

Tracking Changes in the Humanities

Essays on Finance and Education

James C. Hearn and Alexander V. Gorbunov
Donald C. Summers
Edward P. St. John and Ontario S. Wooden
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Edited by Malcolm Richardson

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Introduction

In 1998, the American Academy of Arts and Sciences began an Initiative for the Humanities and Culture designed to underline the importance of the humanities to American civic and cultural life. Data on the state of the humanities has been a key focus of the Initiative from its beginning. This volume, *Tracking Changes in the Humanities: Essays on Finance and Education*, is the third in a series of publications exploring the nature and implications of humanities data. Cumulatively, the four essays in this volume reveal the need for ongoing Humanities Indicators, the Initiative's next major priority.

MAKING THE HUMANITIES COUNT: THE IMPORTANCE OF DATA

The Initiative's first publication, the Academy's 2002 report *Making the Humanities Count: The Importance of Data*, noted that the American educational system collects an impressive range of data, but unfortunately little is done to analyze these tables or to identify the need for additional data that would improve our understanding of the status of the humanities in higher education.¹ Through its National Center for Education Statistics and other offices, the U.S. Department of Education undertakes many large-scale national surveys and studies, such as the National Study of Postsecondary Faculty. Other organizations, like the American Council on Education and the National Education Association, issue more specialized reports, as do university-based programs, like the Higher Education Research Institute at UCLA. The newsletters or bulletins produced for members of the Modern Language Association, the American Historical Association, and other large national humanities organizations routinely provide tables showing the relatively large numbers of new Ph.D.s and the smaller number of tenure-track jobs available during the most recent academic year. And, in what must surely be one of its most closely read issues, *The Chronicle of Higher Education* annually publishes a listing of average faculty salaries. These existing resources reveal much about the condition of the humanities.

However, as we have examined the available data, Academy staff and the steering committee for the Initiative on the Humanities and Culture have been more worried by what these data do *not* tell us: We know the number of undergraduates who take degrees in the many fields of the humanities, but what do we know about their subsequent careers? How well do they fare in the job market or the competition for places in professional schools? Critics complain that the liberal arts curriculum is too fragmented, but how can we create responsible assessments of curricula if we fail to take into account increases in specialized knowledge or the growth of new disciplines? And,

1. *Making the Humanities Count: The Importance of Data* (Cambridge, MA: American Academy of Arts and Sciences, 2002).

what can we say about the contemporary university's allocation of resources to the humanities? As private colleges and research universities compete for scarce funding, while public institutions, including the largest state universities, increasingly rely on private support, are the humanities being left behind?

FOUNDATION FUNDING FOR THE HUMANITIES: AN OVERVIEW OF CURRENT AND HISTORICAL TRENDS

The second publication associated with the Initiative addressed the crucial indicator of humanities funding. Arts policy scholars, to use an instructive comparison, can point to a comprehensive array of statistics about funding for the arts by foundations, corporations, and government at both the state and federal levels.² While methodological issues arise regarding some of these statistics, especially those concerning corporate giving, arts advocates nonetheless possess a clear set of indicators that inform important policy debates about public support for the arts. In contrast, aside from a few statistics about faculty salaries or annual appropriations to the National Endowment for the Humanities, proponents of the humanities lack such thorough indicators. Though some information about foundation support for the humanities has been embedded in the Foundation Center's periodic surveys of arts funding, these reports have excluded core humanities disciplines such as philosophy, religion, and the classics.

To create a baseline for future studies, the Academy cooperated with the Foundation Center to produce a detailed study of foundation funding for the humanities from 1992 to 2002. This joint report, *Foundation Funding for the Humanities: An Overview of Current and Historical Trends* (2004), attempted a comprehensive look at the humanities, adding the disciplines left out of the arts surveys.³ The report included both academic and nonacademic institutions in order to facilitate comparisons between foundation and public funding. It concluded that while overall funding for the humanities rose significantly over the past decade, much of this increase went to museums and historical societies, or to applied disciplines such as bioethics, rather than to the core scholarly disciplines. Some of the latter—including literature and the study of foreign languages—actually experienced decreases over that ten-year period. In addition, despite the growth in giving to the humanities, the share of foundation funds received by the humanities declined over the decade in question.

2. *Giving USA 2005* (New York: American Association of Fundraising Counsel, 2005), an annual overview of all charitable giving in the United States, includes a broad category for "arts, culture and the humanities" but does not provide much detail on the humanities. Beginning with its benchmark survey in 1993, *Arts Funding: A Report on Foundation and Corporate Grantmaking Trends* (New York, 1993), the Foundation Center has issued periodic in-depth reports on foundation giving to the arts. The series continued with *Arts Funding Revisited* (1995) and *Arts Funding: An Update on Foundation Trends* (1998). *Arts Funding IV: An Update on Foundation Trends* (2003) is the most recent report. For public funding, see *Legislative Appropriations Annual Survey: FY 2005* (Washington, D.C.: National Assembly of State Arts Agencies, 2005) and for corporate support, *Giving USA* (cited above) and *The BCA Report: 2004 National Survey of Business Support to the Arts* (New York: Business Committee for the Arts, 2005).

3. *Foundation Funding for the Humanities: An Overview of Current and Historical Trends* (New York: The Foundation Center, 2004).

While foundation grants have been extremely important for innovation in the humanities, they make up a fraction of the support for the field in the United States. One public agency, the National Endowment for the Humanities, provides more than twice as much grant support as the largest private donor, but even if the gifts of all the grantmakers are aggregated together, these external sources of funding provide only a small percentage of the institutional costs needed to sustain the teachers, curators, and librarians who conduct the work of the humanities. Individual donors provide substantial support to universities, libraries, and museums for specialized research, endowed chairs, and acquisitions. These gifts supplement revenues from tuition, income from endowments, and state appropriations (in the case of public universities).

The great bulk of support for research and teaching in the humanities, then, comes from within higher education itself. Yet critics of the contemporary university have argued that the humanities are losing ground inside America's colleges and universities. In 1998, just as the Academy was launching its Initiative for the Humanities and Culture, Academy Fellow James Engell and Anthony Dangerfield authored a widely discussed article for *Harvard Magazine* in which they asserted that colleges and universities were systematically "disinvesting" in the humanities by shifting internal resources away from the humanities to subsidize research in other areas.⁴ While the statistical base for this assertion was thin, anecdotal evidence from many campuses confirmed that Engell and Dangerfield had identified a real problem. Certainly, many adjunct and assistant professors in the humanities, competing for the few tenure-track positions at leading universities, have learned that scarce resources are limiting their career options. Similar trends in science will only compound the problem for university budgets. The controversy generated by these arguments suggests the need for further data and research that addresses such issues.

TRACKING CHANGES IN THE HUMANITIES: ESSAYS ON FINANCE AND EDUCATION

While *Foundation Funding for the Humanities* looked closely at a single indicator, the Academy's Initiative for the Humanities and Culture has also continued to consider the nature of humanities data more broadly. To explore the complex research issues that have prevented humanities groups from making better use of existing statistical data, in 2003 the Academy convened a two-day workshop in Cambridge, Massachusetts, that brought together two very different groups: representatives from several of the larger learned societies in the humanities and researchers who specialize in questions of educational policy. This workshop provided the first occasion for many of the participants to

4. "The Market-Model University: Humanities in the Age of Money," *Harvard Magazine* (May-June, 1998). Commercial pressures on the modern university are treated in greater historical detail in Christopher Newfield, *Ivy and Industry: Business and the Making of the American University, 1880-1980* (Durham, NC: Duke University Press, 2003) and in Derek Bok, *Universities in the Marketplace: The Commercialization of Higher Education* (Princeton, NJ: Princeton University Press, 2003).

identify common research questions and served an important ancillary goal of helping to build a research community interested in humanities policy issues, one that will bridge the often separate worlds of educational researchers and humanities scholars.

Participants in the Academy workshop suggested three large categories of questions that should frame initial efforts to refine the statistical resources available to the humanities. Broadly speaking, these questions address: additional issues in funding for the humanities, especially in the wake of new debates over the “commercialization” of higher education; the career paths of students who major in the humanities as undergraduates, along with the better-documented travails of new Ph.D.s.; and changes in the content and quality of liberal arts education. The essays in this Occasional Paper emerged out of the work at this conference.

Funding the Core: Understanding the Financial Contexts of Academic Departments in the Humanities

The first paper, “Funding the Core: Understanding the Financial Contexts of Academic Departments in the Humanities,” by Professor James C. Hearn of Vanderbilt University and his graduate assistant, Alexander V. Gorbunov, examines the methodological challenges involved in measuring internal university financing of humanities departments. Hearn cautions that it is easy to draw invidious comparisons between academic units if all forms of cross-subsidization—including the allocation of general endowment funds and funding from the recovery of university overhead through indirect cost rates—are not calculated. These hidden subsidies must be taken into consideration along with the number of student credit hours and tuition revenues. In the end, Hearn and Gorbunov find that no existing study, including the Delaware Study of Instructional Costs and Productivity, an in-depth examination commissioned by the U.S. Department of Education of the costs of instructional time at three hundred colleges and universities, adequately covers all these factors.

Yet though Hearn and Gorbunov believe that the Delaware Study does not fully take into account the complexities of internal accounting, they agree with its finding that humanities departments consistently rank among the lowest in costs per student credit hour.⁵ Looking closely at the Delaware data, Hearn and Gorbunov also note that the variation among humanities disciplines is often substantial, and that departments teaching large survey courses have an inherent advantage in these comparisons. So, while the humanities as a whole remain among the least expensive units within the modern research university, some instructional programs—notably in foreign languages and the performing arts—have much higher costs associated with their need for intensive faculty-student interactions.

5. Michael F. Middaugh et al., *A Study of Higher Education Instructional Expenditures: The Delaware Study of Instructional Costs and Productivity* (Washington, D.C.: National Center for Education Statistics, 2003).

The best way to resolve these finance questions concerning institutional support for the humanities, according to Hearn and Gorbunov, would be a carefully controlled comparative study. Ideally, such a study would survey a range of institutions, not just research universities. In the meantime, while not conclusive, case studies could be especially useful in refining a research model.

Prospects for the Humanities as Public Research Universities Privatize their Finances

The second paper presents one such case study: “Prospects for the Humanities as Public Research Universities Privatize their Finances,” an in-depth examination of the status of the humanities at one well-regarded public university, the University of Washington, by Donald C. Summers, the University’s former director of development for the humanities. Comparing humanities departments at the University of Washington to the rest of the university, Summers employs a number of measures, including comparisons of instructional costs, teaching loads, and growth in numbers of tenure track faculty. On the whole, his data tend to support the finding that humanities departments are funded at considerably lower rates than almost all other comparable units.

Summers notes his intention to expand upon this case study by examining other public research universities. He recognizes that the issue of comparability becomes much harder across institutional lines, but he believes that the measures he uses for his own institutional case study could facilitate cross-institutional comparisons. Summers concludes by arguing that humanists must be more proactive in shaping their own financial future, and he offers an example of a department in which such proactive efforts have been successful.

Humanities Pathways: A Framework for Assessing Post-Baccalaureate Opportunities for Humanities Graduates

While the first two essays look specifically at data on finances, the third turns to the experiences of humanities students, asking the question: What happens to undergraduates who choose to major in a humanities discipline? In “Humanities Pathways: A Framework for Assessing Post-Baccalaureate Opportunities for Humanities Graduates,” Professor Edward P. St. John of the University of Michigan and coauthor Ontario S. Wooden of Albany State University, Georgia, examine a variety of federal surveys to tease out conclusions about undergraduates who take humanities degrees. While cautioning that choice of majors, career decisions, and decisions about graduate or professional schools cannot be explained without reference to a large number of variables—including the availability of financial aid, student loan burdens, family background, and work experience—the authors believe it is possible to draw some broad generalizations about patterns of undergraduate enrollments in the humanities and later career choices of humanities graduates.

St. John and Wooden observe that the percentage of college graduates who chose humanities majors declined substantially from the 1960s through the mid-1980s. Beginning in the late 1980s and into the early 1990s, the humanities regained some “market share,” now comprising about 8 to 10 percent of all undergraduate degrees, a figure that has remained stable for over a decade. Humanities graduates who enter the workforce with a B.A. degree typically earn less than graduates with degrees in all other fields except teaching and social work. St. John and Wooden cite a recent survey of the class of 2000 which reveals that only 69 percent of all humanities graduates found full-time employment a year after graduation. While this figure is an improvement over the 59 percent employment rate reported in 1991, humanities graduates still display one of the highest unemployment rates among all undergraduate fields of study.

Perhaps the most significant finding in St. John and Wooden’s survey of the data is that the undergraduate degree in the humanities is becoming a stepping-stone to advanced professional degrees. “Having undergraduate preparation in the humanities provides advanced problem-solving skills that are critical to many professions,” St. John and Wooden note, “but these professions now usually require advanced degrees.” Despite the discouraging findings about immediate postgraduate employment, the authors conclude that humanities majors tend to fare as well as, if not better than, other undergraduate-degree holders in competitive examinations for admission to law, medical, and business schools.

In addition to summarizing nearly two decades of educational research in this area, the authors suggest ways to invest scarce funds for further research. Existing federal databases, especially the ongoing surveys in the Baccalaureate and Beyond series (National Center for Education Statistics), could help in discerning patterns of course taking, postgraduate employment, and graduate education that may be unique to the humanities. Ultimately, St. John and Wooden argue that a key goal of new research studies should be to analyze the linkages between choice of graduate fields, type of undergraduate institution attended, and postgraduate employment.

Toward the Development of Liberal Arts Indicators

The humanities stand at the core of a liberal education, and while the terms are not synonymous, discussions of the liberal arts and the humanities share a number of common themes. Over the past three decades, liberal arts degrees have declined as a percentage of the total number of degrees granted, and the disciplines of the social sciences, and even some fields in the sciences, face many of the same problems as the humanities. Calls for curricular reform are pulling the traditional liberal arts in very different directions. The vocational demands cited by St. John and Wooden are placing additional pressures on liberal arts colleges and public universities to offer more courses that combine preprofessional training with traditional disciplinary content. At the same time, advocates of stronger core curricula want to see more structured requirements and a revitalization of basic survey courses.

In “Toward the Development of Liberal Arts Indicators,” Patricia J. Gumpert and John D. Jennings, both of Stanford University, attempt to separate the multiple issues that surround any effort to evaluate proposed changes in the undergraduate curriculum through quantitative measures. For example, many of the claims made about the core curriculum fail to take into account the explosive growth of knowledge in the twentieth century and the rise of interdisciplinary fields and other new specialties. At the same time existing data about actual course offerings, course enrollments, and staffing patterns are woefully inadequate to support many of the generalizations offered in contemporary polemics. The authors suggest that it would be useful to have comparable statistical information about all the liberal arts in order to understand trends in particular areas.

Gumpert and Jennings also assess the potential pitfalls of any attempt to create better statistical measures for undergraduate education. Because current databases fail to do justice to the complexity of the issues at stake, efforts to create statistical indices can have the unintended consequence of focusing attention, and, consequently, resources of time, energy, and funding, on the wrong issues. To counteract the tendency to “teach to the test,” as it were, they suggest supplementing purely quantitative measures with carefully structured qualitative reports exploring the nature of liberal arts programs at different types of institutions. Like Hearn and Gorbunov, they see clearly the importance of differentiating the various kinds of institutions in the constellation of American higher education.

This concluding essay attempts to set out a conceptual framework for creating a sustainable set of longitudinal indicators. Gumpert and Jennings conclude that we have reasonably good data in some areas—for example, on undergraduate degrees, faculty salaries, and placement of new Ph.D.s—but lack critical information on the state of liberal arts departments, staffing patterns, and enrollment and course-taking patterns. Seconding the recommendations made by Hearn and Gorbunov, this paper also points to a need for more departmental-level data.

* * *

Taken together, the four papers in this volume outline a range of complex issues that could shape an agenda for research exploring the humanities and their connection to the health of the liberal arts and the contemporary university. Each of the papers demonstrates the need for further substantive research about these fields and offers valuable suggestions for pursuing that research. As a whole, the collection underscores the importance of sustaining the dialogue among humanists and educational researchers. It also points toward the next step in the Academy’s Initiative for the Humanities and Culture: the creation of a prototype of the Humanities Indicators. A sustained effort to establish a framework for the compilation, analysis, and publication of data about the state of the humanities, the Indicators will equip researchers and policy-makers at universities, foundations, public humanities institutions, and gov-

ernment agencies with better statistical tools for answering basic questions, including those addressed in these papers. In the long run, Humanities Indicators, taken along with the existing Science and Engineering Indicators, will provide significant information about the welfare and trends of the liberal arts in our nation.

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Funding the Core: Understanding the Financial Contexts of Academic Departments in the Humanities

JAMES C. HEARN AND
ALEXANDER V. GORBUNOV

EXECUTIVE SUMMARY

The disciplines underlying academic departments in the humanities are at the core of the liberal arts and therefore, in most institutions, at the core of undergraduate education itself. Many observers have argued, however, that the academic units that build and transmit humanities knowledge are financially constrained and troubled. This essay addresses the financial status of humanities departments, with particular attention to reviewing available writing, assaying available relevant data, and proposing prospective analyses that might further illuminate the topic.

The literature review addresses ten central questions:

- Which factors most importantly determine internal financial allocations to humanities departments?
- What do we know about the operational finances of humanities departments?
- What do we know about the work and work lives of faculty in humanities departments?
- What do we know about faculty salaries in academic departments?
- Do there exist useful economic models of academic units?

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- How might new trends toward differentiated pricing affect the humanities?
- How can we characterize external funding for the humanities?
- What does the literature on revenue diversification suggest regarding academic units in the humanities?
- What are the implications of new technologies for the financial health of humanities departments?
- What is the emerging role of humanities departments in institutions?

The examination of available data on academic departments focuses particular attention on salaries, costs, and external funding. The review finds data on these and related concerns inadequate in many respects. Particular problems include a lack of timeliness, inappropriate levels of aggregation, and changing data definitions.

The essay next recommends the collection of deeper and broader basic data on the finances and general operations of humanities departments. In addition, two major studies are proposed. The first is a comparative case-study project on internal allocations and budgeting for humanities units, involving analysis of thirty-four departments in various humanities disciplines across varied institutional sectors. The second is a national survey of department finances, based on the responses of department chairs from diverse humanities disciplines, institutions, and regions of the country.

The essay concludes by returning to the observation that the dearth of research on academic departments is lamentable, but may be especially so in departments in the humanities, the foundational disciplines of higher education. Because of their centrality and other factors, departments in the humanities may tend to operate somewhat differently from departments in other fields. Unfortunately, the magnitude of these differences, and their implications for operations and outcomes, is unclear because of data limitations. Beginning with basic questions like the number of students and faculty and moving to more specific questions on salaries, implications of budgeting approaches, and the like, one can only be surprised and disturbed by the lack of information. In the current constrained economic context, it is particularly important that the emerging financial context of humanities units be better understood. The potential erosion of funding levels that have sustained and enriched the humanities merits serious and ongoing analytic attention, and some part of that attention needs to be directed toward what might be seen as the ground floor: academic departments in the field. Ideally, this essay provides some tentative first steps.

INTRODUCTION

The financial status of academic departments in the humanities is important for a number of reasons. The disciplines underlying many humanities departments are at the core of the liberal arts and therefore, in most institutions, at the core of undergraduate education itself. Many students major in the humanities, but many more take significant coursework in these areas as part of their degree programs in other fields. Thus, the efficient and effective functioning of humanities departments is integral and essential to undergraduate education. What is more, humanities departments are the primary home of scholarship in the various humanities disciplines. The health and advancement of scholarship in history, literature, philosophy, and numerous other fields depends intimately on the conditions of the departments housing those fields. Financial conditions help determine choices in humanities departments concerning faculty hiring, class sizes, curricular offerings and sequences, graduate student and staff support, and outlays for supplies and expenses.¹ To the extent that financial conditions in these departments are constrained, the development of humanities students and disciplines is constrained.

Of course, financial constraint is a constant in any organization, and colleges and universities are no exception. As Howard Bowen (1980) noted years ago, postsecondary institutions can always find educationally defensible uses for any resources coming their way, so there is never truly “enough” in higher education. Yet there is some tentative evidence, largely from newspapers and magazines of the humanities and from anecdotal accounts, that humanities departments are at an increasing comparative disadvantage financially, both against their own past levels of financial support and against the current levels of financial support of departments in other fields.

Notably, in the new and still evolving economic and competitive conditions facing U.S. higher education (Levine 1997; Dickeson 1999; Newman and Coururier 2001; Oblinger, Barone, and Hawkins 2001; Collis 2002), humanities departments may be less able than others to adapt and thrive. One reason is that these departments may be less able than others to offset declining state support with new funding from distributed education, contract research, and other non-traditional revenue sources. Departments in English and a few other humanities areas may be able to endure despite this disadvantage because of their role in campuswide course distribution requirements, but some other humanities units may be in jeopardy. Many institutions are responding to recent economic challenges by pursuing targeted program reductions or closures rather than across-the-board cuts, and departments with low enrollments and no prospect of growth in alternative revenues may be especially vulnerable.

The difficulties facing humanities programs in generating nontraditional revenues are potentially exacerbated by their prospects for generating the most traditional of revenue sources: on-campus, full-time enrollments. Enrollment gains may be limited in the humanities because as the costs of higher education

1. More broadly, financial conditions work with external market conditions to determine salary levels, which in turn shape the attractiveness of humanities departments to faculty in the labor market (Hearn 1999).

rise, students' cost/return calculations tend to become less favorable to the humanities. That is, because the humanities tend to offer lower economic returns on graduation than other fields, students may avoid or defect from majoring in those fields as the prices they are paying for the degree rise.² With virtually every state system and most private institutions continuing to raise tuitions, and the economy and funding sources promising no near-term relief, the financial conditions surrounding humanities departments may become appreciably worse before they improve.

Observers and analysts have long noted a trend to decreased external and internal support of the humanities (e.g., see Mooney 1991). Weisbuch (1999), Brooks (1997), and D'Arms (1997) have suggested that the humanities have been losing favor in campus resource allocations because of changing student field choices, limited external funding opportunities, inadequate connections to major societal concerns, and other factors. Among the signs of disadvantage is growth in the salary gap between humanities faculty and others. Summarizing the view of many, Engell and Dangerfield (1998) argue that, over the past three decades, "American colleges and universities systematically disinvested in the humanities" (p. 1).

Reflecting on what they see as the growing financial disadvantages faced by humanities departments, many critics have laid at least part of the blame on humanities faculty themselves, especially their unwillingness to become productively engaged in rebutting public and internal attacks and to contribute to critical campus decision making (Giamatti 1989; Lombardi 1992; Weisbuch 1999). In this vein, Stanley Katz, former president of the American Council of Learned Societies, has said, "The humanists have always been the least well organized [among the academic fields]. They don't get up on their hind legs and demand more. If they don't stand up and defend the role of humanities in teaching and research, cuts will continue to be made" (quoted in Cordes and Walker 1996, pp. 4–5).

