer programs to prepare education researchers at only Doctoral Extensive universities and selected Doctoral Intensive institutions.** This recommendation applies a framework suggested by Ernest Boyer that identified four kinds of scholarship—discovery, application, integration, and teaching. It leads to the recommendation of a set of scholarly missions for the six sectors of education schools:
 - a. **Doctoral Extensives, along with the very strongest of the Doctoral Intensives would focus on the scholarship of discovery.** These institutions, the study found, are the only ones capable of offering research preparation at the doctoral level. They would offer the Ph.D. as their highest degree.
 - b. **Most Doctoral Intensives and Masters I universities would specialize in the scholarship of application and integration.** They would grant the Master's degree as their highest degree and might also offer the Ed.D. for practitioners.
 - c. **The Baccalaureate colleges and Masters II universities could then focus on their area of strength—the scholarship of teaching.** Their highest degree: the Baccalaureate and, when justified, a master's in teaching.

This differentiation of roles might slow the race by institutions with insufficient resources to gain doctoral degree authority and build research programs that focus on the scholarship of discovery. It could also raise research quality and reduce the costs of higher education by limiting the number of Ph.D. program to correspond to the need for education researchers and scholars.

3. **Establish high and clearly defined standards for education research and doctoral preparation in research; close doctoral programs that do not meet those standards. There are two elements here—research quality and doctoral program quality.**

Research Quality: The quality of education research was found to be mixed. The education research community should embrace the National Research Council's six guiding principles that underlie all scientific inquiry. (Shavelson and Town, 2002)

Doctoral Program Quality: Education schools must rethink and strengthen their research doctoral programs. Universities are responsible to ensure strong programs and should close down weak ones, strengthen mediocre ones, and support the excellent programs. If universities fail to act, it is the states' responsibility to do so. Our nation needs a limited number of education scholars. This study indicates there are too many programs trying to produce such scholars today. States should act to maintain quality and to reduce expenditures on doctoral education where the returns are insufficient and redirect them to better uses.

4. **Establish effective means of quality control within the education research community.** Education lacks the quality standards and controls of most established disciplines. AERA has not served as an effective arbiter or monitor of quality and has been unable to lead the profession in developing high, agreed-upon standards for quality research. The Spencer Foundation, in cooperation with the National Academy of Education, could create an alternative to the AERA annual meeting, inviting only the most distinguished scholars to present their work. Spencer could also fund a study of education journals to assess their standards and a study of doctoral programs that prepare education researchers. If strong and clear standards for education research are not set by the education community, they will surely be set by the government, which is likely to become increasingly intrusive in the field.

5. **Strengthen connections between education research and the worlds of policy and practice; establish closer ties between education researchers and their colleagues in the arts and sciences.** No matter how much ed schools twist and turn, they cannot remake themselves in the image of colleges of arts and sciences. They are professional schools and need to focus on the P-12 schools. The primary audience for education research should be policymakers and practitioners. Ed schools should become more involved with policy and practice in their research, teaching, and service, beginning with creating professional development schools. They need to build stronger relationships with the schools of Arts and Sciences, including creating a joint Ph.D. for students seeking preparation in education research.

CONCLUSION

If education schools don't improve the quality of their work, they are in danger of losing their franchise to carry out education research to organizations whose ed research is booming, e.g., corporate, government, and nonprofit companies such as RAND, AIR, SRI, and ETS. As for doctoral preparation, the Spencer Foundation offers dissertation and postdoctoral fellowships in education, more of which it gives to students outside of education schools than inside. It is time for ed schools and their universities to act on what they already know. It will benefit them and it will benefit the country.