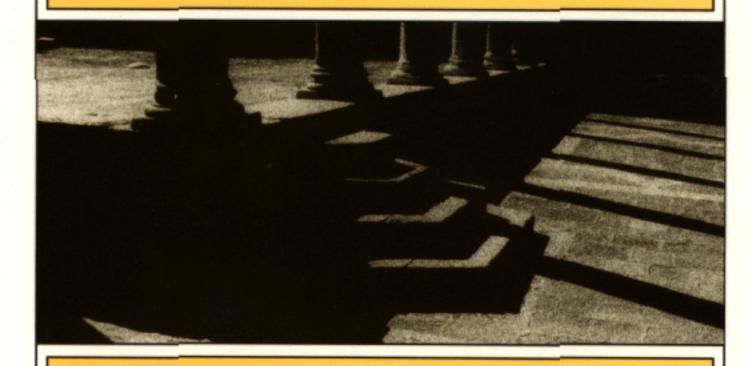
NEW DIRECTIONS FOR HIGHER EDUCATION



Rethinking the Dissertation Process: Tackling Personal and Institutional Obstacles

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NUMBER 99, FALL 1997 JOSSEY-BASS PUBLISHERS In the humanities and social sciences, the time to finish a doctoral degree, and especially the dissertation-writing stage of the doctoral degree, can be significantly influenced if students work in a collaborative environment; are not left alone in their struggle to progress with their dissertations; interact with advisers frequently; are given information about academic publishing; and have a financial support package that fits their particular program and research structure.

The Institution Cares: Berkeley's Efforts to Support Dissertation Writing in the Humanities and Social Sciences

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With the introduction of the doctoral degree into U.S. universities at the end of the last century, concerns about the structure of doctoral degree programs in general and the role and nature of the dissertation in particular periodically resurfaced in discussions of graduate education. At the third annual AAU conference, which was held in Chicago on February 25–27, 1902, Mr. Wilhelm Gardner Hale, professor of Latin at the University of Chicago, presented a paper entitled "The Doctor's Dissertation." In this paper, he discussed the scope and character of the dissertation required of Ph.D. candidates. Hale described the qualifying examination and the dissertation as the two essential components of doctoral study. Together, they were to prove that the doctoral candidate was "worthy of admission to the higher profession of teaching" (Hale, 1902, p. 16). At that time, the Ph.D.'s sole function was to prepare students to become university professors—"complete" professors, in Hale's words—so the doctoral candidate had to demonstrate that he or she possessed the proper intellectual equipment for this profession.

Hale depicted the professor as someone who "should be within his own field, a transmitter of the world's accumulated knowledge and understanding, and an adder thereto" (p. 16). In order to transmit this knowledge, the professor ought to be a "cultivated person, provided with a great deal of knowledge, and with the power of imparting it—in a word, a polished polymath, capable of teaching" (p. 16). The qualifying examination was to test the candidate of the capable of

didate's general familiarity with his or her field.

In order to add to knowledge, however, the complete professor must also be a discoverer. To this end, the dissertation was to demonstrate the candidates "power of originating for himself." According to Hale, a Ph.D. candidate could demonstrate originality within the dissertation in three ways: (1) by discovery, that is "the announcement and proof of something not known before," (2) by adjudication, that is the "establishment of one of two or more conflicting views already held upon a matter of doubt," or (3) by disproof of an existing view, "held upon evidence which had appeared to be of weight" (p. 17). Hale placed these three possible approaches in a hierarchical order, ranking discovery at the top and disproof at the bottom, while admitting that sometimes "disproof in one field may perfectly well be of greater consequences than discovery in another" (p. 17). This hierarchical system for evaluating the dissertation still prevails in the expectations of many faculty and students.

Besides the three types of dissertation research, Hale declared that the subject matter of a successful dissertation must be of measurable importance and "be of such scope that it can be treated exhaustively" (p. 17). He acknowledged, however, that "in the nature of things, no standard of measure, no announcement of a definable minimum could be reached by any amount of discussion" (p. 17). Although he was vague about the importance of the content and the dimensions of the dissertation's scope, he provided a very precise description of its presentation: the dissertation had to be organic, clear, and

not "unliterary."