Engell and Dangerfield (1998) echo Katz's call to arms:

No such problem would exist if humanists were not embarrassed to proclaim their traditional eminence in the academy. Humanists willing to stand up for their high relevance have only to assert both "Yes, we too need money—and more than we're getting—to support our activities" and "No, that doesn't mean we accept wealth as the paramount human and educational value." Not having done so, humanists and their disciplines have come to be construed as a dispensable luxury. The scandal is that, collectively, by their silence in general, as well as in faculty meetings and administrative posts, humanists have acquiesced.

Unfortunately, while the sentiments are understandable and the language powerful, the data and evidence are less than ideal. Is there indeed a financial crisis in the academic humanities? There are at least some signs casting doubt on the assertion. For example, Ehrenberg and Epifantseva (2001) found that

2. For some recent evidence on returns to various majors, see Hearn and Bunton (2001) and the essay in this volume by Edward P. St. John and Ontario S. Wooden.

“on balance, faculty resources at the 15 colleges of arts and sciences in selective private research [universities] have not been systematically reallocated to the sciences and away from the arts and humanities and the social sciences” (italics in original) (p. 8). Relatedly, labor markets in the humanities show signs of improvement, with job postings and placements strong in some fields.³ Finally, undergraduate student interests, attitudes, and major choices may be less negative to the humanities than many believe. While Engell and Dangerfield (1998) note correctly that contemporary college students are less likely than those in the 1960s to express a desire to develop values, form a broad social vision, experiment with varied forms of knowledge, and formulate a philosophy of living while on campus (each core goals of liberal arts education), there are indications that the less-humanistic trends in student philosophies, goals, and major and degree choices have begun to moderate or reverse in the past ten to fifteen years.⁴

In short, the situation in the humanities may be less than dire. In a witty but also determinedly empirical analysis of writings on higher education, Birnbaum and Shushok (2001) have noted that higher education and its component elements always seem to be suffering from one self-proclaimed “crisis” or another, suggesting that the term may quite possibly be overused. Still, we simply do not know how bad, or how good, conditions may be in humanities departments. The existing evidence on this question is insufficient. The success of any future effort to redress financial challenges in these departments will require more aggressive analytic attention not only to the empirical dimensions of the putative problem itself but also to the grounds from which effective practical solutions might arise. This essay is directed toward taking a first step in the direction of that goal.

PROJECT DESIGN

The project presented here had three aspects. First, we collected and reviewed available literature. That literature requires some introduction. There is very little published work squarely focused on the academic units in which humanities instruction, research, and service take place, so the literature review here necessarily encompasses work focused on the finances and operations of academic units more generally as well as work on broad funding trends, enrollment patterns, and faculty labor markets relating to the humanities.

Also, there is no single consistent definition of the humanities in the literature. Dividing lines among fields are not always clear. For example, in its data sets and reports, the U.S. Department of Education tends to lump the humanities into broad agglomerations, such as “liberal arts and sciences, general stud-

3. See, e.g., Gilbert (1995), McDougal (1999), and Leatherman (2001). One example of the trend comes from the American Philosophical Association. According to an analysis by that association, the number of open philosophy faculty positions recently reached its highest level in more than twenty years, while the association’s indicator of candidates per job in philosophy declined to the lowest levels in more than twenty years. See <http://www.apa.udel.edu/apa/profession/Candidates.pdf> and <http://www.apa.udel.edu/apa/profession/jfpstats.html>.

4. For the most recent evidence on evolving attitudes, plans, and values among freshmen nationally, see the annual report on American freshmen by the Higher Education Research Institute at ucla ([heri](http://heri.ucla.edu) 2004).

ies, and humanities.” Organizationally, some institutions consider history one of the humanities, while others place it in the social sciences.⁵ Fields like communications and the law and jurisprudence are handled in equally diverse fashion. In this essay, given the significant paucity of data and analysis on the topic in general, we do not pursue an exclusionary definition of the humanities. Instead, we assume that there is a useful and reasonably consensual underlying connotation to the term and avoid elaborate attention to definitions.

The bulk of the literature review focuses on documents available in libraries and over the Internet. Many analyses are conducted by institutions largely for internal purposes, however, and thus are not easily available to outsiders. To the extent feasible, that work was pursued and incorporated into the review.

As a second aspect of the essay, we conducted an initial assay of available consortial, institutional, and national data sets, with the goal of ascertaining which of these might be employed for secondary analysis relevant to financial conditions in humanities departments. It should be stressed that a comprehensive scan of potentially accessible data was impossible within the scope of this essay. Much of the data of potential use for this essay is proprietary or tightly guarded by institutions, consortia, or contractors. To the extent that such data could feasibly be identified and described, however, we do so in this essay.

Third, we explored in preliminary fashion potential designs for subsequent, more ambitious empirical work. On the basis of what was learned in the prior two aspects of the project, we present in broad outline here two prospective designs for further work.

LITERATURE REVIEW

Ten central questions in the economic, financial, and strategic contexts of humanities departments frame the review of the relevant literature. Below, these questions are reviewed and addressed.

Which Factors Most Importantly Determine Internal Financial Allocations to Humanities Departments?

It is clear from earlier research that, on one level, the humanities are favored internally in colleges and universities. A greater proportion of their revenues tends to come from general institutional resources. For example, in the case of research universities, humanities departments receive relatively large proportions of their revenues from central administration funding or state subsidies to the institution as a whole (Anderson 1990; Shapiro 2003). At the same time, humanities units tend to have a less diversified pool of resource providers and remain much more dependent than other departments on central administration funding drawn from tuition revenues and state subsidies. These differences are especially apparent in research universities, where research funding plays a much larger role in departmental financing in the sciences, engineering, and several other fields than it does in the humanities.

5. For an essay at once serious and humorous on the ambiguous organizational position of the humanities and ideas from the humanities in higher education, see Adams (1988).

Because of their lower dependence on external markets for research funding and their higher proportional dependence on internal funds, humanities departments as financial enterprises are quite distinct from many other units. Before one infers that they are favored internally, however, it is important to stress several caveats. First, of course, there are significant variations among humanities departments themselves; some areas provide extensive service courses for their institutions, while others are only weakly connected to the great bulk of enrollment activity on campus. Second, although evidence is not strong, the relative level of staff and infrastructure support in humanities departments may tend to be lower than that in more research-intensive departments (Anderson 1990), suggesting that higher proportionate internal funding may not offset deficits in research funding. Third, there is evidence that administrators award truly discretionary internal funding (i.e., funding beyond that provided formulaically on the basis of enrollment) to nonhumanities departments already favored in other respects.

That last point merits elaboration. Organizational theorists have long studied issues relating to the financing of academic programs and departments in different areas. Among the most prominent analysts of these topics is Jeffrey Pfeffer, whose work on budgetary allocations and salary distributions is theoretically driven and quite important at both the conceptual and policy levels. In their earliest work on higher education, Pfeffer and Salancik (1974) and Salancik and Pfeffer (1974) provided empirical evidence from a major research university suggesting that (1) the proportions of internal budgetary funding received by an academic unit are significantly related to the unit's power on campus as perceived by academic leaders and evidenced in internal governance participation, and (2) power, in turn, is dependent on a unit's ability to generate external grants and contracts and acquire national prestige, even after controls for various inputs and outputs of the department (e.g., size, credit hours, etc.).

Pfeffer and Salancik's early modeling of budget allocations to individual academic units was supplemented by later work adding new variables and perspectives. Pfeffer and Moore (1980), for example, found that the fields most likely to receive both external funding and internal allocations tended to be those highest in scientific "paradigm state" (the level of consistency and codification of knowledge and norms within fields). Hackman's (1985) analysis of data from several different kinds of institutions suggested that internal resource allocations are affected also by "centrality" (the closeness of a unit to the overall mission of its home institution), a factor not considered by Pfeffer and colleagues. Later still, questioning Hackman's goals-oriented definition of centrality, Ashar and Shapiro (1988) studied a liberal arts college within a major university and found that centrality could be more productively defined in operational terms. Specifically, they examined units' respective roles in the organization's work flow (e.g., number of classes offered, extent to which classes are taken by nonmajors, and collaborations in research and teaching across departments). The major theme of the impressive body of work in this vein is that internal budgetary allocations are driven not only by predictable enrollment-related indicators but also, at the discretionary margin, by resource dependen-

cies, that is, the extent to which the unit provides the institution with critically valued resources such as grants funding, national visibility, prestige, and internal service.

The work of Pfeffer and colleagues has implications for the humanities. Specifically, the evidence provided by Pfeffer and Salancik (1974), Salancik and Pfeffer (1974), and Pfeffer and Moore (1980) suggests that humanities departments may not be well positioned to be favored when administrators have discretion in their budgetary allocations (beyond allocations predictable from enrollment formulas and other basic workload indicators). Because the amount of grant and contract support humanities units provide the institution is limited and because their fields tend not to be as consistent, consensual, and prestigious as those in the sciences, humanities units may not provide campus leaders strong incentives for making additional investments.⁶

Also relevant for the humanities are findings by a variety of analysts that departments that are predominantly or heavily associated with disadvantaged groups, noneconomically valued goals, or perspectives that are unpopular in the larger society tend to suffer in discretionary internal resource allocations (Gumport 1993; Slaughter 1998; Volk, Slaughter, and Thomas 2001; Kangas and Olzak 2003). Along these lines, Gumport (2000) presents findings suggesting that

Selection processes are . . . at work given external demands for managers to reshape the structure of the academic landscape. . . . Thus, what has come to count as knowledge has not simply unfolded or evolved out of existing areas, but has resulted in part from the differential valuing and resourcing of academic units competing for epistemological, organizational, and physical space. When additive solutions have not been possible, priorities are identified; particular units are constructed as failing to pull their weight, and are targeted for downsizing and elimination. For example, graduate-level programs and small humanities programs (such as foreign languages) have been losing resources and status. (p. 83)

Engell and Dangerfield (1998) agree with Gumport's perspective, arguing that the status of academic fields in higher education seems to be based mainly in three criteria: a promise of money (degrees in the field provide presumably higher earnings after graduation), a knowledge of money (the field studies or teaches about money itself), or a source of money (the field receives significant external funding for its research). In the view of Engell and Dangerfield, departments associated in one or more of these ways with money tend to be better funded and supported and more powerful internally on campuses than departments meeting none of the criteria.⁷

6. See Cordes and Walker (1996) for a recent, more journalistic account of the phenomenon noted originally by Pfeffer and colleagues: departments bringing more national attention and external funding tend to do better than other departments in internal university decision making.

7. As noted earlier, however, there is evidence that this view may be oversimplified.

The humanities may tend to suffer in internal allocations because of their relative inability to attract substantial research funding and the vagueness of potential alternative, nonfinancial methods of accounting for educational and scholarly outcomes. While humanists may argue for the importance of nonfinancial measures of unit performance, others on campus may question the use of their own research funding, via the reallocation of indirect-cost support, to support the humanities with their more ambiguous goals and less well-funded scholarship (Engell and Dangerfield 1998). From this perspective, the humanities may be viewed as “not pulling their weight.” Those in more well-funded fields and university leaders often claim that external research funding benefits all of the university, in that the addition of extra funding in one arena lowers the needs in that arena that must be met by internal funds, thus freeing up funds for less externally favored areas like the humanities. Thus, external research funding may offer cross-subsidies that offset the disadvantages of otherwise disfavored fields. The argument goes that whatever supports more funding for particular parts of the university benefits all of the university. In particular, funding drawn by sciences and engineering faculty for research and graduate education may subsidize undergraduate education, even in the resource-poor liberal arts.

Evidence is mixed on this argument. The broad, unrestricted revenues institutions receive for undergraduate education may, in fact, subsidize graduate education and research. That is, funded research may actually be a net drain financially, in and of itself. We have inadequate solid evidence for this possibility, but ample hints are in the literature (see, e.g., James 1978; James and Neuberger 1981; Goldman and Massy 2001; and various chapters in Hoenack 1990; Massy 1996b).⁸

Beyond their inherent disadvantage in research funding, some have argued that humanities departments also suffer from the nature of typical resource-allocation formulas on campuses. Some analysts have argued, for example, that the humanities suffer under cost-based program funding, that is, allocation formulas in which units are provided internal funds based on the costs of delivering their instruction. To the extent the humanities may be offered at lower per-credit costs because of lower salaries, lower equipment needs, and less robust staffing, they may receive lower internal funding, which can build on itself over time to place the programs at a competitive disadvantage on campus. In their study of community colleges, however, Breneman and Nelson (1980) conclude that cost-based approaches actually are appropriate and that humanities units receiving lower funding per credit hour than vocational-technical programs should simply work hard to ensure their costs are as well controlled as possible. When community colleges face lowered numbers of students interested in the humanities for their intrinsic value or for their utility in transferring to a four-year institution, the authors argue that “Financing formulas become fac-

8. New accounting regulations for higher education may, in the end, provide more direct evidence on net funds flows within higher education institutions. As higher education moves away from traditional fund accounting and toward a more functional accounting approach, it may be that analysts can more easily tease out the interconnections among different activities on campus, including surpluses and cross-subsidies for particular activities.

tors only if they block a college from responding creatively to changes by such means as integrating the humanities into the programs that are in ascendancy” (pp. 100–101) and “The real problem lies in the absence of imaginative ideas about how to integrate the humanities in a meaningful way into areas outside the transfer program” (p. 103).

As noted earlier, it is important to be cautious about making conclusions on resource allocations without more comprehensive and representative data sources. Ehrenberg and Epifantseva’s (2001) finding that faculty resources at selective private research universities may not be flowing toward the sciences and away from the arts and humanities is simply one striking, counterintuitive indication of the significant information and research needs in this arena.

What Do We Know about the Operational Finances of Humanities Departments?

How can one characterize in rigorous, reliable terms, the current financial position of humanities departments? Are there indicators that can capture the financial health of these departments? Such indicators would need to be sensitive to the many larger differences in departments as organizations, including structural differences (level of instruction, disciplinary focus, reward and promotion systems, etc.), strategic differences (mission and objectives, service orientation, closeness to the market and external funds, etc.), and sociocultural differences (at the institutional, unit, and individual faculty levels). Such indicators would also need to be sensitive to the varying connections between academic disciplines and departments: often, especially in community colleges and smaller institutions, humanities disciplines are combined, a phenomenon that has received little attention but is often based in financial reasoning (especially economies of scale) and may have important implications.

Perhaps the most thorough attempt to capture the finances of departments associated with different fields, including the humanities, has been the National Study of Instructional Costs and Productivity, known as “the Delaware Study” for its home institution (see Middaugh 2001; Middaugh, Graham, and Shahid 2003). The findings from this analysis of a large sample of four-year institutions point to some distinctive features of departments in the humanities.⁹ For example, in research, doctoral, and comprehensive universities, direct expenses per student credit hour taught were two to three times higher in mechanical engineering departments than in foreign languages and English departments. Expenses in chemistry departments were also notably higher than in humanities departments, but, interestingly, expenses in sociology departments tended to be slightly lower. On baccalaureate campuses, the differences among fields were less pronounced but in the same general directions.

One of the striking findings of the analysis by Middaugh, Graham, and Shahid (2003) involves the variation within humanities disciplines. For departments in research universities participating in the Delaware Study for 2001, the direct instructional expense per student credit hour taught was \$137 in philosophy, \$140 in English, \$149 in history, \$171 in foreign languages, and \$228 in visual and performing arts. Moving to baccalaureate institutions, departmen-

9. The sample for the most recent reported wave of the survey was 175 institutions (Middaugh, Graham, and Shahid 2003).

tal expense per student in 2001 was \$132 in English, \$146 in philosophy, \$151 in history, \$202 in foreign languages, and \$226 in visual and performing arts. Clearly, lumping the humanities together to include areas with large service components like English as well as less enrollment-rich areas like foreign languages or folklore can be misleading analytically.

Looking across campuses of all kinds (including doctoral and comprehensive institutions in addition to the research universities and baccalaureate institutions), it is clear that instructional costs per student credit hour in the humanities tend to be slightly higher in research universities, but not to as great an extent as one might imagine. And interestingly, as the figures above suggest, there are some striking exceptions. Middaugh, Graham, and Shahid (2003) report findings that suggest foreign language instruction is more expensive to deliver on baccalaureate campuses than on others, suggesting there are economies of scale that may offset the higher general costs on more research-oriented campuses.

To study such issues, Middaugh, Graham, and Shahid (2003) decomposed the variance attributable to discipline and institutional sector, using hierarchical linear modeling, and found that the great majority of variance in campus per-student costs is attributable to the institution's disciplinary mix. Clearly, as Middaugh and colleagues suggest, disciplines and institutional sectors vary notably in their internal cost profiles, and disciplines are the more important of the two influences.

The Delaware Study data are exclusively from relatively large and complex four-year institutions and are focused on direct instructional costs. Thus, these data may not reflect various institutions' departmental costs in the most desirable depth or breadth. Seeking to address the cost question comprehensively, financial analysts have examined how institutions can manage and plan more effectively using different approaches to measuring and assigning costs in academic units.

Brinkman (1990), for example, usefully assays what is known about cost behaviors in higher education, with particular attention to average and marginal costs of instruction, economies of scale, economies of scope, and unit costs by level of instruction or student. Brinkman concludes that average and marginal costs in higher education vary by the size of a unit (i.e., the quantity of its activity or output), the scope of the services it offers, the level of instruction or student (for instructional costs), the discipline of the unit and offering, and the associated revenues. Many other analysts have found similar results (Brinkman 1985; Hoenack et al. 1986; Hoenack and Collins 1990; James 1990).¹⁰

By moving from costs in specific fields across institutions to costs within particular departments, Middaugh, Graham, and Shahid (2003) produced findings supporting Brinkman's (1990) contention that marginal and average costs are associated with unit size, scope, level of instruction, and discipline. Specifically, Middaugh and colleagues note that 60 to 75 percent of the variation in cost within a field or group of fields is associated with Brinkman's factors. As to the specifics of those effects, the authors present five major findings. First,

10. As noted elsewhere in this essay, there are empirical indications that graduate education and research tend to be subsidized by undergraduate education.

costs per unit for instruction decline as the volume of instruction increases; that is, there are economies of scale in instructional costs. Second, costs per unit for instruction decline as departmental size (number of faculty) increases; again, there are economies of scale. Third, as proportions of faculty holding tenure rise, the unit costs of instruction rise. Tenured faculty tend to be more expensive instructors, as would be expected. Fourth, graduate instruction tends to be associated with higher costs in a field, although the effect is smaller than the three influences noted above. Last, although equipment costs do affect instructional costs, the primary factors are the first three noted above: teaching volume, departmental size, and tenure composition.

As one studies the financial operations of humanities departments, it is critical to be cautious in generalizations. Most of the research available for review here attends to universities, especially research universities, but there appear to be significant differences among different types of institutions in the relative financial position of the humanities. Some would argue that there has been a resurgence in support for the liberal arts in large research universities (Gilbert 1995). At the same time, some argue that the position of the humanities and liberal arts in general has been deteriorating for years at two-year colleges, as those schools have moved away from preparing students for four-year institutions and moved increasingly to vocational preparation (Eisenberg et al. 1990; Brawer 1999; Cohen and Brawer 2003). Thus, to speak of humanities departments in general can lead the unwary into traps. Add to this the important variations among humanities departments on individual campuses, and the question of comparative financial operations in departments becomes a nuanced one, indeed.

What Do We Know about the Work and Work Lives of Faculty in Humanities Departments?

Engell and Dangerfield (1998) report that faculty in the humanities “teach differently and teach more, especially faculty in the languages and composition” (p. 5). There is some evidence that humanities faculty do indeed spend somewhat more time teaching and somewhat less time doing research than those in the sciences and some other fields (Yuker 1984; Singell, Lillydahl, and Singell 1996). At the same time, it should be stressed that workloads vary appreciably by institutional types and individual dispositions, making disciplinary differences a less important factor. In addition, measuring workloads is not at all straightforward (Yuker 1984; Singell, Lillydahl, and Singell 1996), and even the best data (e.g., those of the federal government’s periodic and comprehensive National Study of Postsecondary Faculty [nsopf]) are not as helpful on this question as we would like (see Fairweather 1996). In terms of workload satisfaction, however, the nsopf data suggest that humanities faculty are rather typical overall.¹¹

11. When no other citation is provided, the findings reported here for nsopf data are products of our own analysis of the publicly available nsopf data sets (see <http://nces.ed.gov/surveys/nsopf/>), with particular attention to the information provided in the 2003 nces report (nces, 2003). It should be noted that the nsopf name was changed years after the project’s inception from the National Survey of Postsecondary Faculty to the National Study of Postsecondary Faculty.

Humanities faculty also are not unusual in their levels of overall job satisfaction, relative to other faculty: their scores on satisfaction tend to be only slightly lower, on average, than those of faculty in other fields. In both the 1988 and 1999 nsopf, full professors in private research universities and private liberal arts colleges and assistant and associate professors in public two-year institutions tended to be highest among humanities professors in overall satisfaction. In each of these groups, overall job satisfaction averaged from 3.3 to 3.8, where 3 = “somewhat satisfied” and 4 = “very satisfied.” Other humanities faculty averaged around 3 on the scale in both 1988 and 1999. Thus, there are no signs of massive discontent across humanities disciplines and departments.

One question of particular importance is the extent to which humanities departments are moving toward the hiring of non-tenure-line, part-time, and adjunct faculty in lieu of full-time, tenure-line faculty. As has been widely reported, the last two decades have brought dramatic increases in the proportions of nontraditional hires (Baldwin and Chronister 2001). There is evidence that this trend is especially pronounced in the humanities. For example, Pratt (1998) reports that the proportions of part-time faculty are especially high in English, history, modern languages, and mathematics. A number of sources deal with this issue (Committee on Professional Employment 2003; Townsend n.d.). Strikingly, a 1999 survey of departments in English and foreign languages found that, after exclusion of graduate teaching assistants, tenured and tenure-line faculty made up only 35 percent of the total number of instructors teaching undergraduate courses and less than half of the faculty (Laurence 2001).

Among the most compelling work in this area is that of Baldwin and Chronister (2001). Using the 1993 nsopf data, these analysts found that the humanities trailed only health sciences and education in their percentages of full-time, non-tenure-line faculty. Among the fields with appreciably fewer nontraditional faculty were business, the natural sciences, agriculture, the social sciences, and engineering. Within the humanities, however, one can see important differences. English and foreign languages departments apparently employed proportionately about twice as many full-time non-tenure-line faculty as departments in philosophy and history. Baldwin and Chronister suggest that, possibly, these patterns may arise because so many term-appointment faculty are used to teach beginning composition and foreign language courses. Interestingly, they note, these are also fields with large proportions of female faculty, who tend to be more likely across all fields to be employed off the tenure-track. Reviewing this evidence as a whole, there can be little question that the staffing profile of departments in the humanities is distinctive and is changing in dramatic ways critically connected to financing.

What Do We Know about Faculty Salaries in Academic Departments?

Of particular importance from a financial perspective are faculty salaries. How do recent salaries for faculty in the humanities compare to salaries in other fields? As most observers already know, there are striking salary differences across fields in colleges and universities. Faculty in the humanities earn consistently less for a given rank and institutional type than faculty in virtually every other field. The 1999 nsopf data for public research universities sug-

Table 1: Average Entry-Level Salaries and Percentage Female Faculty for Full-Time Assistant Professors by Academic Field, 1988–1989

Academic Field	Average Entry-Level Salary (\$)	Percent Female
Top Five in Salaries		
Engineering	38,478	2.9
Economics	34,257	12.2
Mathematics	31,109	21.3
Physics	30,735	2.2
Agriculture	30,394	5.7
Bottom Five in Salaries		
Foreign Languages	25,744	44.4
Philosophy	25,626	5.2
Music	25,579	24.7
Drama	25,468	27.6
English	25,170	42.1

Source: Bellas (1997)

gest that humanities full professors earned 0.71 of health-sciences full professors' salaries, 0.85 of social-sciences full professors' salaries, and 0.91 of engineering full professors' salaries.¹² Among assistant and associate professors in those institutions, salaries in the humanities were even further behind health-sciences faculty of the same rank. Comparing the *nsopf* data for 1988 and 1999 suggests that humanities faculty over that period fell further behind those in some other fields. For example, in private research universities, humanities full professor salaries went from 97 percent of natural-sciences full professor salaries in 1988 to 74 percent of those salaries in 1999.

Critical sociologists and economists argue that the deficits in humanities faculty's salaries relative to others are rooted in the large proportion of women in these fields. Salaries within academic disciplines fit a pattern of findings in labor market studies across a wide range of fields: there is an inverse relationship between wage levels and the proportion of women in occupations. In a recent analysis, Bellas (1997) presented data for new full-time assistant professors in the years 1988–1989 (see table 1). Obviously, the association in these data between gender composition and salaries is not perfect, but the overall pattern is clear.¹³ The association remains strong even in multivariate modeling. Bellas (1997) found that the percentage of female jobholders in academic

12. The *nsopf* definition of the humanities encompasses English language and literature, foreign languages, history, philosophy, religion, and the law.

13. Bellas (1997) drew her data from two sources, the annual survey by Oklahoma State University for the National Association of State Universities and Land-Grant Colleges and an annual survey of faculty cosponsored by the American Association of State Colleges and Universities and the College and University Personnel Association.

disciplines exerts a significant negative influence on wages in multivariate models, even in the context of statistical controls for a variety of other potentially confounding factors. The inference is that labor markets, both internal to universities and external to them, tend to disfavor faculty in fields with high proportions of women.

Interestingly, despite their salary deficits relative to other fields, humanities faculty in the *nsopf* sample express levels of salary satisfaction comparable to levels in other fields across the ranks. Like other faculty answering salary satisfaction items, humanities faculty tend to respond on average between “somewhat dissatisfied” and “somewhat satisfied.” What is more, despite the difficulties and the putatively growing crisis in the humanities, salary satisfaction levels among humanities faculty seem to have risen slightly overall between the earlier and later *nsopf* surveys. Gains in salary satisfaction seem strongest among assistant and associate professors in public research institutions and two-year colleges and among full professors in public two-year institutions. Salary satisfaction declined, however, among full professors in public research institutions and among associate and full professors in public comprehensive institutions. Indeed, relative to faculty in other fields and other times and relative to humanities faculty in other institutions, salary satisfaction among humanities professors in public comprehensive institutions in 1999 was extraordinarily low.

Interestingly, faculty satisfaction may be related to departmental salary dispersion, that is, the extent to which faculty salaries vary among each other in a department. Pfeffer and Langton (1993) found that greater salary dispersion appears to lower satisfaction in academic settings. What does this imply for humanities departments? Echoing the work by Pfeffer and colleagues, Goldfine (2003) found in multivariate modeling using salary data from a major research university that humanities departments appear to exhibit significantly less salary dispersion than departments in the pure sciences. Perhaps, as McKeachie’s (1979) work has suggested, it is not the absolute level of salaries that matters for faculty satisfaction and motivation so much as one’s sense of relative well-being. This might help explain the surprising lack of a “satisfaction gap” between humanities faculty overall and their better-paid peers in other fields on campus.

Any research project or assessment effort dealing with multiple academic departments and disciplines needs to respect the diversity among the salary systems and other reward structures of academic departments. There is no easy way to evaluate productivity or performance across different kinds of departments. Early analysts of faculty salaries and hiring found that there is no single academic marketplace, even within a single institutional sector or a single university. Instead, the marketplace is balkanized, largely on the basis of academic disciplines (Caplow and McGee 1958; Brown 1965). Smart and McLaughlin (1978) found that fields varied so substantially in the factors critical to their individual faculty members’ salaries that attempts to identify singular and consistent reward structures at the institutional level were seriously misguided.¹⁴ Those authors suggest institutional salary analyses are best done by separating

14 Further support for that conclusion comes from Hearn and Anderson (2002), who found notable differences in decision processes around tenure and promotion.

academic units into groups with similar reward systems.¹⁵ Fairweather (1996) and Chatman and Rychnovsky (1999) recently provided empirical support for that approach. Fairweather, for example, found that publications tended consistently to play a larger role in salaries in the health sciences and business fields than in the humanities.¹⁶

Do There Exist Useful Economic Models of Academic Units?

A number of analysts have explored academic units from the perspective of economic theories of the firm and nonprofit organizations. Among the most frequent focuses of this work are departments as multiproduct enterprises, private and public returns to academic degree programs, and the interplay of the revenues, costs, and cross-subsidies associated with undergraduate education, graduate education, and research, respectively (see, e.g., Freeman 1975; Verry and Davies 1976; Hoenack and Collins 1990; Tuckman and Chang 1990; Goldman and Massy 2001; Shapiro 2003; and various chapters in Lewis and Becker 1979; Becker and Lewis 1992; Lewis and Hearn 2003).

Perhaps the most provocative of the economic perspectives on departments, and one of the most frequently cited, is that of James and Neuberger (1981). Drawing on the theory of nonprofit organizations and the literature on collective decision making, these economists explain departmental behavior using a model of the multiproduct nonprofit organization (npo). Specifically, James and Neuberger (1981) define an academic department as “an npo, run by its workers or faculty members, all of whom agree on a single utility function which they proceed to maximize in choosing its product and factor mix” (pp. 585–586). The department is characterized as a nonprofit faculty collective engaged in the “production” of large, profitable introductory classes in order to provide resources for “consumption” of graduate students in small classes and research. The faculty of the department decide on its optimal product mix, teaching technology, and quantity and quality of undergraduate and graduate students. They make these decisions on the basis of the incentive structure, that is, the costs and revenues associated with alternative strategies. Under this theory, departmental decision making falls into two steps: first, maximizing profits from pure production, and second, using these profits as revenues for pure consumption. Profitable production activities, which do not yield utility per se, subsidize the loss-making, utility-maximizing activities. Thus, the department as a multiproduct npo is a hybrid generating resources through profitable production activities and then spending them on costly utility-enhancing consumption.

Using this conceptualization of the incentive structure and objective function in a department and drawing on analogies to Yugoslav business and the Israeli kibbutz, James and Neuberger make a number of empirical predictions

15. To place units this way, they suggest analysts explore middle-range theories such as Biglan's (1973) categorizing of academic fields along the hard/soft, pure/applied, and life/nonlife dimensions.

16. Of special interest is his finding that minority status interacted with fields in determining salaries in the fine arts: minorities received higher salaries than nonminorities in those fields in the context of controls for publications, institutional characteristics, teaching loads, and other factors.

about departmental behavior, most of which they see as confirmed by available data. For example, profits may be given up and other forms of utility sacrificed in order to maximize utility for the key decision group in the organization. The authors note, “npo’s should be regarded as a producer-consumer hybrid, and consumers never have ‘enough’ income” (James and Neuberger 1981, p. 589).

From this perspective, collective utility is separable from individual utility, which is defined primarily in terms of faculty salaries. Focusing on jointly determined collective utility, James and Neuberger warn that variations in behavior are inevitable across departments and that external control and consistency are difficult to achieve: “[S]ince the choice of product mix and factor mix depends on subjective utility functions of the faculty-managers, these may vary from one department to another and the response to parametric changes may also vary. This means that the central administration at the university or the state planner overseeing it is clearly limited in his ability to influence resource allocation when decisions about product and factor mix are in the hands of the departmental non-profit collective” (James and Neuberger 1981, p. 605). In short, the relative autonomy of departmental faculty ensures that they will have some success in shaping internal resource distributions under the model.

There have been other attempts by economists to model departmental operations, but like the James and Neuberger (1981) effort, they encounter some quite difficult hurdles. As Siegfried (2001) has noted, “It is difficult to identify a straightforward goal for colleges and universities, let alone the locus of decision making. . . . The myriad financial contributors to colleges and universities . . . combined with the amorphous authority of faculty require administrators to devote so much attention to balancing competing interests that frequently nothing is maximized. . . . Because the operation of colleges and universities does not fit well into the framework of existing economic analysis, most theoretical analysis has been limited to important but narrow questions about higher education” (p. 46).

Interestingly, there is evidence that the point may apply especially to humanities departments. Examining labor market actions in the face of changing circumstances, Shapiro (2003) reports that, while units in the sciences and engineering appear to behave in ways consistent with the James and Neuberger (1981) model, humanities departments do not: “[T]he failure of the data to support the model in this study could be used to argue that the basic premise of treating humanities departments as non-profit faculty cooperatives with consistent goal functions is invalid. Indeed, . . . the principle of utility maximization subject to production and financial constraints may well be a workable model for explaining departmental hiring behavior in the sciences and engineering, yet not be a workable model in the humanities” (Shapiro 2003, p. 23).

Shapiro proposes two possible reasons for this pattern. First, “Humanities departments may be more heavily subsidized by their institutions (or . . . cross-subsidized with profits from other departments), and thus not subject to financial and production constraints in the same way that other departments are. . . . This would have the effect of reducing the dependence of humanities departments upon actual student enrollments for their funding” (Shapiro 2003, p. 23).

Second,

[H]umanities departments may simply have more complex goal functions than science and engineering departments, functions that cannot be boiled down to the single pursuit of academic prestige. This would not be surprising, given the observation that faculty members and departments in the science and engineering disciplines are much more heavily dependent upon external funding than are those in the humanities. Scholarly reputation and prestige, both for individual faculty members and for departments, is a significant factor in the awarding of external funding. The absence of such funding from the departmental budgetary climate could render the competitive pressures that drive prestige-maximizing behavior in the science and engineering disciplines less forceful, or even nonexistent, in humanities departments. Without such uniform patterns, departmental behavior becomes less susceptible to modeling. (Shapiro 2003, p. 23)

In the end, it appears that we simply do not have workable economic models of great promise for improving our understanding of humanities departments as units.

How Might New Trends toward Differentiated Pricing Affect the Humanities?

In recent years, internal tuition differentiation has risen in popularity on campuses. The traditional practice of charging uniform prices for instruction of different kinds (e.g., in engineering, business, and philosophy) has given way to a new emphasis on flexibility. Instructional services marketed to corporations and other organizations with “deep pockets” may be priced differently from services marketed to older populations, for example. Institutions can differentiate tuition by the offering unit (the business school as opposed to the department of philosophy), by the instructional or facilities costs associated with a particular course offering, by the timing of the offering (evening, weekends, day, summer, etc.), by the course level (graduate/professional or undergraduate), by the location of the course (on-line, off campus, etc.), by the student’s major field and degree level (or absence of a stated major or degree objective), by the number of credits being taken by the student (“tuition banding,” often used to encourage full-time as opposed to part-time enrollment), and by student residency status (in-state, out-of-state but in U.S., or overseas).¹⁷ Tuition has long been differentiated on some of these dimensions, for example, by state residency and by enrollment in lucrative professional fields like medicine and law. Now, however, institutions are beginning to experiment with finer distinctions in the pricing of their educational services. Even within individual academic units, some pricing discretion is being allowed, especially under decentralized budgeting systems (often termed “responsibility-centered” budgeting) that treat units as fiscal entities responsible for their own revenues and costs.¹⁸

17. See Yanikoski and Wilson (1984) for a basic introduction to tuition differentiation.

18. For a case analysis of such a system in action, see Hearn et al. (forthcoming).

There is little question that, when undergraduate tuition is set traditionally (i.e., not differentiated by the costs of instruction), the humanities can potentially provide cross-subsidies for other fields. When all undergraduate education is priced the same, regardless of whether it is delivered by high-priced full professors or graduate assistants (regardless of whether it requires high-priced labs, scientific equipment, and instructional technology or simply some chairs and a board), the areas in which instructional costs are lower than associated instructional revenues are providing funds that can be shared with areas facing no net positive revenues from instruction. For example, in effect, because a student pursuing a language degree is paying the same amount as students pursuing engineering degrees but is receiving a lower-cost education, she or he may be helping support underfunded engineering departments and students. Of course, different curricular structures and economies of scale may counterbalance this tendency (e.g., a 100-person freshman engineering class taught by a graduate student may be appreciably less costly at the margin than a ten-person senior seminar in the classics taught by a full professor). Still, the lack of differentiation in undergraduate tuition may often serve to aid other departments and students at the expense of those in the humanities.

Relatedly, because humanities degrees may have lower returns in the labor market after graduation, undifferentiated pricing of undergraduate education in the humanities may be creating a disincentive for enrollments in these areas. That is, if students are evaluating their major choices even partly on the basis of returns to investment in financial terms, the humanities may stand in poor contrast to other fields. Put another way, for a given price, a student can receive a much better return by “investing” in an undergraduate engineering degree than an undergraduate philosophy degree. Thus, in sum, undifferentiated undergraduate tuition may disserve humanities departments in two ways: providing subsidies to departments in higher-cost fields, and creating relative disincentives for majoring in the fields.

How Can We Characterize External Funding for the Humanities?

Lamenting that “there exist no systematic data, collected over time, that might provide a partial guide to sources, levels, and patterns of funding” in the humanities, John D’Arms, the late president of the American Council of Learned Societies, sought to identify the principal sources of financial support in this field (1997, p. 32). D’Arms identified (1) government agencies, especially the National Endowment for the Humanities (neh); (2) private philanthropic foundations; (3) providers of independent fellowships, including the American Council of Learned Societies, National Humanities Center, the John Simon Guggenheim Memorial Foundation, the Institute for Advanced Study, the Center for Advanced Study in the Behavioral Sciences, and residential centers and national research libraries; (4) corporate sponsors; and (5) private individuals. D’Arms stressed, however, that much support for the humanities is not overtly labeled as such: “Overshadowing all these, of course, are the universities and colleges themselves, and the various supporters that combine to form their distinctive networks of patronage: parents and students paying tuition and fees; graduates and other individuals, past and present, bearing gifts des-

ted for the annual fund or for the endowment; state legislatures; federal and corporate sponsors; private and family foundations” (1997, p. 32).

D’Arms underscored the point that, among the various funding sources, there is a dynamic interplay contributing to stability in the system. This interplay involves sources both within and outside higher education, with major roles played by federal agencies, philanthropic foundations, independent fellowships providers, and, to a lesser extent, corporate sponsors and private individuals. D’Arms highlighted two imbalances in the existing system: a small number of funding sources (the *neh* and a few of the largest independent foundations) playing a disproportionately large role, and a series of trends placing an increasing funding burden on institutions and programs within them.

Specifically, D’Arms noted four critical trends at the time of his analysis. First, the grant-making process at the *neh*—the largest source of external support for the academic humanities—was beginning to attend to governmental and *npo* priorities at the expense of the academic sector’s research and fellowships. Second, private support for the humanities was shifting and declining (although Renz et al. [2004] provide data suggesting it began to climb again in the years since the D’Arms report). Several major philanthropic foundations with histories of supporting the humanities had begun either to reduce their support or to direct it more predominantly to nonacademic humanities activities (e.g., funding for the visual arts and museums). Third, D’Arms noted a sharp decline in both the number of awarded individual fellowships and the purchasing power of those fellowships. Fourth, funding priorities in the humanities were clearly shifting away from operational support, leaving that arena to the institutions themselves. As D’Arms put it, “The role of the independent fellowship providers has contracted, and that of the colleges and universities has expanded to take their place; such investments align closely with institutional values that privilege research” (1997, p. 44). The four trends noted by D’Arms, taken together, highlight the difficult external funding challenges facing humanities departments today.

A number of questions regarding external funding deserve more systematic and up-to-date analysis. To what extent have funding patterns changed since the D’Arms’ study of 1997? Which funding sources are likely to play the most important role in the near future? What might be learned from systematic analysis over time of the funding approaches of the *neh* and other funding sources? Also, what do we know and need to know about the troubling trends in the funding of humanities students at the graduate level?¹⁹

What Does the Literature on Revenue Diversification Suggest Regarding Academic Units in the Humanities?

Pressure to maintain quality and competitive standing in the face of menacing resource constraints has become a primary challenge facing colleges and universities. Faced with limited tuition revenues and public subsidies, institutions have increasingly entered into the aggressive pursuit of alternative revenue

19. Miller (1984), Mooney (1991), Messer-Davidow (1997), and numerous others have noted the importance of addressing this question.

streams.²⁰ This trend has touched leaders and operations at the departmental level in several ways.

In the pursuit of new revenues, some institutions are also deploying human resources in new ways. For example, some have refined compensation and promotion processes to provide more explicit incentives for faculty's revenue-generating activities. In the instructional arena, many institutions and units within them have begun targeting new markets of learners, focusing not only on traditional degree seekers but also on people seeking nondegree pre- and post-baccalaureate certification. Most institutions in the United States are aggressively expanding efforts to bring in donations from alumni, private individuals, foundations, and charitable organizations. Efforts in the public institutions, especially, have grown in recent years, as have efforts to attract funding from other nations. At the departmental level, institutional efforts to establish donor networks and information systems have increased private support dramatically in some institutions.

In each of these arenas, the humanities may be at something of a disadvantage. Clearly, there are departmental differences in capabilities and promise for efforts to generate new revenues. Intensive empirical work by Leslie, Oaxaca, and Rhoades (2002) suggests that the most entrepreneurial cultures and traditions may be found in departments in the life sciences. Departmental differences are not always in predictable directions, however. Entrepreneurial spirit may be based as much in individuals and in local cultural and organizational conditions as in certain fields as a whole (Clark 1998). In one especially noteworthy example, Davies (2001) found in a series of case analyses that a single moral philosophy department in England brought in more in new revenues than its institution's engineering faculty because of its success in winning contracts to design ethical codes for electronic communications.

What Are the Implications of New Technologies for the Financial Health of Humanities Departments?

How have humanities departments responded to the advent of new technologies? Can we identify cases of successful and "profitable" responses by humanities departments and new technologies? The ultimate implications of new information technologies for improving efficiency and effectiveness in academic fields such as the humanities are as yet unclear (Morón Arroyo 2002), but there is little question that familiarity with technology can aid individual faculty and units in particular circumstances. Some analyses (Green 2001) suggest that humanities faculty nationally are the least well prepared of all disciplinary areas for using technology as a resource for instruction, scholarship, and research. This deficit may be linked to the nature of the funding of the humanities: lower levels of external research funding and more modest connections to particular industries and professions may hamper the development of the technology infrastructure in academic departments.

20. For a rather comprehensive review of this topic, see Hearn (2003), which serves as the major basis for this section of the report.

What is more, humanities faculty may simply be professionally predisposed to be more cautious regarding technological change. Massey-Burzio reports that many “humanists are less than enamored with technology when compared to their peers in other disciplines:” they are often ignorant, skeptical, or wary of the new technology and its opportunities; they mostly opt for the old and customary methods of scholarly work; they are concerned about digitized texts and art works; some of them view technological inventions as distractions or barriers to effective work; many have little respect for the Internet and “surfing the web”; and they do not find it convenient to read their long texts from the monitor (1999, p. 620).

Clearly, relationships between the academic humanities and new technological advances are evolving slowly. It remains unclear what implications the new technologies will have for the humanities. On the surface, the long texts and visual imagery of the humanities would seem to be especially appropriate for web-based availability and instruction, but the substantial front-end investments required for electronic instruction and related uses of new technologies may be beyond the resources readily available in the humanities fields (Collis 2002). Over time, digitizing and creatively using materials in the humanities may prove to be one of the most cost-effective arenas for the new technologies currently emerging.

What Is the Emerging Role of Humanities Departments in Institutions?

Three familiar notions in the organizations and strategic planning literature in higher education are “centrality,” “connectedness,” and “criticality.” These concepts have been used, along with such terms as “present and future demand for graduates,” “quality,” “comparative advantage,” and “cost-revenue relations” as elements in higher-education institutions’ efforts to conduct internal program reviews for strategic purposes.²¹ In such initiatives, each academic program area or unit is assessed as to its standing on these criteria, then strategic decisions are made and resources allocated on the basis of the assessments. Thus, the assessments guide leaders’ decisions concerning individual programs’ appropriateness for increased or decreased internal investments (i.e., number of faculty positions, allocations from central budgets for operations, etc.).

Historically, as noted earlier, in the contest for such support, humanities departments seem to have suffered in two important respects. First, approaches of this kind rely on measurability and thus may be insensitive to the relatively “soft” goals of humanities departments. Humanities departments may not produce enough students and may not produce other easily measurable results. As such, they may be disfavored in internal planning processes. This problem extends further than budgeting, of course. Whether the measurement at hand relates to internal resource allocation, external funding, reporting for national surveys, self-evaluation, or external review, humanities departments in some arenas will tend to look quite different from departments in other more voca-

21. For an analysis of such efforts at one institution, see Simsek and Louis (1994). For more general organizational analyses of the concepts, see Hackman (1985) and Ashar and Shapiro (1988).

tionally or scientifically connected fields.²² Often it appears that those differences work to the units' disadvantage.

Second, because funding opportunities are limited, humanities departments tend to suffer from lower assessments on external revenue generation. Units in such areas as English or history have suffered too from a lack of comparative advantage (similarly framed departments usually exist on nearby campuses), but those units have benefited from their closeness to the core missions of their campuses (centrality) and the dependence of many campus programs on their course offerings for meeting distribution requirements for students (connectedness). In contrast, departments without major service roles in the core curriculum on campus have suffered because they are able to excel on few if any of the familiar criteria. While they may have a form of comparative advantage (there may be few competitive programs in the field), demand may not be substantial. Absent expectations for new funding, improved enrollments are the main route to survival. As Stanley Chodorow, former provost of the University of Pennsylvania, has said, "The challenge for the humanities today—and particularly for those parts of the humanities that do not attract large numbers of students, such as classics and folklore—is to create programs that attract and retain students" (quoted in Cordes and Walker 1996, p. 3).