More than ninety years later, the discussion Hale initiated in 1902 about the role and particularly the nature of the dissertation continues. Today's graduate deans, faculty, and students talk about why we require the dissertation and what it should encompass. In 1990, the Council of Graduate Schools undertook a yearlong study to pursue precisely these questions. The resulting publication, The Role and Nature of the Doctoral Dissertation, summarizes "information on current policies, practices, and points of view related to the research component of Ph.D. programs, and from that information distills recommendations and ideas for improving doctoral education" (Council of Graduate Schools, 1991, p. i).

A perusal of the publication confirms that the dissertation's purpose and characteristics have not changed substantially from what Hale outlined in 1902. According to the Council of Graduate Schools, the dissertation should (1) reveal the student's ability to analyze, interpret, and synthesize information; (2) demonstrate the student's knowledge of the literature relating to the project, or at least acknowledge prior scholarship on which the dissertation is built; (3) describe the methods and procedures used; (4) present results in a sequential and logical manner; and (5) display the student's ability to analyze the results fully and coherently (p. 3). Significant changes have occurred, however, in the research environment and in the length of time it takes students to complete the doctoral degree. Consequently, this raises once again questions about originality, the importance of the subject matter, the dissertation's scope, and the form of the dissertation. (Whether the form of the dissertation is a

monograph, a series of articles, or a set of essays is determined by research expectations, accepted forms of publication in the discipline, and custom in the discipline and in the student's program.)

Just as the Council of Graduate Schools reexamined the dissertation's role and nature in the early 1990s, so did the Graduate Division at the University of California, Berkeley. When this division studied the increase in time-to-doctorate over the past twenty years, it also assessed those two aspects of the dissertation along with other factors. In this chapter, we present findings from that investigation and explain why the Graduate Division at Berkeley made special efforts to support humanities and social science students as they researched and wrote their dissertations. We describe the institutional strategies we implemented to support students during critical stages of their doctoral study.

Lengthened Time-to-Completion of the Doctoral Degree

In 1990, the Office of the President of the University of California commissioned a study of time-to-degree and factors affecting completion. Undertaken by the director of graduate research at UC Berkeley and made public in 1991, this study examined time-to-degree on all nine UC campuses. The goal was to determine whether the time students took to complete doctoral requirements had increased over the last twenty years and, if so, what factors had affected the trend.

In analyzing the Survey of Earned Doctorates (SED) data for three cohorts of UC doctoral recipients over a ten-year period, the study found that the median time-to-degree had increased by 1.3 years; in 1968 it took 5.4 years to finish a doctorate; in 1988 it took 6.7 years. (Mean time was 6.7 years in 1968 and 7.7 years in 1988.) An analysis of the data by major fields of study demonstrated that the length of median time-to-degree was the greatest in the arts and humanities and the social sciences. In both disciplines, median time had increased by 1.8 years, from 7.4 years in 1968 to 9.2 years in 1988 in the arts and humanities, and from 6.1 years in 1968 to 7.9 years in 1988 in the social sciences. Mean time for the arts and humanities was 7.4 years in 1968 and 9.2 years in 1988; for the social sciences, mean time was 6.1 years in 1968 and 7.9 years in 1988 (Nerad, 1991, p. 80).

This study also analyzed doctoral completion rates for only UC Berkeley students (see Table 7.1). These rates varied widely across major fields of study. Students in the humanities and social sciences had the lowest completion rates. When the data from the cohorts who entered between 1975 and 1977 were

Median time-to-degree is calculated from the time a student enters graduate school until doctoral completion. It includes the time students withdraw from doctoral study or are away for research purposes. Calculations exclude students who received their master's degree from an institution other than the doctorate-granting institution.

Of all the UC schools, in 1991, only the Berkeley campus had collected data that allowed such an analysis.

analyzed, the results showed that only 31 percent of the humanities students and 45 percent of the social science students had completed doctorates after eleven, twelve, and thirteen years (as of May 1988). In comparison, the completion rates for biological and physical science doctoral students were 69 percent and 67 percent, respectively (Nerad, 1991, p. 103).

These findings prompted further investigations to determine at what stage students were most likely to withdraw from doctoral study. The research revealed a clear pattern: the majority of students left during their first three years of graduate study (31 percent), generally before they advanced to candidacy, and a smaller number (11 percent) left after advancement to candidacy, between the fourth and twelfth years. Furthermore, when the attrition rates of the humanities and social science doctoral students were compared with those of students in the biological and physical sciences for these two periods, the attrition rates were higher for humanities and social science students after they advanced to candidacy than before (humanities, 21 percent; social sciences, 12 percent; biological sciences, 4 percent; physical sciences, 8 percent).