Absent success in that endeavor, departments in such fields face retrenchment and possible elimination. Increasingly, legislators and business leaders are asking how traditionally structured institutions "pay off" in narrow economic terms (Parr 1988; Cordes and Walker 1996; Priest et al. 2002; Yudof 2002). The emerging entrepreneurial orientation in higher education (Engell and Dangerfield 1998; Newman and Couturier 2001; Hearn 2003) and the parallel movement toward decentralized budgeting (discussed earlier) are putting pressure on individual departments to generate revenues through tuition and research. In the smaller humanities areas (e.g., programs in the classics and some languages), prospects for tuition and research revenue growth are not great. The trend may even disfavor larger, service-oriented humanities units: under such budgeting approaches, there are usually notable revenue rewards for "keeping students home" (i.e., decreasing the extent to which credit hours are generated by a department's major-area students for other units via distribution requirements). Such actions may further threaten the revenue base of humanities departments and thus endanger their solvency.

How are humanities departments adapting to these changing circumstances? The evidence is virtually nonexistent. A number of studies have examined strategic change in liberal arts colleges, noting the trend to professional programs in the face of evolving resource constraints.²³ Very few studies, however, have directly examined strategic change in humanities departments in the face of evolving contexts. A valuable doctoral thesis by Thomasson (1984) is one exception, but its examination of responses of doctorate-granting departments to labor market conditions is now rather dated. Work by Zammuto (1984), Lombardi (1992), Gilbert (1995), Gumport and Sporn (1999), and Ehrenberg

22. In this context, there is always a danger that imposed indicators will drive some humanities departments to pursue measurable behaviors contrary to their traditional core values, principles, and goals.

23. For an excellent empirical examination of these issues, see Kraatz and Zajac (1996).

and Epifantseva (2001) is relevant, but that work takes more of an institutional than a departmental perspective. Bowen and Sosa (1989), Turner and Bowen (1990), Berger (1992), and Hearn and Bunton (2001) are among many who have reviewed labor market conditions facing faculty and new graduates in the humanities, but that work deals more with individual and societal issues than issues at the departmental level. The work of Shapiro (2003) more directly deals with departmental issues, but reports some difficulty applying econometric models to the behavior of humanities departments, as opposed to departments in the sciences and engineering. Simply put, his work suggests humanities departments respond distinctively to various incentives and constraints.

In this context, one needs to ask a series of difficult questions. What are the short- and long-term opportunity costs of reducing humanities course offerings and departments? Which values and goals are served, and which are disserved, by such actions? How can one characterize and better understand the “markets” for the academic humanities? For example, what are the current and prospective markets for coursework, majors, and degrees? What are the current and prospective markets for humanities knowledge more generally (e.g., services to be delivered via contracts, grants, and consulting arrangements)? What are the competitive advantages and disadvantages of liberal arts colleges and community colleges in comparison with technical and vocational institutions? What are the effects of the emerging internationalization trends on the humanities?

It is especially important to pose one hopeful question: are there identifiable approaches for maintaining or increasing the demand for humanities education, improving its quality, and better managing its costs? That is, for the distinctive microeconomic context of humanities departments, are there cost-effective operational approaches that could be developed and shared across the nation? These questions are at the heart of this essay, but published, reliable evidence of best practices around the country appears extremely limited. What we have, instead, are a number of provocative proposals meriting not only attention but also aggressive testing in the field. Several of these may be highlighted here.

In a prescient essay, the late Yale president A.B. Giamatti (1989) observed that emerging trends demand that those in the humanities question inherited organizational arrangements tying intellectual areas of inquiry into departmental structures. Instead, he argued that academic humanists should “be flexible and choose to assert themselves, even if that means consolidation of resources, even if that means changing comfortable administrative structures, before choices are forced on them, or, worse, before the power to choose is denied” (p. 77). Among the approaches he favored were larger departments making common cause with smaller ones, instead of competing with them, by encouraging common teaching and shared training of graduate students in areas such as techniques of language instruction. Giamatti called for teaching and studying subjects in general disciplinary groupings and common context, “rather than assuming that each ‘discipline’ or ‘subject’ is forever encased in the plastic bag of the departments” (p. 78).²⁴

24. Brooks (1997) makes a very similar point: “The worst response of the humanities at the present juncture would be allowing themselves to become privatized, marginalized, trivialized, content with debates within closed systems and compartments” (p. 168).

Graff and Berube (1995) follow a similar line of argument, emphasizing integrative, whole-institution reform as a path to improvement in humanities fields and units. These authors detail a litany of “dubious and wasteful” practices producing curricular incoherence and wasteful fiscal management. Citing gross mismanagement, they highlight indefensible course, text, and program overlaps and duplication. In response, they propose (1) large extracurricular symposia as integrating and efficient choices for institutions, (2) semester-based themes uniting cognate courses and programs across campus, and (3) other across-campus events and themes. Their credo: “Imagine a campus cutting costs not by ruthlessly cutting a faculty or increasing individual workloads (and burn-out) but by instituting a more creative division of faculty labor. In short, these suggestions can improve education while making it more economical” (p. 5).

Focusing on the “irresponsibility of some departments for admitting more students in fields where there are few jobs” (quoted in Leatherman 2001, p. 3), Robert Weisbuch has made perhaps the most well-publicized proposal for improvement. In a 1999 essay, he offered the following rules of thumb to ensure departments enroll appropriate numbers of Ph.D. students. First, he suggests, “[A]ny department should accept only 1.3 times the number of incoming students as the number of graduates in the previous year who found truly significant jobs—positions that they chose, not jobs that they accepted out of economic necessity” (p. 4). Alternatively, Weisbuch says, “let any department admit as many new doctoral students as it can assuredly support through fellowships and teaching for every term of a five-year Ph.D. program. Less-than-full support prevents full-time education and encourages a lethargic approach to earning a degree” (p. 4).

Bruce Johnstone (1999) notes that such an approach requires honest and realistic communication with graduate students: “I believe it is imperative that graduate students in the humanities be counseled from the beginning to consider a broad range of postgraduate occupations. Such counseling need not weaken graduate humanities departments; indeed, it might strengthen all of the humanities to know that the skills they cultivate can be valued in occupations far from the classroom” (p. 2).

Magner (1999) favors the aggressive expansion of master’s degree programs producing graduates for a variety of positions outside of the academic world. When implemented, he argues, his proposal would compensate for the losses in graduate programs caused by declines in the numbers of doctoral students while more effectively linking humanities departments with the outer world and thereby demonstrating the societal value of the liberal education.

Of course, while each of the proposals noted above has appeal, none should be recommended unilaterally. As noted repeatedly in this essay, individual contexts differ appreciably within and across institutions and sectors. Importantly, much has been written about the humanities in research universities, and those involved in humanities programs in other kinds of institutions must tread cautiously among the literature’s prescriptions.

Questions About Which Little Is Known

The topics introduced above are wide-ranging, and the literature is variously useful in addressing them. Many further questions might be asked, but even approaching answers to those questions is sadly beyond the range of currently available literature. For example, what are the financial implications of encouraging multidisciplinary collaboration in instruction and research? More broadly, what are the most accurate and useful ways of apportioning indirect costs across units to accurately reflect activity and cost centers on a campus?²⁵ And, even more broadly, are there ways in which U.S. humanities departments can benefit from considering forms of academic organization and funding in other countries with vastly differently higher-education systems?

Faculty are at the heart of academic departments, but we know too little about their work and work lives. Perhaps the most obvious question about humanities faculty is one about which we know very little: how can we characterize the distinctive productivity of faculty in humanities units? Kirschling (1979), Smart and McLaughlin (1978), Konrad and Pfeffer (1990), Fairweather (1996), Chatman and Rychnovsky (1999), and numerous others have noted that defining and measuring productivity in a consistent way across academic fields is enormously challenging. Interestingly, Hoenack (1990), a veteran administrator and analyst at the University of Minnesota, notes that administrators may actually benefit in certain ways from incomplete and ambiguous information regarding faculty productivity in different units. Regardless of who benefits or loses from the lack of across-unit productivity measures, there is little question that the area remains poorly understood.

How can humanities faculty be motivated to adapt to changing financial circumstances? Numerous authors have written on the place of salaries, promotion, and tenure and other rewards in the work lives of higher-education faculty (see Tuckman 1979; Hansen 1988; Massy and Wilger 1995; Hearn 1999; Sutton and Bergerson 2001). While this literature is very helpful, it is not yet specific to the conditions of faculty in the humanities. Much more needs to be known about incentive approaches appropriate to these fields.

An interesting additional question arising out of recent trends in internal financing involves the implications of the trend toward decentralized budgeting. To foster department-level incentives for the pursuit of new revenues and the reduction of costs, many institutions have implemented decentralized budgeting systems, which treat each organizational unit as a quasi-independent financial entity responsible for its own revenues (via tuitions, research, and service) and costs (Whalen 1991; Strauss, Curry, and Whalen 1996; Massy 1996a; Cantor 1997). As noted numerous times elsewhere in this report, humanities departments tend not to generate research revenues at the same pace as departments in the sciences and engineering, so that aspect of decentralized budgeting could be harmful to departments in humanities. At the same time, enrollment revenues vary appreciably in the humanities, depending on the extent to which the department is engaged in service coursework for the campus. In the

25. This is an ongoing issue in cost analysis in higher education, as noted by Hoenack (1990), Brinkman (1990, 2000), and Jones (2000).

end, the treatment of humanities departments under decentralized budgeting schemes will depend on the specific formulas for such areas as indirect costs, tuition revenues for departmental classes, and the home-department share of tuition revenues from courses taken by major-area students in departments other than their home departments.

A further question seems especially important and woefully understood: what are the implications for the humanities of the growing split in the fortunes of public and private universities? On this last question, numerous analysts have pointed out that in recent years private universities have widened their financial advantages over public universities (Alexander 2001; Ehrenberg 2003). In the face of tightening state budgets, many public institutions have raised tuitions, cut programs, and limited salary increases, with the results being losses in financial position relative to otherwise similar private institutions. This trend has unclear implications for particular kinds of academic programming, including the humanities.

DATA AVAILABLE FOR RESEARCH ON THE FINANCIAL CONTEXTS OF HUMANITIES DEPARTMENTS

Sadly, there are very few valid, reliable, and comparable data on the costs, subsidies, and revenues associated with academic departments in general, much less those specifically associated with the humanities (Winston 1999; Johnstone 2001; Middaugh 2000, 2001). Such data, in time-consistent form, are critical to understanding the cost-effectiveness of operations in programs and departments. Yet, financial data are usually not collected in forms amenable to imputed assignment to individual faculty and units. Thus, in keeping with Jones's (2002), D'Arms's (2002), and Solow's (2002) portrayals of humanities data in general, the diversity and depth of financial data available on academic departments in the humanities is less than ideal.

Individual professional associations such as the American Philosophical Association, the Modern Language Association, and the American Historical Association periodically collect and publish data on labor market conditions, faculty salaries, and instructional staffing patterns within their particular fields but seek and provide little financial information on other topics.²⁶ The data of the Coalition on the Academic Workforce (2000; also see Townsend, n.d., 2002, 2003a, 2003b), produced by twenty-five professional societies in the humanities, are very promising for future work on salaries, labor force issues, and departmental production issues. At this time, however, the extent to which these data will be available to independent analysts and applicable over time to issues at the departmental level is unclear. Across-discipline information on the humanities is simply very difficult to obtain and initiatives in this direction are very difficult to maintain over time. Below, the most prominent current sources of across-discipline information on various financial topics are discussed.

26. See Committee on Professional Employment (2003), Denham et al. (1996), and Hutcheon et al. (2003).

Data on Basic Characteristics of Academic Units

The U.S. Department of Education's Integrated Postsecondary Education Data System (**ipeds**) data sets cover all U.S. postsecondary institutions receiving any form of federal funding. An extraordinary variety of institutional characteristics is covered in the various surveys that make up the **ipeds** system. These surveys include finance-related information (including revenues, costs, salaries, and research funding) by institution as well as counts of full- and part-time faculty by broad field of instruction, rank, and certain other characteristics.²⁷

The aforementioned Delaware Study provides quantitative and, to a lesser extent, qualitative data on teaching, research, and service activity at the unit level. For those institutions paying to participate in the study, these data can be used to create indicators of performance and productivity by academic unit. The data facilitate benchmarking teaching workloads, instructional costs, and productivity by academic field and thus can be used for intrainstitutional and interinstitutional comparisons. Data definitions, methods, and data collection tools are regularly reviewed and improved over time (see Middaugh 2001).

Data on Salaries

As noted earlier in this essay, it is important to understand faculty differences in salary levels across the humanities disciplines and between the humanities and other fields. It is also important to understand salary trends over time, across disciplines. The American Association of University Professors (**aaup**), the College and University Professional Association for Human Resources (**cupa-hr**), Oklahoma State University, the U.S. Department of Education, and some other organizations have regularly collected salary data and produced reports. These reports are often summarized in such periodicals as the *Chronicle of Higher Education* and *Academe*.

The **aaup**'s annual report on the economic status of the profession focuses on mean salary and compensation for faculty and is enormously valuable. The analyses accompanying the annual report are without fail sophisticated and insightful (e.g., see Ehrenberg 2003).

cupa-hr presents faculty labor market reports each year, with particular attention to salaries.²⁸ In many ways, these reports are exemplary, providing number of faculty plus average, median, high, and low salaries by discipline and rank. The reports also provide the average percentage salary increase annually for public and private institutions. Data are broken out for five faculty ranks, three researcher levels, and eighty disciplines/major fields.

Since 1974, Oklahoma State University has provided an annual national report on average (also high and low) salaries by discipline, rank, region, and category of institution for those institutions that are members of the National Association of State Universities and Land-Grant Colleges (Reichard 2002). More than 300 disciplines are represented in the study.

27. See Broyles (1995) for an overview of **ipeds**.

28. The association was formerly titled the College and University Personnel Association.

The federal government's National Study of Postsecondary Faculty (**nsopf**) deals explicitly and extensively with faculty salaries. **nsopf** surveys are accessible for analysis. The surveys have been conducted only in 1988, 1993, and 1999.²⁹

Data on Costs

The Delaware Study data noted above contain information at the department level on teaching loads by faculty category and on the direct costs of instruction. The data do not contain information on costs other than instruction-related costs. While **ipeds** and some associations provide cost-related information, those data are not at the level of academic departments.

Data on External Funding

The **ipeds** data contain highly aggregated summaries of institutional funding from external sources. The Foundation Center and some other organizations collect data and present reports on foundation funding for the humanities (see Cobb 1996; Weisbuch 1999; Renz et al. 2004).

Data on Other Finance-Related Issues

A variety of U.S. Department of Education data-gathering efforts can inform research on the finances of the humanities on campus. The **ipeds** data are useful for information on funding at the institutional and internal college levels, although field-specific information is limited.

The **nsopf** data for individual faculty respondents provide information on employment history and current status, salary, benefits, other income, workload, responsibilities, educational and occupational background, and research funding. The **nsopf** data also contain faculty responses to a series of more subjective questions on their satisfaction with compensation, benefits, workload, and the overall job and on their professional attitudes and plans. Individual-level **nsopf** data are available for analysis under the U.S. Department of Education's restricted-license program. The **neh** funded some parts of the three waves of **nsopf** surveys, and some questions are therefore of special interest to those in the humanities, but financing of the humanities is not an emphasis in the surveys.

The Higher Education Research Institute (**heri**) at the University of California, Los Angeles (**ucla**), conducts periodic surveys of faculty for its American College Teacher Project (see Lindholm et al. 2003). The surveys contain some useful finance-related information, including data regarding faculty attitudes about their salaries.

Limitations of Available Data Sets

Each of the data sources noted above has value for studying the finances of humanities units. At the same time, each has noteworthy limitations. Often the

29. See <http://www.nces.ed.gov/surveys/nsopf/> for an overview of the surveys. A recent report of interest is Bradburn, Sikora, and Zimble (2002).

problem is that the financing of academic departments remains a largely internal matter not susceptible or open to analysis from the outside. For example, Russell et al. (1990) provide some useful background information on academic departments as of 1988, from the *nsopf* survey, and some of the items reported indeed are connected to finances, but those items are limited and not especially informative for the present topic. Most of the other items are unrelated.

Department-level data were collected for the *nsopf* only in 1988. Also, in the *nsopf* data for individual faculty, specifications for some finance-related variables (including research funding and individual workloads) have changed from wave to wave, limiting comparability over time. Sample sizes are inadequate for analysis of particular populations (e.g., assistant professors in the humanities at a particular kind of institution). The sample-size problem holds especially true in the 1988 data, for which only about 1,500 humanities faculty from various disciplines and types of institutions were sampled. Even beyond 1988, data are sometimes retrievable only when aggregated for all the humanities or for a few broadly cast humanities disciplines: English and literature, history, philosophy and religion, and law.

There are two limitations to the data from *ucla's heri*. The generalizability of the data is limited by the self-selected, subscriber-based sample, and the data are available for analysis only for institutions subscribing to *heri's* Cooperative Institutional Research Program.

The Delaware Study data are available only to participants in the data-collection project, and the project is oriented to serving individual institutions rather than broader fields (e.g., the humanities) or academic researchers. The data collected reflect direct instructional expenses only and do not constitute a full cost model. For example, indirect costs attributable to units, research-related costs, nonclassroom dimensions of faculty activity, and various ancillary activities in departments (such as centers or institutes) are not considered. There are only a few qualitative indicators employed, so analysis of "quality" from broader perspectives is not possible. Finally, participation in the data gathering is voluntary and is restricted to four-year, Title-IV-eligible institutions, making generalizations from the data questionable.

The methodology and coding system for the *ipeds* data are complicated. It can be hard for a nonexpert to retrieve raw data. Also, the data tend to be aggregated at levels that are broader than ideally useful for study of particular kinds of departments and fields (e.g., typically available institution-level analyses are on the order of "salaries by gender," "salaries by level and control of institution," and "average salaries"). To access some *ipeds* data, one needs to obtain a special restricted-use license, as is the case with the *nsopf* data. Also, despite ongoing efforts to improve the consistency and comparability of data across time and across institutions in the *ipeds* sample, some problems remain in these areas.

Information sources on faculty salaries are not as robust and comprehensive as one would like, however. Unfortunately, not one of the annual reports (including the *aaup*, *cupa-hr*, and Oklahoma State reports) provides breakdowns on an annual basis nested simultaneously by field, faculty rank, and

specific institutional type (e.g., public research university, private liberal arts college, and so forth). Such data are essential because, without the three-way nesting, any field differences uncovered could potentially be rooted in different sample distributions of reported salaries across institutional types or across different ranks, rather than in any generic salary advantage for one field over another. That is, given that different kinds of institutions pay different salaries (research universities being the highest paying), and given that salaries grow with faculty rank (full professors being the highest paid), field differences in aggregate data can be confounded by type and rank differences.

Although the Oklahoma State salary data and reports are perhaps the most specific of the data and reports provided by this group, they are drawn from only a select group of public, usually doctorate-granting, institutions in each state (i.e., the membership of the National Association of State Universities and Land-Grant Colleges). Those interested in broader salary comparisons and trends cannot profitably use the data. What is more, for each of the annual salary reports, data are presented only in tabular form. From all indications, the data are not available for independent analysis by the general public.³⁰ The only source for publicly available salary data appropriately nested by field, faculty rank, and institutional type is, unfortunately, not an annual source: the NSOPf surveys, which have been conducted three times beginning in 1988.

The data of the Foundation Center (see Cobb 1996; Renz et al., 2004), regarding foundation funding for the humanities in academe and elsewhere, are limited in numerous respects for those interested in independent analysis of the issue. The data are limited to foundation giving and are not available for independent analysis. The database is collected from a sample that may or may not accurately reflect overall support for a particular year. Last, although a more precise taxonomy for categorizing grants is now used, categories of grant recipients were limited prior to 1989 to language/literature, history, and arts/architecture. These data are not, therefore, ideal for long-term trends analysis. Nevertheless, the Foundation Center's reports, however limited, are among the most useful available. As Jones (2002) has emphasized, the funding of humanities scholarship, faculty, and students is simply not well documented: such data are nowhere available in a form amenable to systematic analysis over time, within disciplines, and across institutions.³¹

An important theme emerges when one examines data sets across different domains of funding: too much of the available data are insensitive to the great variety of U.S. higher education both within and across institutions. Too much of what one sees in data tables and in essays is based in conclusions about humanities, humanities departments, humanities faculty, and humanities students either writ too large or writ too small. In one article, we may learn that humanities faculty in U.S. institutions have higher teaching loads than other faculty, but the extent of the differences within and across various sectors of institutions is unmentioned—a community college is a place very different from a

30. The possibility of accessing these data is perhaps worth more aggressive exploration.

31. The problem is not new. Data limitations were also a major impediment in the 1980's to the similarly directed work of Gomberg and Atelsek (1983).

research university. In another essay, one may learn that humanities faculty at the author's campus earn 21 percent less than the business faculty there, a fact providing the foundation for an extended argument about the decline of the humanities nationally. Such writings may be valuable in some respects but miss the point that the topic begs for more nuanced attention. "American higher education" or "faculty in the humanities" are not very valuable as analytic concepts. The "sweet spot" for reasoned policy analysis lies in attention to particular contexts across particular parts of higher education. Those contexts, properly chosen, can be consistently tracked over time, and comparisons can be made within the contexts at hand.

RECOMMENDED NEXT STEPS IN RESEARCH

The problems for financial data in the humanities are very similar to the problems described by Jones (2002) as limiting humanities data more generally: fragmentation and poor coordination of data collection, analysis, and dissemination; a lack of data gathered continuously to support trends analysis; limited public availability of timely, generalizable, discipline-specific data; and persistence of problems in indicator conceptualizations and definitions. Thus, the most obvious next steps for research in this arena are at a very basic level. To put it in the words of Robert Solow (2002), the humanities community needs to collect improved data on "what is taught to whom and by whom, how long it takes, where graduates and postgraduates go, what they do when they get there, and how many of them there are" (p. 3).

Ideally, any new push for basic data should include substantial new information on the organization and financing of the humanities in academic institutions. For example, analysts and policy makers need to know more about such fundamental areas as the nature and extent of scholarly activity by faculty in the humanities in various kinds of institutions and, relatedly, the nature and number of humanities centers and institutes within academic institutions and their connections to academic departments. The baseline data collection regarding these questions is every bit as important to the financing arena as it is to other areas of concern in the humanities. Indeed, the questions posed above are arguably economic questions at heart, in that they focus on the classic economic question: how to achieve efficient production (here, of valued humanities instruction and knowledge) in the face of constrained resources. Without basic data on production, it is difficult even to identify the most promising avenues of research, much less launch that research.³² Taking the need for baseline data as a given, however, two specific ideas for future research arise from the review of literature and datasets presented in this essay.

32. Perhaps an association, group of associations, or consortium of institutions could obtain funding to develop a data-collection system devoted exclusively to the humanities. The various groups involved in collecting salary information (e.g., *aaup*, *cupa-hr*, Oklahoma State University), or the institutions involved in the Delaware and *cirp* studies mentioned elsewhere in this report, might provide examples of this kind of effort.

Internal Allocations and Budgeting for Humanities Units: A Comparative Case-Study Project

Perhaps more than any other part of an institution, faculty and leaders in the humanities have reason to raise concerns about the recent trends toward decentralized budgeting and the aggressive pursuit of new kinds of revenues on campus. For one thing, humanities units may be less likely than units in the sciences and professions to have ready arenas for new funding and thus may be at a disadvantage in an internal funding system rewarding ingenuity and success in that domain. More importantly, the core role of the humanities may be threatened to the extent institutional investments flow toward the most robust markets for external funding. Unreflective movement toward diversified revenue streams can corrode campus commitments to established and valued institutional cultures, identities, and missions. At its worst, the emphasis on departmental cost-centers and the pursuit of new revenues can be mindless and dispiriting to those with deep faith in the measurable societal and individual benefits of higher education. Still, the possibility exists that emerging financial approaches might result in new, perhaps even inspiring, visions of the distinctive financial and philosophical role of the humanities in higher education.

It seems appropriate to fashion a case-study analysis of how the new ethos on campus is affecting the finances of the humanities in particular. How are the microeconomies of humanities departments changing? Are annual central appropriations to humanities units waning in the face of fiscal pressures and increased attention to alternative revenue streams? To what extent and how have trends to decentralized, responsibility-centered budgeting and decision making affected humanities departments? How are staffing patterns (i.e., pay-rolls) of humanities departments changing (e.g., among tenured faculty, tenure-line faculty, non-tenure-line faculty, part-time instructors, and graduate-assistant instructors)? How do faculty view the evolving strategic and funding climate on their campuses?

To examine these and related questions, an intensive case-study project seems appropriate. Individual humanities departments would be the unit of analysis for this project. In each department in the study, the project staff would review relevant departmental documents (especially those relating to strategic planning, funding, staffing, and course offerings) and interview department chairs, faculty, and graduate students. On each campus, staff would also review relevant institutional documents (especially those relating to strategic planning, external funding, and budgeting) and, ideally, interview the provost, appropriate humanities-related deans, and the president. The departmental sample would consist of thirty-four departments drawn from twelve campuses, composed as follows: (a) three departments each from two public “flagship” research institutions, two private research institutions, two public comprehensive institutions, two private comprehensive institutions, and two private liberal arts colleges, and (b) two departments each from two community colleges.³³

33. Only two departments each would be drawn from humanities units on community college campuses because such institutions tend more than four-year institutions to collapse several fields into a single department, leaving fewer distinct humanities departments for analysis.

The product of this project would be a final report portraying the contemporary financial world of humanities departments across the diverse range of such units in U.S. higher education. Ideally, the report would provide first-hand or indirect information on financial successes among the nation's humanities units and thus have aspects of a best-practices document. At the same time, however, the intent would be to capture the realities of departments across a spectrum, to highlight tensions and challenges as well as positives. The report would be tailored to informing campus leaders, faculty, and state and federal policy makers concerning the status of humanities "on the ground" in colleges and universities.

It should be noted that such a project could be incorporated as part of a broader case-study analysis of humanities departments and programs on campus. Such an expanded project could focus not only on funding-related questions but also on questions of governance, leadership, strategy, resilience, staffing, and programming. As suggested in the material above, these organizational areas are closely connected to funding and arguably inseparable in the end. A broader project incorporating organizational and financial concerns might be more cost-effective than two separate projects, if both such projects have appeal to potential funders.

The Finances of the Humanities: A Survey

The paucity of data on the humanities extends, as noted earlier, to financing at the level of individual departments. One straightforward way to address this problem is via a nationally representative survey of humanities units. Directed to department chairs in institutions in varied institutional sectors, varied humanities disciplines, and varied regions of the country, this survey would seek information on recent trends in internal and external humanities funding on their campuses and in their departments, fundraising efforts, enrollment trends, changes and trends in academic programming, staffing trends, budgetary processes and procedures (e.g., extent of any decentralized-budgeting emphasis), and the chairs' attitudes and values concerning humanities funding. Such a project would provide an unprecedented level of information on the current and emerging financial status of the humanities on campus.

Embedded in both of the research ideas proposed above is a desire to learn more regarding some significant questions for policy and practice. For example, to what extent and how have humanities departments (e.g., Spanish, Portuguese, and Italian departments) been merged on campuses over time and what have been the financial and operational implications of such mergers? Has merging led to promised improvements in efficiency and effectiveness? Similarly, to what extent and how has the centrality and connectedness of humanities departments on campuses changed over time? (For example, are humanities departments not serving as many undergraduates as before because other units, hungry to maximize their own resources, have decreased distribution requirements favoring the humanities?) It is reasonable to predict that the projects could provide useful empirical findings on these and other pressing issues for the humanities fields.

CONCLUSION

The academic department is the core operating unit of U.S. universities. Curricula, degree programs, grading practices, research initiatives, and faculty careers are shaped there, and it is there that the notion of shared academic governance is most developed (Peterson 1976; Clark 1983). It is there that the financial strains confronting institutions are most salient to individual faculty and students, and it is there that attention to the origins and effects of those strains is most imperative. Unfortunately, although observers have long realized that academic departments are the critical organizational units on most campuses, they are too rarely studied as enterprises unto themselves.

The dearth of research on academic departments is lamentable, but may be especially so in departments in the humanities. In historical terms, the humanities are the foundational disciplines of higher education. That centrality endures today: the humanities are deeply embedded in the core scholarly missions of the great majority of contemporary colleges and universities. In part because of that centrality, departments in these fields may tend to operate somewhat differently from departments in other fields. For example, music departments and chemistry departments are quite distinct as economic units: their revenues, relevant labor markets, faculty and staff characteristics, students, instructional models, scholarly products, and costs differ substantially.

Unfortunately, the magnitude of these differences and their implications for operations and outcomes are unclear because of data limitations. Our review of available literature and data reveals an extraordinary dearth of material on the financial conditions of departments in the humanities. Beginning with basic questions like the number of students and faculty and moving to more specific questions on salaries, implications of budgeting approaches, and the like, one can only be surprised and disturbed by the lack of information. In the current constrained economic context, it is particularly important that the emerging financial context of humanities units be studied and understood. The potential erosion of funding levels that have sustained and enriched the humanities merits serious and ongoing analytic attention, and some part of that attention needs to be directed toward what might be seen as the ground floor: academic departments in the field. Ideally, this essay provides some tentative first steps.

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Prospects for the Humanities as Public Research Universities Privatize their Finances

DONALD C. SUMMERS

EXECUTIVE SUMMARY

Public universities are losing their protected financial status. As state funding continues its steady decline, universities compensate by seeking out new revenue sources. Faculty and administrators confront a new realm of competition where only the strongest survive, and the resulting differential effect on the university landscape, something years in the making, is just now beginning to be studied.

Many university departments have evolved successfully to meet this challenge. The health sciences, business, and technology fields are now well adapted to these Darwinian financial pressures. No engineering or medical school student heading into university teaching fails to realize the central role grants, contracts, sponsorships, and the like will play in his or her future career.

However, another entire class of university departments has not adapted nearly so well; some observers warn their paths are veering dangerously toward extinction. In this new environment, it is the departments and programs in the humanities, those core liberal arts disciplines in language, literature, and culture, that are at a striking disadvantage. Anecdotal evidence suggests the dire warnings have at least some merit, and many hypothesize that the humanities, a traditional bulwark to human culture and society, are in rapid decline. Humanists are not empirical researchers, so perhaps it is not surprising that few, if any, have tested this hypothesis with means other than rhetoric.

This essay reviews the relevant history and policy to establish a macroscopic background, provides a summary of the current landscape for “disadvantaged” units such as the humanities, and offers measures that attempt to empirically frame both the internal resource picture and prospects for new external revenue of the humanities departments. The example used is the Division of the Humanities in the College of Arts and Sciences at the University of Washington, Seattle. Future study will collect data from a set of peer institutions and present a comparative analysis.

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By now, the nationwide decline in states' support for their systems of post-secondary education is a well-established and much-publicized trend (Hovey 1999). Public colleges and universities continue their scramble to adapt to an increasingly complex financial environment, and gloomy observations abound. In August 2003, the *Chronicle of Higher Education* observed that "the 2003–4 fiscal year, which began in most states on July 1, may be the worst in memory for higher education" (Potter 2003, p. 22). By April 2004, it had compiled a long reportage of historic challenges, most recently the lowest raises for public university faculty in thirty years (Robin 2004).

In response to years of shaky state support, public institutions are behaving more like private entrepreneurs by searching for alternative sources of revenue to meet budgets already under enormous strain from a variety of factors. A demographic surge in college-age students; the "information age" growth in fields of study and costs for technology, equipment, and infrastructure; and, among selective institutions, heightened competition for the best students and faculty are a few of the market forces that are speedily reshaping the structure, and some would say very purpose, of the public university.

Despite the fiscal crunch at the state level, overall revenue growth at large public research universities such as the University of Washington, Seattle, continues to be strong (see figure 2). But these new sources of revenue—billions from gifts, grants, self-sustaining enterprises, commercial partnerships and enterprises, intellectual property licensing agreements, technology transfers, and other dollar-generating initiatives—are obtained from market competition, not the largesse of the state government, and are thus available only to specific segments of the institution. Far from being a unified enterprise, the modern research university may contain many hundreds of units, each with a unique revenue base. For example, the University of Washington has seventeen discrete colleges and schools containing 139 academic departments and another 179 labs, centers, programs, or projects, and every unit has a unique funding structure and constituency. The University of Washington's considerable increase in alternative funding may make the institution seem financially healthy at first glance, but the restricted nature of this outside money, intended as it is for specific research or projects, means that core instructional programs (such as those in the humanities) may not access the funds. As the Vice Provost for Budgeting Harlan F. Patterson observes, state support makes up approximately 14 percent of the University of Washington's overall budget but provides 61 percent of the funding for student services, faculty salaries, and teaching supplies.

Despite allowing institutions to increase tuition levels significantly, legislative cuts continue to erode core institutional funding. Public university managers increasingly find themselves in a double bind of (relatively) low tuition and low state subsidy that leaves them less able to determine institutional priorities. Yet demand still grows, and therefore the harsh realities of the marketplace take over. Deans, department chairs, and program managers find themselves forced to develop new sources of revenue for their individual programs

should they wish to forestall declines in program quality. Therefore, those programs and disciplines with marketable commodities or access to external funds or both thrive; those that do not, wither—or expire altogether. While this generality has significant exceptions from one institution to another, one need only read remarks such as those by one university president, “my faculty can do anything they want—as long as they find the money to pay for it!” (Duderstadt and Womack 2003, p.72), to see that the very mission of the public college and university is controlled less by the values and priorities of institutional leaders and faculty and more by what the alternative revenue market makes possible.

As former University of Michigan President James Duderstadt declares, public university programs “such as business, medicine, and engineering, with strong resource opportunities, are usually winners; others such as the arts and humanities, with fewer opportunities for external support, can become impoverished backwaters” (Duderstadt and Womack 2003, p. 112). To emeriti presidents like Duderstadt and Harvard University’s Derek Bok, the liberal arts disciplines are in danger, and “humanists . . . feel devalued” (Bok 2003, p. 113). To humanities faculty, the situation is described in more desperate terms, and low pay only begins to describe what has extended into an intellectual plight. The liberal arts themselves have declined, and “students aren’t getting the education they deserve.” We thus become “a country that spends more to support beer and shaving cream on one Super Bowl Sunday (not to mention tax subsidies to build the stadiums) than its government spends on music and painting and theater in a year” (Engell and Dangerfield 1998).

While there has been much comment and handwringing concerning this trend, a review of the literature reveals a surprising shortage of empirical data that captures the humanities units as a distinct segment of the much larger institutions in which they reside. There seem to be little more than ominous warnings about the particular challenges they face, and even less about possible pathways to a more positive and secure future. Duderstadt and others who comment on the entrepreneurial forces in public universities take in the entire university landscape, and little comment is made on the challenges particular to the humanities. Robert Weisbuch (2002), former president of the Woodrow Wilson National Fellowship Foundation and president of Drew University, observes that “there isn’t much out there on this, and these are really important questions. It’s almost as if a culture of defeatism has taken over.”

There appear to be a number of unanswered questions. If humanities departments are in a state of decline, as many observe, what measurements to assess this will transfer from one institution to another? What, if anything, is happening at the state, institutional, or program level to fix the problem? Are there institution-wide policies in place to cross-subsidize or otherwise compensate those units with less access to alternative revenue streams? Despite the challenges, have these units been able to find significant sources of new revenue, and if so, what are the measures and characteristics of the successful programs and the prospects for dissemination and replication?

This essay begins an attempt to provide at least preliminary answers to these questions. First, a review of the historical, economic, and political factors contributing to the current revenue challenges for the humanities will establish the macroscopic perspective. Then I will examine—as empirically as possible—how these forces impact the humanities units at a public flagship, the University of Washington. By comparing the numbers, one sees how these units fare in the university-wide struggle in the new academic marketplace, and what future they have before them.

The fourteen departments and centers that make up the humanities division at the University of Washington serve as the initial case study to develop benchmarks and transferable measures to other institutions from a large array of institutional data; investigate institutional responses or compensatory measures for the humanities, if any, to the influence of the market; and identify pathways for new sources of alternative revenue. Subsequent data collection will expand this study to include humanities units at other public flagships most similar in size and structure to the University of Washington.¹

I have selected public flagships as the institutional type to examine for several reasons. First, of the largest 120 universities in the United States, 116 are public, and this is where the largest fraction of students is educated: nearly 80 percent of all students attend public four- and two-year institutions, with more than half of this number at the four-year institutions. Second, because of the great number of departments and the diverse ways they are financed, flagships provide the richest environment for studying the humanities as they compete against other fields for scarce resources. Third, unlike other publicly supported institutions such as community colleges or smaller four-year institutions, the public flagships are in direct competition for top faculty, students, and program funding with top-tier private institutions. As the private institutions have obvious financial advantages, this added challenge for humanities units at public flagships makes the need for examining their environment even more urgent. They compete against both the stiffest internal and external competition, so any analysis proving useful for their condition is likely to have application in other institutional settings. Finally, the condition of the public flagship (and the humanities units within them) has tremendously important practical and symbolic value. Public universities, “our principal incubators of new discoveries and ideas,” represent a state’s best effort to provide the highest quality education to the broadest possible constituency, what remains of an altruistic educational design to support a healthy, egalitarian democracy—a design in which the humanities’ critically important role appears to be increasingly threatened (Cole 1994, p. 3).

1. I have already obtained permission to access the unit-level data at the University of California, Berkeley; the University of Michigan; and the University of Minnesota. As this study progresses, I will seek to engage the University of California, Los Angeles; the University of Illinois; the University of Iowa; and the University of North Carolina at Chapel Hill in the sharing of information as well. This set of institutions makes up nearly all of the “peer group” used as a comparative context by Washington State’s Office of Financial Management.

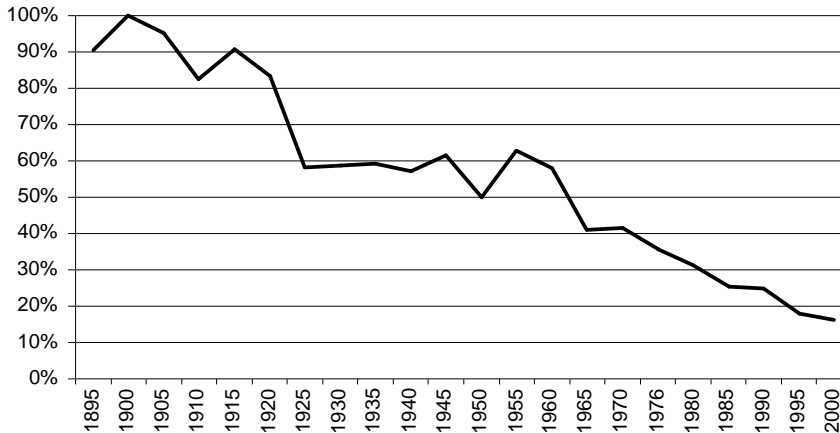
University of Washington Director of Institutional Studies Phillip Hoffman (2002) states unequivocally, “when push comes to shove . . . the humanities are put at the bottom of the funding list.” How did this come to be? A review of the historical forces in play is helpful background for any analysis of current trends.

It may be cold comfort for humanities faculty and students to remember (or realize) that the state’s support has always been erratic and that commercial pressures have long had strong influence on the academy. “Markets are hardly new to higher education,” note Robert Zemsky and colleagues (2001), who observe that this is a “history that much of higher education in the United States has forgotten” (p. 9). But as Bok (2003) points out, “what is new about today’s commercial practices is not their existence but their unprecedented size and scope.” As early as 1909, Thorstein Veblen ([1918] 1993) complained in *The Higher Learning in America* that university leaders are “very little else than business men” and that “the hand of business control[s] . . . every aspect of the modern university” (p. 42). Frederick Rudolph’s 1962 examination of American higher education finance and other samples of institutional histories confirm this. As Rudolph’s work details, the geneses of public and private schools were remarkably similar, each established with a unique admixture of public and private resources, and their growth patterns have long been influenced by market pressures.

In Washington State, for example, while the state legislature established the University of Washington in 1861, it provided only for occasional public funding through land sales and small allocations from the treasury (Gates 1940). The University of Washington was born only because of a private gift from Arthur Denny, Edward Lander, and Charles Terry, who deeded ten acres for the first campus. It was not until 1875, after the university had closed several times for lack of funds, that the legislature approved \$1,500 annually from the territorial treasury for “the repair and upkeep” of the university.

From its very beginnings, then, the University of Washington typified this makeshift public-private partnership. While by the beginning of the early twentieth century the state supported the majority of the university budget, there remained chronic shortages and programmatic deficits, and as other sources of revenue were discovered, the proportion of state support declined steadily, reaching approximately 15 percent by the end of the century (see figure 1). As mentioned earlier, this shrinking proportion of state support results today in large part from the growth of nonstate revenue. Federal funding for medicine and the sciences, along with patient revenue from the University of Washington’s hospitals, accounts for more than a third of total revenue by 2000. In short, with regard to financing, there is no bright line between public and private universities anywhere in the history of the university institution. As Rudolph (1962) observes, private colleges often accept public funds, and public universities are quite happy to gain private support whenever possible.

Figure 1: State Appropriations as a Percentage of the University of Washington Budget, 1895–2000



Source: The Annual Financial Report of the University of Washington and the Report of the University of Washington Board of Regents, 1900–2000

After growing slowly but steadily since the Civil War, public universities enjoyed unprecedented expansion and levels of funding from 1945 to approximately 1970. This expansion was due primarily to the 1944 GI Bill and the Higher Education Act of 1965, both of which created “vast sums” (Bowen 1980) for student aid and initiated a “quiet revolution in [higher education] financing” (Zemsky, Shaman, and Shapiro 2001). Federal spending on research and development, spurred by the first presidential science advisor, Franklin Delano Roosevelt’s Vannevar Bush, channeled much financial support into the leading research universities (Arnowitz 2000). While nonexistent in the University of Washington’s budget in 1945, federal grants accounted for 22 percent of the university’s income by 1950. The trend only gained momentum from there with the new research demands prompted by such policy drivers as Sputnik. Together, these new funds enabled “increases in real wages [and] increased enrollment, expanded research, and improved quality” (Pickens 1993, p. 9).

The largesse of state governments, which managed to support rising enrollments and the expansion of facilities this funding necessitated, began to falter in the 1970s. Inflation, a slowdown in enrollment, and new pressures on state budgets combined to lower state investment in public universities, initiating a three-decade boom-and-bust cycle for the public institutions that followed the business cycle. The most recent decade of decline appears to be the most serious, and there are widespread fears that the downturn is of a more permanent nature. Administrators at public flagships across the country can cite statistics similar to the University of Washington’s, where, for example, allocations of state dollars per student, adjusted for inflation, declined from approximately \$9,556 in 1990 to \$8,378 in 2000 (Office of Institutional Studies, University of Washington 2004). National state data compiled by policy analysts such as Thomas Mortenson (1999) and by organizations such as the National Information Center for Higher Education Policy Making and Analysis (2002) confirm this trend.

CURRENT CONDITIONS

Yet this decline in state appropriations alone does not explain the jump in public universities' entrepreneurial behavior. It is combined with a number of other more recent, well-documented factors.

Rising Costs

Technology's speed and efficiency has made many products and services faster, better, and cheaper, but education's age-old, human-intensive classroom model still resists all attempts at streamlining. Universities suffer from what economists call "cost disease." The core components of a university—faculty, the physical plant, equipment, and library materials—have not been made less expensive and more efficient like many other aspects of industrial production, so they are becoming comparatively more expensive. University costs, as measured by the Higher Education Price Index (an index that captures the more inflation-prone inputs central to higher education), have outpaced the Consumer Price Index by an average of 30 percent from 1980 to 1999 (U.S. Department of Labor 2004).

Tougher State Budget Competition

Higher education is one of the few discretionary items in state budgets; the others are either entitlements or mandates, and all of them are getting more expensive. Skyrocketing health-care costs for an aging Medicaid population, rising prison populations resulting from tough drug sentencing guidelines, increases in transportation demand, federal "unfunded mandates" for K–12 testing, and other state and federal initiatives will make it increasingly difficult for states to carve out additional support for higher education. Public ballot initiatives that limit state spending growth, such as the 1993 Initiative 601 in Washington State, cement this difficulty. More recently, in 2004, Washington State's Public Ballot Initiative 884 contained a proposal for a 1 percent sales tax increase to provide additional money for the state's school systems, including public higher education. The strong anti-tax sentiment in Washington State again proved insurmountable, with 60 percent of the voters rejecting the bill (Washington Secretary of State, 2004). Given this record of opposition to increased public support for higher education, university leaders in Washington State (and elsewhere) must certainly be prepared for long-term, chronic shortages of state dollars.

Political Constraints on Increased Tuition

As Ikenberry (1999) observes, "from 1975 to 1998, the cost of four years at a public institution rose from a third of national median income to the equivalent of median household income" (p. 67). While striking, this measure obscures broader inequalities: the highest quintile's income growth was able to compensate for the tuition increase, while the worst proportionate share of costs fell on the lowest and moderate income quintiles. As a percentage of public university budgets, tuition and fees have risen from 12.9 percent in 1980 to 18.5 per-

cent in 2000 (nces 2000). Exacerbating this in the public's eye are the well-publicized price tags at the nation's private elite universities and a concomitant tendency to forget that public universities remain relatively inexpensive by comparison. In 2002, public college and university tuition averaged \$4,081. While tuition is higher at the more selective public flagships, it still remains far below the average private tuition of \$18,273. Furthermore, despite this apparent growth in tuition costs, 70 percent of students in attendance at four-year colleges and universities in the 2002–2003 academic year still paid less than \$9,000 in tuition and fees, and nearly 40 percent paid less than \$4,000 a year (College Board 2003). In terms of tuition revenue, these factors add up to a triple whammy for public universities: significant increases in real and perceived tuition add to important public concerns over access issues, making it difficult for legislatures to raise what are, by comparison, relatively low tuition levels. One commentator calls this a “financial vise” (Hirsh 1999).