To understand why students in the humanities and social sciences take longer to complete the degree and have higher attrition rates, the study examined the impact of financial support patterns on time-to-degree. Again using SED data for students who received their doctorates between 1980 and 1988, the study found that students whose major financial support came from their own or a spouse's earnings took the longest average time to complete their degrees (11.0 years). Students who were supported primarily by loans completed the degree in an average of 9.4 years. Those supported primarily by teaching assistantships took 8.3 years. Students with fellowships completed degrees in an average of 7.9 years. Finally, those supported by research assistantships had the shortest mean time, 7.0 years (Nerad, 1991, p. 89).

The study also showed that a large proportion of humanities students and social science students depended on teaching assistantships (humanities, 45 percent; social sciences, 25 percent) and on their own earnings or other sources of funding (humanities, 38 percent; social sciences, 40 percent) as their primary sources of support. A smaller proportion supported themselves primarily with research assistantships (humanities, 2 percent; social sciences, 11 percent), the most expeditious way of financing a doctoral program (Nerad, 1991, p. 90). In comparison, 49 percent of students in the physical sciences and engineering primarily supported themselves with research assistantships. Only 14 percent of students in the physical sciences and 26 percent in engineering supported themselves through their own or other earnings (Nerad, 1991, p. 90). It became clear that support patterns in humanities and social science disciplines were among the reasons that resulted in a longer time-to-degree and higher attrition rates.

To analyze time-to-degree and completion rates further, we conducted qualitative research consisting mostly of individual, semistructured, in-depth interviews on the Berkeley campus. This research corroborated the earlier

Table 7.1. Doctoral Progression Status for the 1975-1977 Cohorts in 1988

| Arts Arts | Field | Aurio | Aurition Rate Years 1-3* | Attrit | ion Rate rs 4–12 | Pend | ing as of 1988 | Degree as of M | Degree Awarded as of May 1988 | |
|--|---------------------------|-------|-----------------------------|--------|---------------------|------|-------------------|-------------------|----------------------------------|----------|
| gical sciences 27 (34) 13 (16) 8 (10) 32 (40) neering 234 (37) 46 (7) 13 (2) 192 (69) quages and literatures 145 (37) 46 (7) 13 (2) 346 (54) quages and literatures 145 (37) 89 (23) 46 (12) 115 (59) tral resources 38 (22) 20 (12) 8 (5) 104 (61) steal sciences 168 (23) 61 (8) 12 (2) 479 (67) sssional schools 173 (35) 72 (14) 33 (7) 219 (44) studences 200 (30) 82 (12) 80 (12) 301 (45) studences 1,058 (31) 393 (11) 205 (6) 1,778 (52) | | z | (bercent) | z | (percent) | z | (bercent) | z | (bercent) | Total Nº |
| ss 73 (26) 10 (4) 5 (2) 192 (69) teratures 145 (37) 46 (7) 13 (2) 346 (54) s 38 (22) 20 (12) 8 (5) 104 (61) s 168 (23) 61 (8) 12 (2) 479 (67) ols 173 (35) 72 (14) 33 (7) 219 (44) 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Arts | 27 | (34) | 13 | (16) | 80 | (10) | 32 | (40) | 8 |
| 234 (37) 46 (7) 13 (2) 346 (54) s 38 (22) 20 (12) 8 (5) 104 (61) lods (23) 61 (8) 12 (2) 479 (67) ols 173 (35) 72 (14) 33 (7) 219 (44) 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Biological sciences | 73 | (56) | 10 | € | × | (5) | 192 | (69) | 280 |
| s 38 (22) 20 (12) 8 (5) 115 (29) s 38 (22) 20 (12) 8 (5) 104 (61) lods 173 (35) 72 (14) 33 (7) 219 (44) lods 200 (30) 82 (12) 80 (12) 301 (45) l,058 (31) 393 (11) 205 (6) 1,778 (52) | Engineering | 234 | (37) | 46 | 9 | 13 | (5) | 346 | (54) | 639 |
| s 38 (22) 20 (12) 8 (5) 104 (61) 168 (23) 61 (8) 12 (2) 479 (67) ols 173 (35) 72 (14) 33 (7) 219 (44) 200 (30) 82 (12) 80 (12) 301 (45) 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Languages and literatures | 145 | (37) | 8 | (23) | 46 | (12) | 115 | (53) | 395 |
| ols (23) 61 (8) 12 (2) 479 (67) ols 173 (35) 72 (14) 33 (7) 219 (44) 200 (30) 82 (12) 80 (12) 301 (45) 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Natural resources | 88 | (22) | 20 | (12) | 80 | (2) | 104 | (6) | 170 |
| hools 173 (35) 72 (14) 33 (7) 219 (44) 200 (30) 82 (12) 80 (12) 301 (45) 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Physical sciences | 168 | (23) | 61 | (8) | 12 | (5) | 479 | (29) | 720 |
| 200 (30) 82 (12) 80 (12) 301 (45) 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Professional schools* | 173 | (35) | 7.2 | (14) | 33 | 9 | 219 | 4 | 497 |
| 1,058 (31) 393 (11) 205 (6) 1,778 (52) | Social sciences | 200 | (30) | 82 | (12) | 8 | (12) | 301 | (45) | 663 |
| | Total students | 1,058 | (31) | 393 | (11) | 205 | (9) | 1,778 | (25) | 3,444 |