Federal Aid Policy

As Duderstadt (2003) writes, “federal policy has shifted away from the view that higher education is a public good and toward the view that education benefits primarily the individual.” While it is intended to encourage access, massive amounts of federal student aid money (\$50 billion in 2001) have led to no significant increase in the lowest income quintile's participation in higher education (Mortenson 1997). Instead, in an irony not lost on Duderstadt (2003), federal aid subsidizes the high tuition, high-aid model at the private institutions, which enroll 20 percent of the students but capture 40 percent of the federal student aid dollars. The public flagship is thus further behind the competition and is left with no recourse but to make up the difference elsewhere.

Increased Enrollments

In addition to the pressures that hold down revenue and increase expense (cost disease, declines in state support, pressures on tuition growth, and the federal student aid subsidy for the competition), the demographic surge in enrollment stretches resources even further. According to statistics compiled by the Washington State Higher Education Coordinating Board, in 2003 there were 104,449 students enrolled in four-year institutions in Washington (2003). Enrollment projections show a need for 36,000 additional slots overall in the next decade.

Federal Research Funding

Because of these pressures, universities must search for new sources of revenue. When they find new money, the very availability of these funds creates dependence upon it. Sheila Slaughter and Larry Leslie (1997) theorize that resource dependence theory is a helpful model for explaining this action, where faculty will follow new financial opportunities if present funding dries up. Foremost among these alternative sources of income at research universities are federal research funds that, since 1950, have contributed to the disproportionate “enormous growth” of the health sciences, medicine, and technology-related fields

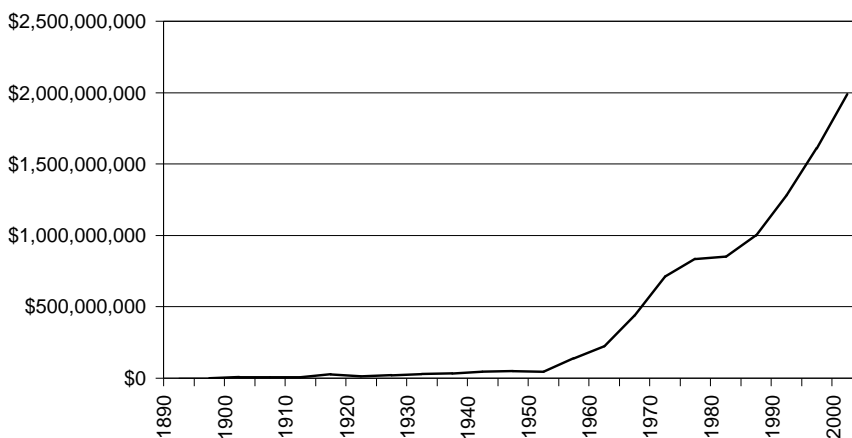
(Cole 1994). In fact, 60 percent of all federal dollars for campus research goes to the biomedical sciences (Duderstadt and Womack 2003).²

Other New Alternative Revenue Engines

With an unlimited supply of ideas to study, universities will naturally expand where resources permit, and the availability of other new revenue sources has shaped the institutions according to simple opportunity. Grants from corporations and foundations, income from self-sustaining enterprises, corporate sponsorships and partnerships, and intellectual property all provide increasingly important income for those aspects of the university with access to them. But access is unequal, and as Slaughter and Leslie (1997) note, by aligning with the market, “some departments, colleges, and curricular areas gain revenue shares . . . whereas areas such as the humanities . . . lose shares” (p. 14).

In short, as “government support is becoming less important . . . support from private parties through tuition, donations, grants, and sales of nonmedical services is becoming more so” (Cohen and Noll 1998, p. 147), and the market, not the academy, increasingly becomes the decision maker regarding what gets taught and learned. Paradoxically, the success of the university in its entrepreneurial behavior poses a serious challenge for the traditional core human-

Figure 2: Combined Annual Revenue from the University of Washington, 1890–2000



Source: The Annual Financial Report of the University of Washington and the Report of the University of Washington Board of Regents, 1900–2000

2. In 1960, medical center income comprised 2 percent of the University of Washington budget, and by fiscal year 2000 this percentage grew to nearly 18 percent. Add the income of the medical center to an approximate 60 percent share of fiscal year 2000 federal grants, and in total the biomedical sciences brought in roughly \$666 million for the University of Washington, or a third of the \$1.98 billion annual budget. By comparison, the fifteen departments and programs in the humanities division brought in a total \$284,682 in grants and about \$1 million in gifts. Even if approximately \$17 million in tuition revenue for the students who took humanities courses is counted, the humanities account for less than 1 percent of overall revenue. Yet by measure of total student credit hours, the humanities division is the third largest academic unit on campus.

ities functions. Consider the University of Washington's long-term revenue pattern shown in figure 2.

While there appears to be spectacular growth, it is an aggregate number of hundreds of income streams. A flagship is not a flagship at all—it is a flotilla where some of today's high-powered battleships, such as medicine, were mere runabouts in decades past. (The wooden hull, square-rigged sloops of the humanities remain much the same as they have ever been, struggling harder to battle the increasingly rough seas.) Most of this revenue is restricted to particular programs or purposes, and as a proportion, less and less goes toward the traditional teaching mission. As universities respond to the many new opportunities, "it is inevitable that they will experience more conflicts that were avoided when they had too little of a good thing" (Cole 1994, p. 4). As Duderstadt (2003) observes, "while some components . . . have undergone dramatic transformation in recent years, notably . . . medicine and business administration, other programs such as the liberal arts continue to function much as they have for decades" (p. 15).

Incremental Budgeting

Finally, despite this complexity and disproportionate access to alternative program revenue, many public university leaders still use an incremental budgeting system within a scheme of fund accounting. Simply put, the next year's budget is based on the previous, plus or minus what is required to make expenditures equal revenue within each fund. "In the face of a more limited resource base, [incremental budgeting practices] eventually lead to . . . slow starvation." (Duderstadt and Womack 2003, p. 116). In the interunit competition for university resources, incremental budgeting is a serious handicap for the humanities. This budgeting practice provides no cross-subsidization from more profitable parts of the university or other types of compensation for these departments' lack of access to other revenue as it only accounts for the distribution of centrally managed dollars such as state support and tuition revenue. If a university wishes to maintain the quality of its programs in language, literature, and culture, there must be some offsetting of declines in incremental allocations with new external funds or an effective institutional commitment to reallocate current internal income streams.

THE CRITIQUE

Before examining the internal financial flows that confront the humanities as well as prospects for generating alternative revenue, it is worthwhile to summarize the concerns and criticisms this increased university entrepreneurialism has raised. Institutional decision makers must proactively address these critiques as they look to entrepreneurialism to pry open the financial vise.

Mission Creep

A reward system based on income and prestige shifts the emphasis of the university away from its core teaching mission. As university presidents, and in-

creasingly deans, department chairs, program managers, and faculty are caught up in the race to secure funding, there is considerable distraction from the teaching mission. Dollar-generating initiatives such as fundraising also come with high transaction costs, such as the resources needed to staff fundraising campaigns, for example. The warnings are numerous in the literature: “significant costs involve the time spent by presidents and chancellors in fundraising rather than in guiding and inspiring academic endeavors.” (Hirsh 1999). The variety of other enterprises such as Division I athletics, technology transfer offices, and investment policies in business start-ups (where a university may own equity) can distract leadership. Duderstadt (2003), well familiar with these challenges, writes, “these peripheral businesses are only tangentially related to the fundamental purposes of the university, but they consume disproportionate amounts of time, energy, and financial resources” (p. 105).

Loss of Academic Standards and Values

If all academic units must market themselves and generate their own income streams, knowledge itself is commoditized, no longer a valuable end in and of itself. “The priority of knowledge as instrument over substance places humanities scholars and critics in an ambiguous position,” writes Stanley Aronowitz (2000). “The constant struggle for more resources can . . . obscure the larger message of a true humanities education—that there is more to life than making money” (p. 62). If the public sees universities creep further away from their main teaching mission, it may further reduce its enthusiasm and tax support. Also, “the profit motive shifts the focus from providing the best learning experience that available resources allow toward raising prices and cutting costs as much as possible without losing customers” (Bok 2003, p. 110).

Division I football typifies this loss of values and shift in priorities: at nearly all public flagships the football coach is among the best paid employees. Also, athletic scholarships bring academically subpar students to campus, and the media coverage of classroom cheating, student-athlete crime, high dropout rates, and corrupt coaches is depressingly continuous. While athletics are only one glaring example of the pressures created by the marketplace, their prominence offers a powerful symbol that cannot but fuel humanists’ suspicion that core values are under attack.

Many humanities faculty have deep philosophical misgivings about capitalism. While failing to account for the obvious diversity among humanities faculty, it is perhaps safe to generalize that long immersion in literature gives rise to a faculty culture characterized by an Emersonian idealism, a romantic contempt for material gain (Wordsworth’s famous line, “Getting and spending, we lay waste our powers” comes to mind [1807]), and perhaps even a Marxist aversion to capitalism. Humanists especially interpret the university’s mission as an outgrowth of the Enlightenment desire to explore and celebrate human culture and find it fundamentally distasteful and even hypocritical for many to consider engaging in the very structures they criticize as problematic (Reading 1996, p. 5).

Erosion of Internal Collegiality and Trust

Whereas Bok (2003) puts it rather mildly when he states that “commercialization can undermine collegiality and trust within academic communities by creating divisions and tensions that did not previously exist,” Bill Reading (1996), who was a professor of comparative literature, is more emphatic on this point: “Purveyors of ‘the best that has been thought and said’ live a progressively marginal and anxiety-ridden existence, being only too aware that they have lost considerable status in the newly restructured academic system” (p. 113).

Loss of Autonomy

Donors who make large gifts can “unbalance” the academic curriculum, and universities are “reluctant to reject large gifts, even those that are likely to have unsettling academic effects” (Bok 2003, p. 62). A number of recent, well-publicized cases detail the conflicts large and assertive donors have with university administration as they attempt to shape an institution according to their own wishes.

Loss of Public Trust

The perceived erosions of mission, values, and standards accelerate when the university professor is seen not as a dispassionate, objective scholar but as a commercial actor. “No one can be sure that medical faculties will present a completely balanced and unbiased program if companies pay a large portion of the cost,” warns Bok (2003, p. 174). “The primary concern here,” Duderstadt (2003) writes, “is that unbridled market forces” could lead public universities away from “acting in the public interest and instead lead them to become, in their activities and philosophies, indistinguishable from the for-profit sector. Quality could sink to a lowest common denominator provided by commodity products in the mass marketplace” (p. 96).

Counterarguments for these critiques of course exist. Humanists, such as Arnowitz (2000), Reading (1996), and James Engell and Anthony Dangerfield (1998, 1999), who write about the commercialization of higher education, are mostly pessimistic about the trend. In general, they call for a broad re-envisioning of higher education that will return the humanities and the other traditional liberal arts fields to the center of the modern university. However, as they lack an analysis of the data and a strategic vision based on financial reality, such calls for reform are easily dismissed from the policy agenda. Even the brief overview of the economic pressures presented here makes a convincing case that universities are in the grip of powerful forces. Rhetorical arguments to restore the liberal arts, however reasonable and laudable, are easily crushed in the financial vise. With a university budget containing another funding cut in one hand and arguments such as Reading’s *The University in Ruins* (1996) in the other, a typical university president or dean will have little choice in deciding between the alternative priorities each advocates.

Instead of fighting the tide, perhaps leaders in the humanities fields can adapt. Furthermore, perhaps such adaptation can be done in a manner that is congruent with deeply held values, ones that, at first glance, appear to be op-

posed to the dynamics of commercialism. A look at the reasons for engaging in entrepreneurial behavior can equip leaders with the perspectives necessary to proceed in the best possible manner.

The first and perhaps most compelling reason for engaging in entrepreneurial activity is simply stated. Whether congruent with humanists' values and culture or not, there appear to be no alternatives. "I understand it now," says a humanities professor and program director at the University of Washington. "It's fundraise or drop dead."

Bok (2003) is more sanguine than many humanists about the potential benefits of commercialization. Corporations, he says, provide valuable lessons on efficiency. In business-like functions such as food service, building maintenance, construction, and personnel, "corporate practice and experience may have valuable lessons to teach" (p. 25). In the academic realm, he observes that, despite the reams of literature on effective teaching practices, most faculty remain ignorant and unmotivated to improve. Competitive pressures may encourage them to change their ways. Humanists may chafe at a third possible benefit Bok enumerates: "commercial motives play a useful role in weaning first-rate intellects from a sterile preoccupation with scholastic puzzles, like the players in Hermann Hesse's *The Glass Bead Game*" (p. 27). Alan Sokal's famous 1996 spoof of the New York University cultural studies journal *Social Text* reinforces this uncomfortable point. Some discourse in the humanistic fields is so coded and esoteric that it is unintelligible nonsense, and perhaps tightened resources will create pressures that will expose the poseurs.

Finally, the pursuit of alternative revenue may itself be a healthy exercise. For example, if done properly, raising money from individuals, corporations, and foundations can yield an array of concomitant benefits such as increased community awareness of university goals and programs, a broad and enthusiastic base of community support, identification and partnership with like-minded individuals, and new program ideas. Many agree that humanists have a valuable role to play in society, and University of Washington departments that have identified and cultivated sympathetic and supportive constituencies report a surprising number of benefits in addition to more money. "Fundraising is great," remarks one department chair. "You surround yourself with people in the community who love what you do" (Daniels 2003).

Whatever the arguments and philosophical background may be, the simple fact remains that, for the foreseeable future, marketplace dynamics are here to stay.

DATA

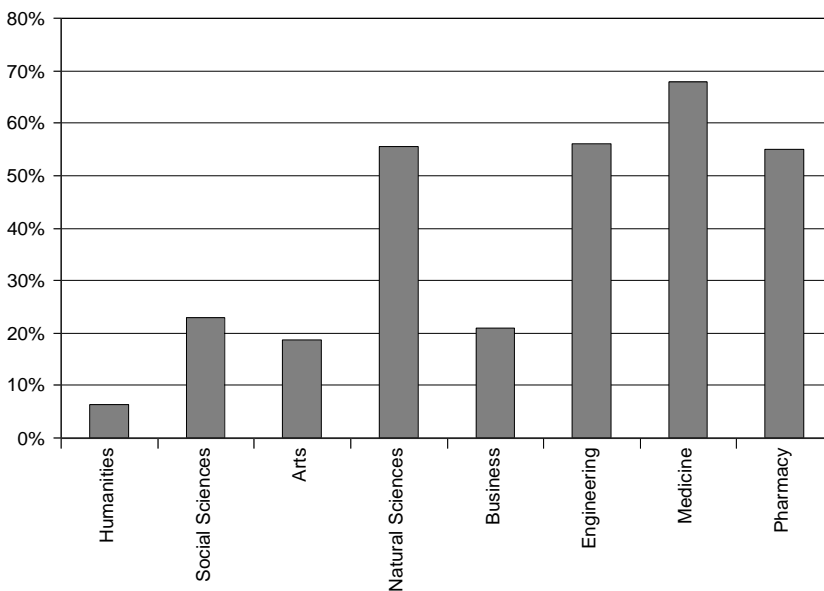
The following measures seek to concretize the impact of market forces on the Division of the Humanities at the University of Washington. As no comparative study of the fiscal health of humanities departments exists, these measures are offered in the hope that they may be found robust enough to justify applying them to other public research universities. All of the data presented here were easily obtained from university websites such as that of the College of Arts and Sciences at the University of Washington (UWCAS 2004). The author has

found encouraging signs of cooperation from various administrators for collecting similar data from other universities—particularly the University of Michigan; the University of California, Berkeley; and the University of Minnesota—and plans a broader comparative study of humanities unit finances in the context of organizational analysis that will attempt to provide tentative explanations for variance in both internal and external funding levels.

At the University of Washington, the label “humanities” is a collective term for eight relatively small departments collectively offering courses in more than sixty ancient or modern languages and cultures; a large English department (with a total student enrollment of 15,000 annually, the department, were it a separate school, would rank as the tenth largest of the university’s seventeen schools and colleges); a linguistics department; an interdisciplinary, undergraduate-only Comparative History of Ideas Program; a para-academic Language Learning Center; and the Walter Chapin Simpson Center for the Humanities. As one can see just from the description, there is great organizational diversity within the division itself. (A future challenge will be to define exactly what constitutes the “humanities” among the peer group of flagships.) Together, the division contains approximately 1,700 undergraduate majors, 420 graduate students, 200 tenure or tenure-track professors, and 120 nontenure-track instructors and teaching assistants. They and fifty administrative staff consume an annual budget of \$17 million, composed almost exclusively of state funds and tuition revenue. In terms of total student credit hours, the humanities division is the third largest academic unit at the university.

Figure 3 shows the overall measure of the differential access to all external funding at the University of Washington by selected academic units. The hu-

Figure 3: Percentage of University of Washington Unit Budgets Derived from External Funds (FY02)



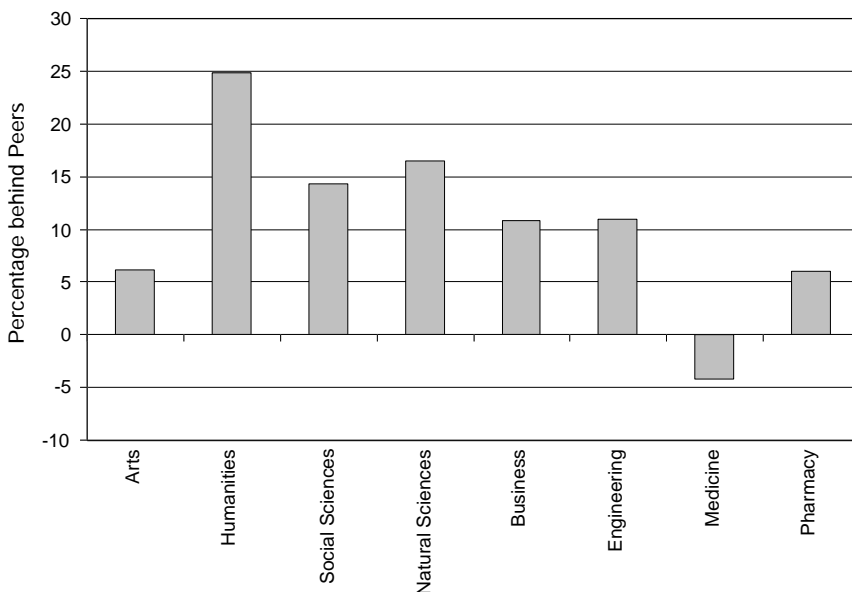
Source: Office of Research, University of Washington

manities division receives 6 percent of its funding from external sources, primarily gifts from individuals, and is the academic unit farthest behind the mean of 38 percent. Medicine, the natural sciences, the School of Pharmacy, and engineering all receive more than half of their funding from external gifts, grants, contracts, and other sources, such as patents and commercial enterprises. (Of the university's fiscal year 2002 revenue of \$2.5 billion, approximately \$800 million came from grants—77 percent in federal dollars—and \$138 million from gifts.)

Because of this limited access to other funds, it is safe to say that, barring other variables such as cross-subsidization or other countermeasures, the decline in state dollars has the most serious negative consequences for the humanities. A look at the various illustrations of faculty salary, staffing levels, student demand, and measures of overall quality appears to confirm this. One caveat, however: this analysis is admittedly very approximate—there are many other variables in play, and categories such as workload and staffing levels make for tenuous comparisons across academic divisions. That said, after looking at the data, a fuzzy but nonetheless consistent picture emerges of the impact of market forces on the humanities at the University of Washington.

Historically the University of Washington has been challenged to maintain faculty salaries in relation to its competitors. Today this salary differential is often cited as a chief obstacle to improved performance, and anecdotal data support the claim that salary is an important factor in a tide of faculty losses in the humanities. “The University of Washington is regarded as the premiere recruiting ground for faculty—by other universities,” observes one humanities

Figure 4: Faculty Salary Percentage Behind Peer Average (FY02)



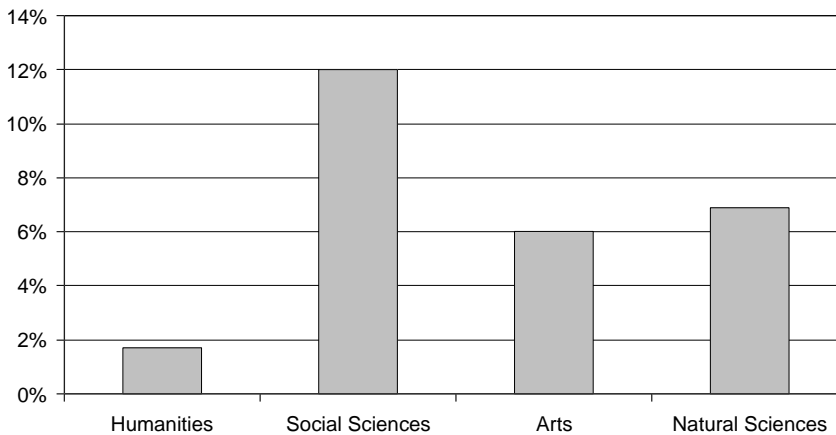
Source: Office of Institutional Studies, University of Washington

department chair, whose department has lost ten regular faculty to offers by other universities since 1997. Figure 4, a comparison of fiscal year 2002 average faculty salaries with the University of Washington peer group, confirms that, in relation to peers and on an aggregate level, humanities faculty are the most underpaid. (The negative value for medicine indicates it is ahead of its peer group average. Not coincidentally, the National Research Council ranks the life sciences as the strongest unit on campus—see figure 8.)

Since faculty salaries make up between 80 and 90 percent of a typical budget in the humanities, this measure alone is a strong indication that the humanities have the least adequate resources in the university. The correlation between salaries and the relative inability of humanities faculty to develop alternative revenue is not a matter of institutional policy—far from it. Rather, it is a result of the institution succumbing to market forces. As the graph illustrates, humanities faculty are not the only ones well behind their peers, an indication of how deeply declining state support has affected the university, despite its success in the marketplace.³

Figure 5 compares the actual number of full-time employee (fte) tenure or tenure-track faculty in 1992 with that of 2002. While each division experienced a similar expansion in the number of student credit hours, the humanities division grew the most slowly in the number of new faculty positions. In 1992 there were 8.02 humanities majors for every fte tenure or tenure-track faculty member. In 2002 this ratio had increased to 8.7—149 majors but only three faculty positions had been added. While not an enormous increase, it appears to have added significance when considered with the other data.

Figure 5: Percentage Growth in Tenure Track Faculty, University of Washington College of Arts and Sciences (1992–2002)



Source: College of Arts and Sciences, University of Washington

3. The natural sciences division is also relatively far behind, yet it is a very diverse department in terms of the access its departments have to the marketplace. Strong magnets for outside grant revenue like chemistry and biology have accordingly higher relative salaries, much closer, or even ahead of, peer averages. These are offset by departments such as math and statistics, where lower relative salaries are in part a function of their comparative lack of external funding.

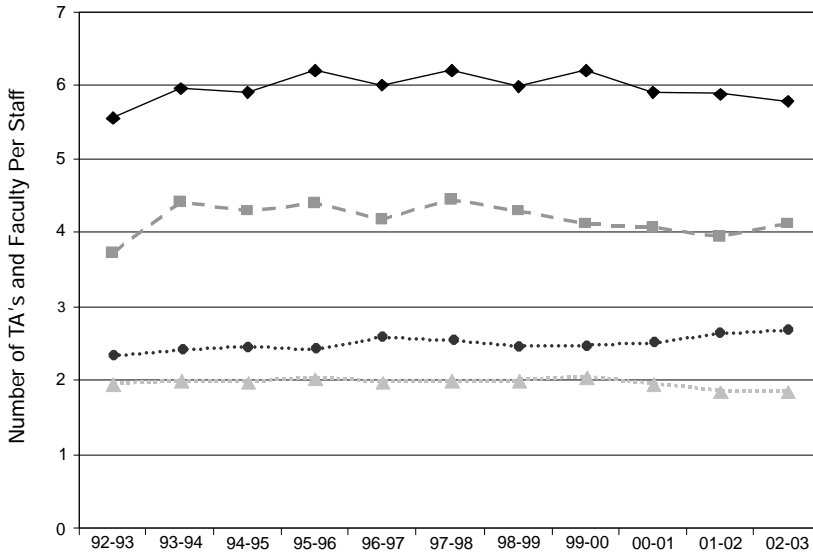
Figures 6a and 6b compare the relative workload of department administrators and support staff, important components of departmental efficiency and faculty and graduate student productivity. In these figures, one sees that there are substantially more teachers for each staff person in the humanities division than the other three divisions in the College of Arts and Sciences. Figure 6b shows that each staff person must also support a greater administrative load in terms of student credit hours. So, by measures of both the instructional staff they support and the number of student credit hours they administer, the humanities department staff appear to shoulder the greatest burden. In fact, when one looks at overall levels of support in terms of state dollars per student (see figure 6c)—a metric which includes operational funding, faculty salary, staff salary, and all other departmental expenses—the disadvantage of the humanities (and social sciences) compared to the rest of the university units is striking.

Do curricular and other “natural” differences between the university units explain these differences, or is it a matter of access to resources? Because of their subject matter, do engineering, public affairs, or architecture “need” a proportionately higher level of resources than the humanities (and social sciences)? The answer may be less a matter of academic priorities than market influence. For example, because of the millions in external grants received, the natural sciences require more staff such as fiscal specialists to monitor and report on various grant expenditures; while some staff are paid from grant resources, others are paid from state funds. According to Ronald G. Ehrenberg in a 2003 *Chronicle of Higher Education* article, this external money actually means a net loss for the universities that receive it. He reports that trend data from 1970 to 2000 show that universities “actually lose money on efforts to generate revenue from research” (p. B24). Grant work demands staffing, equipment, materials, and other expensive items, and decreases in the indirect cost allocations grantor agencies are willing to pay means universities must subsidize the research with core funding from state dollars and tuition revenue.

As for the arts, for example, some would argue that the hands-on nature of studio instruction or training in musical instruments demands a low teacher to student ratio. However, faculty in the humanities can present their own compelling curricular cases for staff support. The teaching of writing, for example, is better done in smaller classes. Whatever the pedagogical arguments, conversations with current University of Washington humanities chairs reveal that low staffing levels are a major concern that affects faculty productivity, morale, and departmental efficiency.

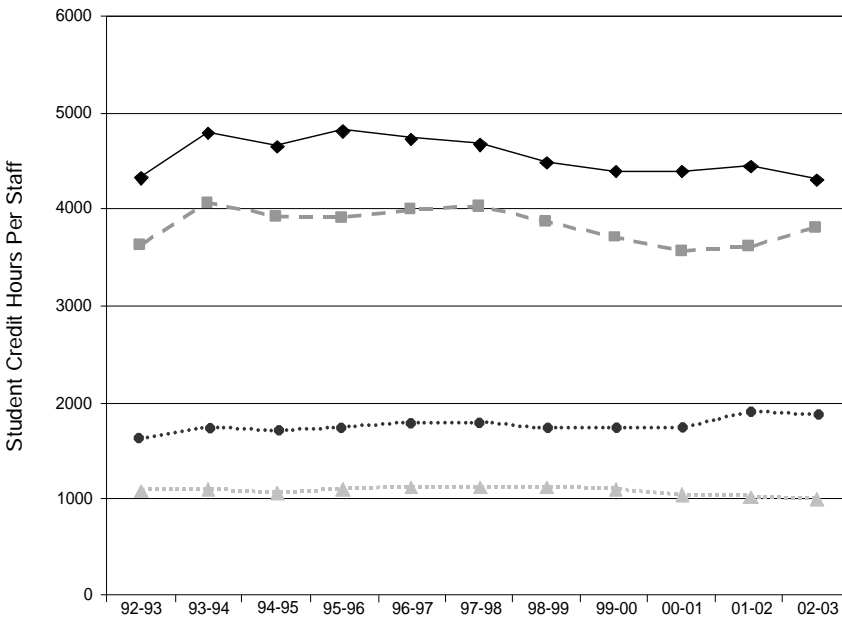
The relatively low funding levels for the humanities departments are again reflected in figure 7. Put simply, this chart compares how much money a unit generates to its cost. (More specifically, it provides the ratio of tuition dollars generated by student enrollment versus the cost of the program in state dollars, which is tuition plus state subsidy.) This chart offers only an approximate measure, and many variables are not included, such as out-of-state tuition and the various sources of external revenue. While a full profit-and-loss analysis per discipline that fully allocates costs is a prohibitively complex undertaking, this graph does provide a useful, if approximate, lens into internal resource distribution. One sees that the humanities departments, with their low rates of growth in faculty positions, low staffing levels, and low salaries, actually made a small

Figure 6a: Number of Teaching Assistants and Faculty Per Each Individual Academic Support Staff (1992–2003)



Source: College of Arts and Sciences, University of Washington

Figure 6b: Student Credit Hours Per Each Individual Academic Support Staff (1992–2003)



Source: College of Arts and Sciences, University of Washington

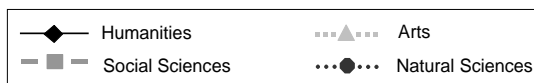
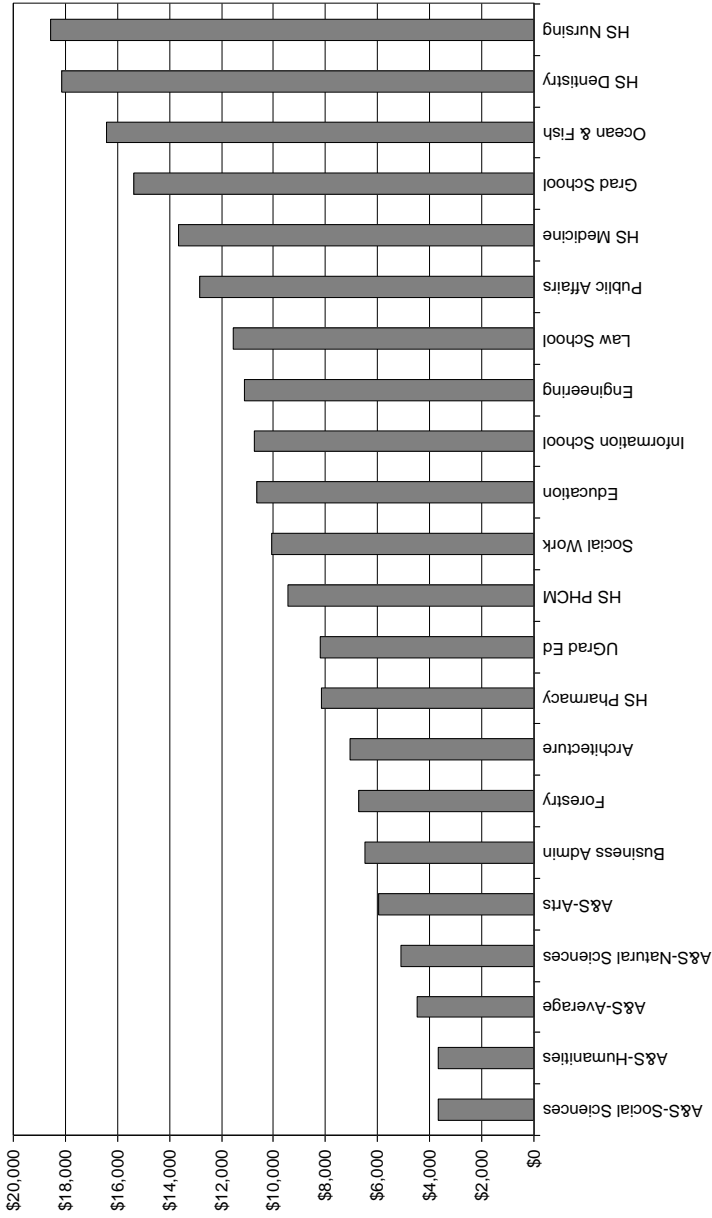


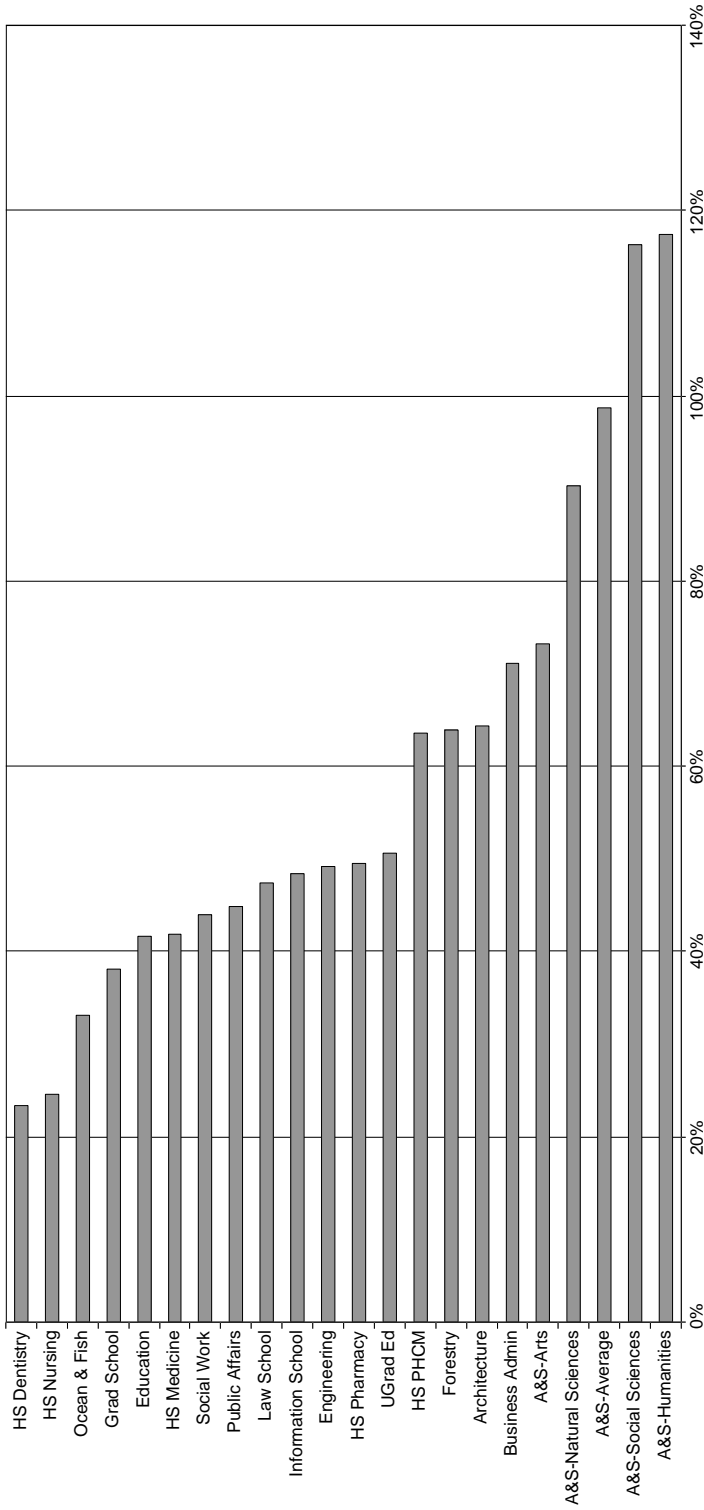
Figure 6c: Tuition Dollars Expended Per Student, University of Washington Selected Academic Units (FY02)



Note: A&S=Arts and Sciences; HS=Health Sciences; UGrad Ed=Office of Undergraduate Education; PHCM=Public Health and Community Medicine; Ocean & Fish=College of Ocean and Fishery Sciences

Source: College of Arts and Sciences, University of Washington

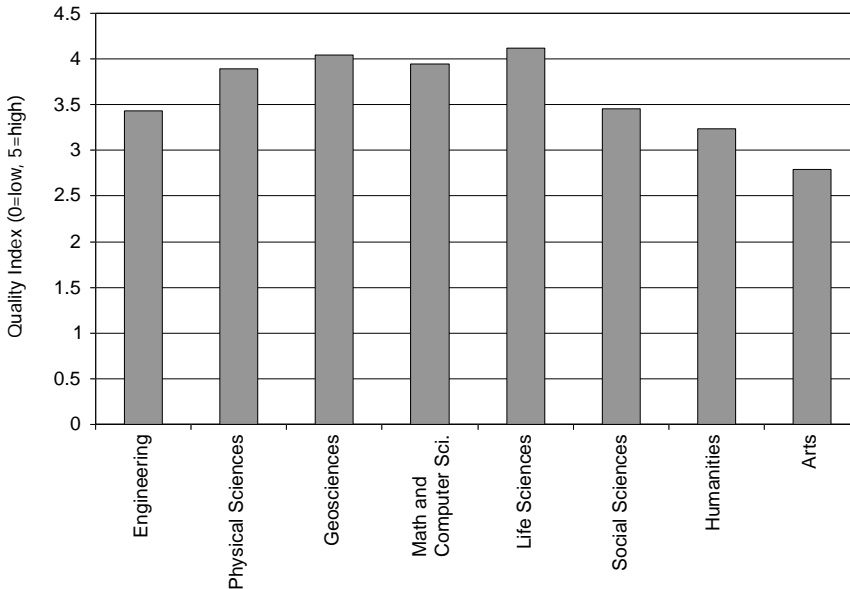
Figure 7: Tuition Generated from Unit Level Student Enrollment as Percentage of Total Unit Expenditure



Note: A&S=Arts and Sciences; HS=Health Sciences; UGrad Ed=Office of Undergraduate Education; PHCM=Public Health and Community Medicine; Ocean & Fish=College of Ocean and Fishery Sciences

Source: College of Arts and Sciences, University of Washington

Figure 8: National Research Center 1993 Ranking of University of Washington Faculty Quality



Source: WebCASPAR, National Science Foundation

amount of money for the University of Washington in 2003, a trend that is consistent with past years. Overall it is the most efficient academic unit on campus. By contrast, every other unit's revenue excepting the social sciences fails to cover its instructional budget.

What is the impact of all of this on program quality? While educational quality is infamously difficult to measure, many make the attempt and, by one respected index put forth by the National Research Council, there are correlations between external measures of quality and patterns of internal resource distribution. While new rankings are not yet fully available, the most recent 1993 National Research Council rankings for the University of Washington show a correlation between quality and access to external revenue (see figure 8).

Many articles and books describe a deep disturbance over the perceived loss of status and popularity of the humanities. National Center for Education Statistics (NCES) data indicate that, despite a large increase in college enrollment since 1970, by 2001 the numbers of undergraduates majoring in English and foreign languages, the closest corollaries for the University of Washington humanities division in the NCES data, actually declined 27 percent, and the decline in the percentage of majors was even steeper. Part of the blame for this fall in popularity may lie in the humanities departments themselves, with their obscure discourse, infighting, and lack of entrepreneurial initiative (Engell and Dangerfield 1999). But a look at two demand trends for the humanities at the University of Washington shows that, counter to this national trend among undergraduates, there are both a rising demand for humanities majors and one of the highest rates of unmet student enrollment demand for humanities course offerings.

As figures 9 and 10 show, the number of humanities majors has increased approximately 15 percent, while over the same period the natural sciences show a decline. At the graduate level, the number of students in the humanities has declined significantly, but this is due to a planned reduction imposed by the departments and deans (“Ph.D. birth control”) in response to the nationwide slackening in the academic job market.

One may infer from figure 11 that student demand for courses in the humanities, along with other disciplines in the social sciences and the arts, is being met at a lower rate than those units with strong external funding. This graph measures the rate of student denials, or the number of undergraduate course enrollment requests that could not be filled due to a lack of capacity.

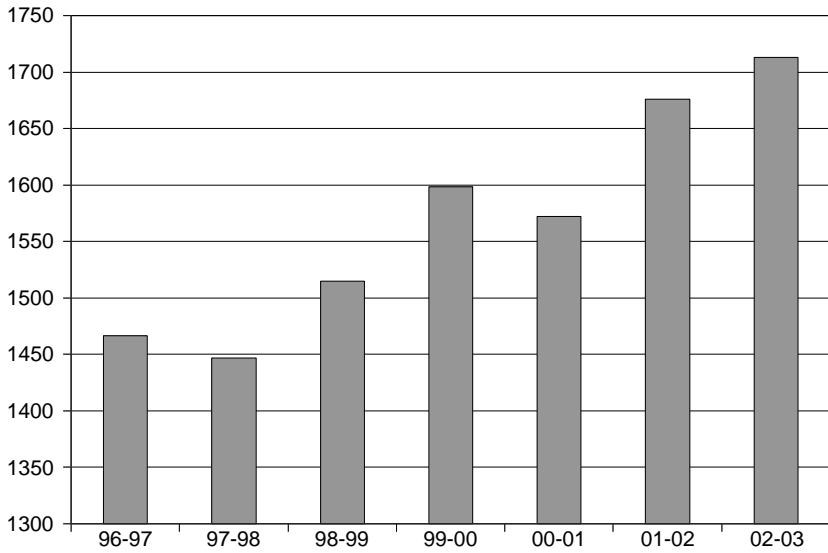
For example, in the 2002–2003 academic year, 17 percent of students who wished to enroll in a humanities division course during the academic year were not able to due to lack of space. Like the rest of the data here, this graph presents less than a picture of certainty: in 1999, on-line registration allowed students to check class enrollments before signing up, so the decline in course denials may have occurred because available information discouraged some from making the attempt. However flawed the measure may be, it again provides a reasonable comparison by academic unit. While there has been considerable improvement since the mid-1990s, the relatively high level of student denials remains, and it is another factor, however imperfect, that may be added to the picture of overall financial resource scarcity for these departments.

COMPENSATION: INTERNAL, EXTERNAL, OR BOTH?

Were the demand for humanities courses shrinking along with the expenditures, one could make the argument that the departments were simply experiencing an overall decline in valuation and that the adjustments reflected a shift in the overall demand, both from the funders and the students. Yet the university is obliged to meet this demonstrable student demand, especially given its mission to serve the public. It is also arguable that, strong demand or not, the fundamental skills in thinking, writing, ethics, and so forth imparted by a humanistic education mean the students should be required to take the classes anyway. At the University of Washington, there are few distribution requirements that demand enrollment in humanities courses, however. So if this funding disparity remains in light of high student demand, what has been done at the state, university, college, or program level to respond?

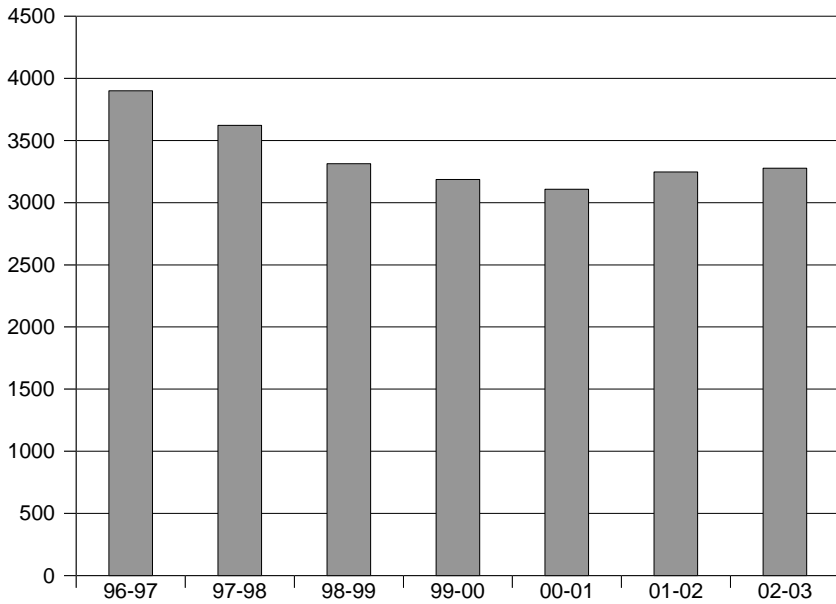
Student demand is high for other areas as well, and the University of Washington continues to observe that it cannot serve its current enrollment at historic levels of quality. Whatever arguments or data the humanities departments may present about the need for added support, it is easily lost in a welter of competing claims. At the state level, the humanities per se have a difficult task achieving any sort of prominence on the public policy agenda. Like the federal funding agenda, where billions go to science and a comparative pittance goes to the humanities, there is little hope that poetry, literature, and language can realistically compete with roads, prisons, and health care for direct support. The 2003–2005 biennial Washington State budget, while mostly bad news for

Figure 9: Number of Undergraduate Humanities Majors (1996—2003)



Source: College of Arts and Sciences, University of Washington

Figure 10: Number of Undergraduate Natural Science Majors (1996—2003)



Source: College of Arts and Sciences, University of Washington

the humanities in that funding drops yet again, does contain an institutionally prompted, state-level decision that includes \$1.5 million for faculty salary increases to bring all departments to at least 20 percent behind peer averages. Because as a group the humanities departments are the farthest behind, they should benefit disproportionately in this new allocation of permanent central funding. This funding does appear to have the potential to be a countermeasure, albeit a modest one, to market forces.