noems who len aner obtaining only the master's degree.

Note: In May 1988, we calculated the completion rates for all cohorts. This means for the 1975 entrance cohort, thirteen years had passed; for the 1976 cohort, twelve Source: Graduate Division, UC Berkeley, as of 11/1988, "scriattri-3-12," Aug. 27, 1990, mn. years had passed; and for the 1977 cohort, eleven years had passed.

Includes architecture, business administration, city and regional planning, education, librarianship, public health, public policy, and social welfare. Number of students who entered the program between fall 1975 and spring 1978.

findings. We found that a series of factors rather than a single factor contributed to the lengthening time-to-degree (Nerad and Cerny, 1993). Combining what we had learned from the qualitative and quantitative data collected during the study, we developed a nine-point model to determine what conditions in addition to financial ones contribute to long or short time-to-degree or to high or low attrition rates. These conditions are (1) research mode, (2) program structure, (3) definition of the dissertation, (4) departmental advising, (5) departmental environment, (6) availability of research money, (7) financial support, (8) campus facilities, and (9) the job market.

The focus group interviews we conducted with humanities and social science students illuminated particular field-specific obstacles that delayed the process of doctoral completion, or in the extreme, prevented the student from completing the degree. We learned that for several reasons, writing dissertations in the humanities and social sciences posed more challenges, which was

a strong determinant of progress toward completion.

First, in the humanities and, to a lesser degree, in the social sciences, the model of the lone scholar working independently still prevails (Nerad and Cerny, 1993). Lacking the laboratory, a collaborative environment typically found in the biological and physical sciences, students in the humanities and social sciences usually face a solitary research and writing experience and have less frequent interaction with their adviser and peers.

Second, these students encounter greater difficulties than their counterparts in biological sciences, physical sciences, and engineering when they cease to be "course-taking" people engaged in reading books and articles and become "book-writing" people responsible for producing original written material

based on research findings.

Third, humanities and social science students often encounter a lack of consensus about what constitutes an appropriate doctoral research project. Although most agree that the dissertation must be original, substantial, significant, and carried out independently, the interpretation of these terms differs from one discipline to the next and often from one faculty member to the next. This ambiguity often provokes students' anxieties and may contribute to longer time-to-degree for humanities and social science students. Ambiguity about the nature of the dissertation also exists. Must the dissertation be a magnum opus or simply a piece of research in which students demonstrate their mastery of the tools of independent research and produce a modest contribution to knowledge in their field? We found that students easily lost perspective when trapped between two interpretations and felt insecure about whether they had undertaken significant research, treated their results in a substantial way, and presented them organically and clearly.

Fourth, the advising relationship emerged as an important factor in the dissertation process and doctoral completion, because the ultimate decision about the dissertation's scope and character rests with the dissertation committee, particularly with the main dissertation adviser. How might a student work most productively and still satisfy the standards of the dissertation com-

mittee or the major adviser? When, what, and how much should a student show the dissertation committee? How could the student best present the material to ensure positive and productive feedback? Doctoral students had great concerns about these issues.

Development of Support Structures and Programs

In response to these research findings and to students' concerns, the Graduate Division at the University of California, Berkeley, decided to implement financial support structures. These would address the financial circumstances and patterns of support unique to humanities and social science students. We also established an intellectual support structure to help students at the dissertation-writing stage of the doctoral program break the isolation, establish intellectual communities, overcome their anxieties about the dissertation's scope and character, and make the transition from "book reading" to "book writing."

Financial Support Structures. Given that support patterns in the humanities and social sciences tended to result in longer time-to-degree and higher attrition rates, we recommended that departments in these disciplines implement a support package. Such a package would give students an efficient mix of support for each stage of the doctoral program. It would offer fellowships for the first year, teaching assistantships for years two and three, fellowships at the conceptualizing stage of the dissertation, and then, if available, research assistantships for one year and dissertation-writing fellowships for the final year. Having learned that students often have difficulty making the transition from taking courses to conceptualizing the thesis, we emphasized that humanities and social science departments provide fellowships for a summer or for six months so that students could conceptualize and concentrate on writing the dissertation prospectus full-time and would not need to spend time on work unrelated to the dissertation in order to earn a living during this period.

Finally, because a large proportion of humanities and social science students support themselves primarily through teaching assistantships or their own earnings or employment, they often have trouble devoting their full time and attention to dissertation writing. During focus group meetings and in individual interviews, students frequently expressed the desire to have one full year in which they could concentrate entirely on writing the dissertation. In response, the Graduate Division reallocated its discretionary funds in order to offer a number of Dean's Dissertation Fellowships, primarily to students in the humanities. This fellowship provides a stipend of \$10,500, plus resident fees for one year.

Three-Day Topical Interdisciplinary Dissertation Workshops. As we have established, students often found the dissertation-writing process to be a lonely, isolating experience. Some lamented the lack of contact with faculty, the lack of intellectual community, or their difficulty in establishing intellectual contacts outside of their departments. Many expressed anxiety about the content of their dissertation: Is it substantial? Is it significant? Is it original?

Building on an earlier model developed for the Social Science Research Council, Dr. David Szanton, now executive director of international and area studies at Berkeley, collaborated with the Graduate Division to introduce a new form of interdisciplinary dissertation workshops to the Berkeley campus. These three-day, off-campus workshops, aimed at creating intellectual communities around common themes, bring together three to four faculty and twelve students writing dissertations on closely related subjects but in different disciplines. Students might come from the social sciences, humanities, and professional schools. Workshop participants share their research, identify common themes, and offer mutual support and constructive critiques from the different disciplinary and intellectual perspectives represented. In the exchange, students gain new perspectives on the individual proposals and projects and establish a basis for continuing interchanges, perhaps even collaborative activities.

Workshop planners choose topics after identifying broad cross-disciplinary themes. Identification of common themes is possible because Berkeley's Graduate Division maintains a database of dissertation-in-progress titles. Since the database also contains the names of faculty dissertation committee members, it is possible to identify faculty interested in the selected topic and to

solicit their participation.

Once the workshop topic has been formulated, flyers describing the forth-coming workshop and soliciting applications are mailed to relevant departments and to students who, according to information in the database, may be particularly interested in participating. To apply, students submit a curriculum vitae and a copy of their dissertation proposal, or if the research is well under way, a current account of the project no more than ten pages long. From the resulting applications, twelve students, plus a few alternates, are selected based on the intellectual connections among the topics and the potential for intellectual excitement. The aim is also to include roughly comparable numbers of men and women, as well as students with diverse backgrounds, intellectual perspectives, and levels of progress in research and writing.

Students receive letters saying that they have been selected to participate in the workshop and later obtain the full set of participants' proposals. They are then asked to prepare for the workshop by imagining themselves to be the editors of an edited volume, with the various proposals as the twelve chapters of the book. Each student is to write a short introduction that lays out the relationships among the "chapters." Participants may choose to focus on common threads, linkages, conflicts, a distinctive critique, levels of analysis, clusters of issues, perspectives, and theoretical or conceptual approaches. All of the "introductions" are then redistributed to participants before the workshop begins so that each student can discover how others have read and contextualized their work.

The workshops are held off campus to reduce distractions and to create an atmosphere conducive to intense discussion and group cohesion. The night of arrival, participants are reacquainted with the workshop schedule and for-

An earlier description of these workshops appeared in Szanton, 1994.