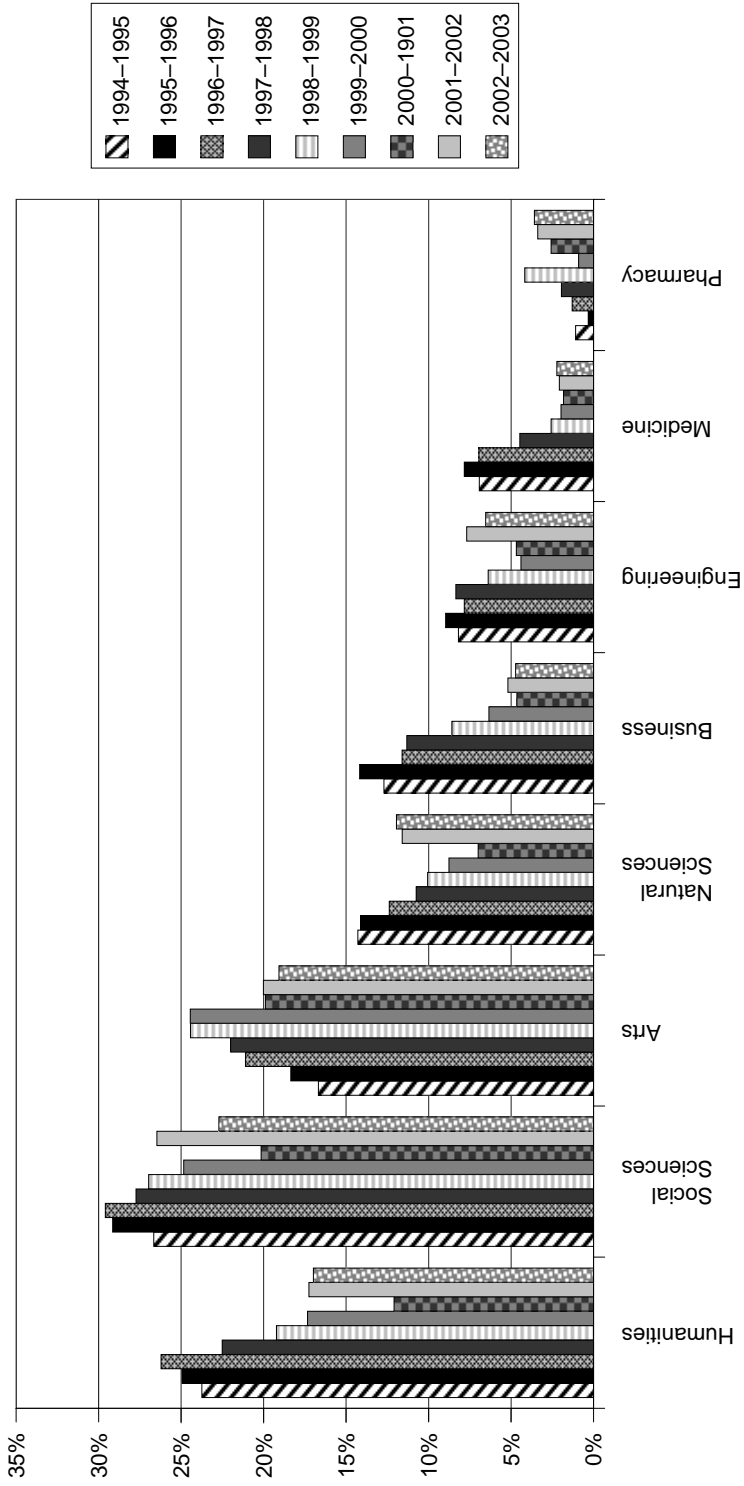
At the institutional level, there have been a few specific initiatives that have done a considerable amount of good for the humanities at the University of Washington in the past decade or so, efforts not necessarily reflected in the above measures. That there were not more does not mean university leadership takes joy in the inequalities market forces create. Given the difficulty and contentiousness of measuring the relative merits of academic units, reallocation from one specific unit to another is political dynamite, particularly for public institutions with entrenched constituencies. Which units will give a pound of flesh to the underfunded humanities? Unless the president and board are unusually strong, institutional reallocation must occur in a manner that appears to be fair and ecumenical to achieve a broadly welcomed aim. In this guise, the humanities have, in fact, received some measure of institutional largesse.

In 1997, the Center for the Humanities was allocated approximately \$200,000 a year through the Universities Initiatives Fund (uif), a creative measure put forward by then President Richard McCormick to reallocate a special fund (created by a 1 percent tax on program budgets) by a competitive internal grant process. The uif was operational from 1997 to 2001, and this example is the only proposal awarded to the Division of the Humanities. The Humanities Center uif funding matched a private gift of \$5 million and moved the humanities center from a trailer into first-rate facilities as the Walter Chapin Simpson Center for the Humanities. Today the Simpson Center continues to provide the entire humanities division with significant resources and curricular leadership. However, the impetus for this uif investment was not completely at the institutional level. This funding was undoubtedly influenced by the availability of a private \$5 million gift that served to match university funds. While it remains an important and continuing institutional investment, it is difficult to ascribe the impetus of the gift solely to central administration.

The high level of student denials was partially addressed in 1996 through a program to offer more “bottleneck” courses to shorten the time to degree for students. President McCormick allocated an additional \$1.4 million in annual state funding for specific class expansions where these overenrolled but required-for-the-major courses clogged up the system. As figure 11 shows, it did have a positive effect across the board, but only until 2000 when the trend reversed again. Furthermore, nothing was done to address the divisional inequality in either the social sciences or the humanities divisions.

A third example of the University of Washington’s institutional support for the humanities is the Royalty Research Fund (rrf). Established in 1992 with a portion of revenue generated by patents and other types of intellectual property, the fund has distributed approximately \$15 million in revenue in the last decade to support faculty research, broadly defined. “But we don’t get

Figure 11: Undergraduate Course Entry Denials, 1994–2003



Source: College of Arts and Sciences, University of Washington

enough proposals from the humanities faculty,” says Malcolm Parks (2003), associate vice provost for research and head of the rrf initiative. He has actively promoted this fund to humanities faculty, and he is concerned that “humanities faculty are underrepresented in the amount of proposals they submit” (2003). Like Weisbuch, he ascribes this to the culture of humanities departments where entrepreneurial behavior is not an important value. Humanities faculty make up approximately 6 percent of the total tenure and tenure-track full-time employees at the University of Washington, and since 1992, the percentage of winning rrf proposals from humanities members has averaged 4.3 percent and a funding level of \$36,000 a year.

Even if new (and significant new) resources arrive, complex departmental dynamics may present a further challenge. In 1999, the university responded to an English department uif proposal with \$300,000 annually to create an “evening degree” master of fine arts in creative writing at a higher, “self-sustaining” tuition level for nontraditional students. However, after much debate, it was finally concluded that this program expansion did not agree with the goals of the creative writing faculty. The grant funding was refused, and the department lost what appeared to be a valuable opportunity to establish a substantial new source of income. Whether for curricular, cultural, or other reasons, financial expediency may not be the first priority in a humanities department.

At the level of the College of Arts and Sciences, the last two biennial budgets contained significant cuts for all four divisions. Divisional Dean of the Arts and Humanities Michael Halleran (2003) said that, while there were small protections put aside especially for the humanities because of their lack of access to external funds, they still bore a more or less equal share of the budget reductions. There is no explicit cross-subsidization from one division to another.

The department level appears to be the point at which the greatest control over alternative revenues sources is possible. In the highly decentralized management culture of the University of Washington, what former Arts and Sciences Dean and now SUNY Buffalo President John Simpson (2003) calls “the most decentralized university in the United States,” revenue raising initiatives have to come from department-level leadership. In the new entrepreneurial university, it is apparent that humanities department chairs and faculty must take direct responsibility for developing external sources of revenue or suffer from their absence.

The University of Washington’s individual academic units are strongly encouraged to pursue alternative means of revenue generation. Intellectual property, licensing, corporate sponsorships, and business partnerships do, in theory, offer potential for the humanities, but there is little practice that indicates any of these offer significant financial return. Despite the English department’s experience, self-sustaining programs or profit-center degree programs styled after the executive degrees offered by professional schools do appear to make sense if carefully planned and executed. These opportunities will be explored in a subsequent version of this essay as the experiences and practices of additional institutions are researched. Grants are another and far more frequently pursued form of alternative income, but as there are few private foundations that fund humanities in higher education and only one small federal agency,

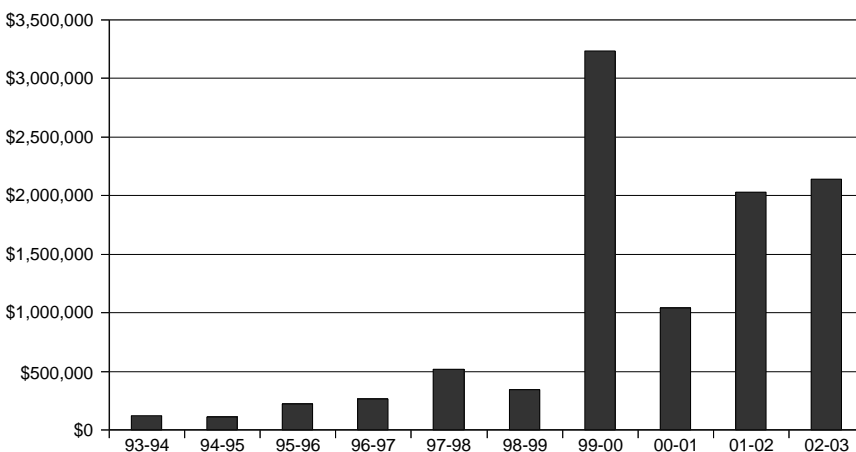
the National Endowment for the Humanities, there seems to be less opportunity for grants to support programwide funding. As a means of department support, they are also difficult to sustain in the long term.

The greatest emphasis for alternative revenue development for the humanities is currently placed on the solicitation of charitable gifts. The impetus and support comes from central leadership: at the University of Washington, a 1997 financial restructuring imposed a series of fees on the current university-wide endowment to create a university-wide fundraising enterprise that would eventually support efforts by each individual school, college, program, or unit. The university organizational structure itself is peculiar, based on historical accident and ad hoc political arrangements rather than a proportionate distribution of resources. Several small colleges with less than 25 percent of the student credit hours of the humanities division are, unlike the humanities, free-standing units with their own deans and development staff. Because the humanities make up a division of a larger school, the College of Arts and Sciences, they do not have independent status, and although the division may contain ten times as many students and faculty, it receives a disproportionately small development staffing allocation.

However skewed the allocation of development resources may be, it has been somewhat effective. Figure 12 shows how the new development apparatus dedicated to the humanities departments has supported a significant increase in division income from private gifts and grants.

For most of the 1990s, the division received mostly passive gift income, or unsolicited acts of largesse from friends, faculty, alumni, and others. The income spike represents a change to active solicitation of gifts as prompted by the newly funded development apparatus. Importantly, this new income is not

Figure 12: Private Gifts and Grants to the University of Washington Humanities Division (FY94-FY03)



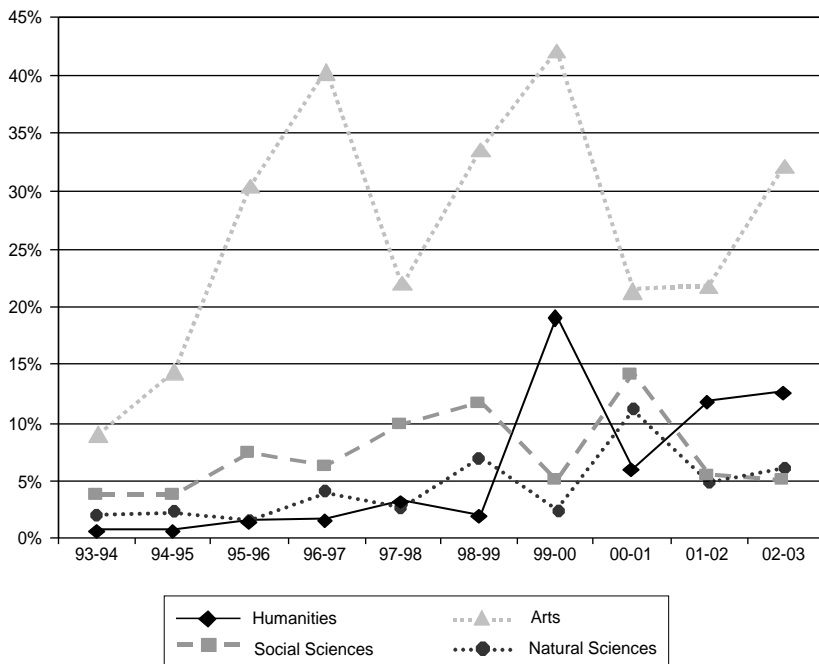
Source: Report of Contributions, Office of Development and Alumni Relations, University of Washington

spread evenly, nor is it attributable solely to the new development function. In 1999, the Department of Classics received a \$3 million bequest for undergraduate and graduate student support, the product of a long friendship with a wealthy individual. By 2003, however, seven of the fourteen humanities units received more than \$50,000 in philanthropic income, and most others were actively engaged in developing and soliciting major gift donations. While this gift income is usually restricted, it is nonetheless directed to some useful departmental purpose, the support of students, faculty, or core programs. If a particular need has been met through donations, future solicitations request support for areas of unmet need.

Figure 13 provides a picture of this income compared to total division budgets.

While a department-by-department comparison with peer universities awaits further study, the division is raising well over \$2 million a year in current use and endowed gifts, and by fiscal year 2004 the division had active solicitations for over \$25 million in new gifts. Even if these gifts are restricted to specific uses (student, faculty, or program support), as most of them usually are, it is reasonable to project that after a decade or two of sustained progress, the departments can endow their core programmatic needs. With a series of endowments, then, a department can build a financial cushion and significantly reduce dependence on state allocations. For example, classics has a generous fund for student support and can now compete with Harvard University and

Figure 13: Private Gifts and Grants as Percentage of Division Budget (FY94-FY03)



Sources: College of Arts and Sciences, University of Washington; Report of Contributions, Office of Development and Alumni Relations, University of Washington

others in recruiting top students. However, professorial and program support remain victims of state budget cuts. Yet, given their newly professionalized development apparatus and another ten or even twenty years of effort, a fully endowed future is not impossible. Classics is now actively soliciting endowed funding for faculty positions, library materials, and its study abroad program, and more than \$1 million in endowed support for faculty has already been pledged. If the department continues to be successful in soliciting large endowments for these areas, it will have most of its major program needs provided for, in whole or in part (depending on the size of the endowment), by permanent funds under its control. While core funding for faculty salaries will still be provided by state funds, and these funds will continue to be subject to the forces described earlier, there is no theoretical limit to fundraising potential.

PRESCRIPTIONS FOR THE NEXT TEN YEARS

Weisbuch (2002) recounts the following example as a chief obstacle confronting the humanities: “The president of a major research university told me that, when he offered his faculty members funds for new proposals, he received more than 50 ideas from scientists, 30 from social scientists, and nothing from humanists except requests to put more money into existing programs.” He continues to say that an anthropological investigation of the humanities fields would reveal a cultural bias against market participation. He believes that there must be a new attitude in the field, whereby initiative and an entrepreneurial spirit takes hold in humanities departments, and leadership, faculty, students, and staff can adopt a “glass half-full” mindset. Instead of only worry and objection that humanists are not getting their due, new concepts of positive outcomes will, paired with reliable data and proven strategy, enable humanities faculty to harness substantial support, financial and otherwise, from a broad, diverse, and engaged constituency.

As figures 12 and 13 illustrate, the humanities division at the University of Washington is experiencing its first measure of significant alternative revenue, primarily from philanthropy. After three years of systematic effort recruiting fundraising volunteers, training faculty and chairs on the fundamentals of development, expanding department outreach to alumni and community members through newsletters, websites, and events, and personally soliciting investments to support the departments’ faculty, students, and programs, the external revenue generation trends are encouraging. There are significant sources of untapped revenue for the departments, but the process can take several years or more, and it will require substantial effort and additional commitments of time from deans, chairs, faculty, staff, and even current students.

The University of Washington could provide several possible case studies, and experience to date points to the critically important role of the department chair in acting as a catalyst for fundraising success. Those department chairs who add development to their job descriptions have begun to see positive results. The Department of Near Eastern Languages and Civilization, a small department of only nine tenure or tenure-track faculty, is perhaps the clearest example of success in the humanities division. Chairman Mike Williams and

several of his faculty colleagues have worked closely with development staff to identify, recruit, and train more than two dozen volunteers as members of a department advisory board. Together, faculty, development staff, and volunteers have identified, cultivated, and solicited individual charitable donations with modest but significant success. In the 2001 fiscal year, the department received less than \$10,000 in charitable gifts. In fiscal year 2002, the newly formed development effort raised this income to more than \$26,000. By fiscal year 2003 the total rose again to \$45,000, and fiscal year 2004 began with a gift of \$300,000 for an endowed graduate fellowship, with another \$50,000 endowed discretionary program support fund nearly complete.

These gifts have come not from alumni but mostly from community members who identify, either through heritage or interest, with the department's language and area studies programs. Before the development effort, they were largely unacquainted with the University of Washington. For example, a large community of Iranian expatriates living in Seattle has made significant investment in the department's Persian Studies Program (which comprises one tenured faculty member and one graduate student). Constituents in the Turkish community are building a program endowment for the Turkish Studies Program, and the department has over \$5 million in active proposals to prominent philanthropists to fund other aspects of its program.

Anecdotal evidence such as this is insufficient, however, and until a reasonably complete review of the peer group's development efforts and history is complete, we will have only a spotty picture of how private dollars are supporting the humanities at our peer public flagship universities and, furthermore, how each institution can learn from the peer group.

It is important to establish a clear conceptual framework before conducting additional research. Here, an attempt has been made to present possible pathways for data collection to assess the relative financial health of a humanities division at a public research university and access to sources of external revenue. After collecting this data across a peer group, the following hypothesis will be tested: those humanities units that have engaged in entrepreneurial activity at the program level have discovered that such activity can compensate for declines in state support and, furthermore, that the process does not compromise academic integrity or cultural values. While in further need of refinement, this proposition will be a guiding theme in further research.

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Humanities Pathways: A Framework for Assessing Post-Baccalaureate Opportunities for Humanities Graduates

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EXECUTIVE SUMMARY

Historically the liberal arts and humanities prepared undergraduates for employment in professional settings. However, the shift in the labor market in the past few decades has created a new challenge. Rather than preparing students for professional employment, humanities degrees now prepare students for graduate education in professional fields, as well as for advanced study in the humanities. Two trends—the increasing rates of applications for professional schools by humanities graduates and the declining earnings of humanities graduates—illustrate the critical nature of this challenge.

This essay develops a framework for assessing factors that contribute to promoting postcollege opportunities for graduates of the humanities and reviews possible databases for research on postcollege choices by this population of college graduates. Based on a review of research in sociology, economics, and higher education, the framework identifies three aspects of graduate attainment along with related outcomes:

- *Social and economic forces*: The proposed framework provides explicit consideration of the ways exposure to work and employment experiences influence both occupational and educational aspirations.
- *Graduate student choice sequence*: As a result of their family experiences and undergraduate educations, students develop occupational aspirations, make choices of graduate fields, choose graduate institutions, and persist through degree attainment.

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- *Educational trends and policy*: Prior and current educational experiences, along with institutional and program characteristics and prices and subsidies, influence educational choices resulting in the attainment of graduate degrees.
- *Outcomes*: Graduate education improves the chances of entering elite professions and earning high salaries. Advanced degrees also provide opportunities for personal development and enable graduates to pursue work related to their interests and education.

Two types of existing databases can be used for research on postcollege choices by graduate students. The longitudinal studies collected by the National Center for Education Statistics could be used to examine postcollege choices by students in national samples of graduate students. In addition a few states currently maintain individual record data systems that could be adapted to examine the postcollege choices by students in the humanities and other fields. In the longer term, it is also desirable to include humanities graduates and graduates with professional degrees in national studies of graduate degree recipients.

Changes in the labor market periodically require a rethinking of the purposes of undergraduate and graduate education. Historically, a liberal education was thought to prepare undergraduates for professional work, a perception that had a reasonable empirical foundation. Before the 1970s, high school graduation served as the screening device for general employment, and a four-year degree, a liberal arts education, provided a screening function for professional and managerial employment. However, in the twenty-first-century economy, an undergraduate education is often needed for general employment, and advanced professional opportunities increasingly require more specialized education. These shifts in the patterns of education and employment have especially important implications for undergraduate education in the humanities because college graduates in these fields earn substantially less, on average, than graduates with majors in engineering, math, sciences, health, and most other applied fields.¹

While the low earning power of undergraduate degrees in the humanities is often referenced in the popular press, these superficial analyses often miss a critical issue regarding the role of the humanities in the professions. While an education in the humanities once prepared students for general managerial positions in business and government, these degrees now prepare students for graduate education in professional fields—law, business, education, public administration, and so forth—as well as for graduate education in the humanities. Undergraduate preparation in the humanities nevertheless provides advanced problem-solving skills that are critical to many professions.

1. Undergraduate degrees in the visual and performing arts are not included in this definition of the humanities. Subject to similar labor market constraints, the arts provide a different sort of preparation for professional education, which is one of the reasons these fields are not considered in this essay.

This essay explores the implications of the transition in the role of humanities undergraduate education from preparing students for professional employment to preparing graduates for advanced professional education. Research on graduate education is more limited and undertheorized compared with research on undergraduates (Feldman and Newcomb 1969; Pascarella and Terenzini 1991; St. John, Asker, and Hu 2001). This essay first reviews the challenges facing humanities education, then develops a logical framework for research on humanities education as preparation for post-baccalaureate opportunities. Using the framework as a guide, we review related research on educational and employment opportunities for humanities graduates and consider the implications for research and policy.

CHALLENGES FACING HUMANITIES EDUCATION

While there is little research on the consequences of holding humanities baccalaureate degrees on subsequent degree attainment, there is a substantial body of research on earnings by degree level. And while undergraduate humanities majors enroll in many different graduate fields, there is little research on post-baccalaureate success of professionals who hold undergraduate humanities degrees.

Aspirations for Graduate Education

Demographic reports from the testing services, based on registrations for graduate school entrance exams, provide baseline information on the number of humanities undergraduates aspiring to attend graduate and professional schools. There is no complete database or means of charting the number of humanities majors who applied to and were accepted by graduate and professional schools, but the testing services provide demographic reports of test takers, and this data serves as an indicator of aspirations to attend graduate schools that correspond with the test being taken (Stolzenberg 1994).

The Graduate Management Admissions Council (GMAC) administers the Graduate Management Admissions Test (GMAT) and regularly reports descriptions of GMAT takers. The latest report presents data from the 1997–1998 academic year through the 2001–2002 academic year for students seeking admission to business schools. Many of the test takers in the database are repeat takers and are represented in the data by the number of times they took the test. During any given reporting period, 18–27 percent of test takers are repeaters (GMAT 2002).

In 1997–1998, the total number of GMAT takers self-identifying as humanities majors totaled 7,013 with a mean score of 542. Of this total, 3,080 were men with a mean score of 563, and 3,933 were women with a mean score of 525. During the 1999–2000 academic year, the number of humanities majors taking the GMAT had increased to 8,778 with a mean score of 543, only a 1 point increase from two academic years prior. Three thousand eight hundred and six men took the test with a mean score of 564, while 4,972 women took the test with a mean score of 527. By the 2001–2002 academic year, 11,504 humanities majors took the GMAT. The 5,165 men who took the test scored

an average of 557, while the 6,339 women who took the test scored an average of 529. Clearly there is an increase in the number of undergraduate humanities majors taking the GMAT. Of the 140,870 GMAT takers in 1997–1998, the mean total score was 525, yet in 2001–2002 the total mean score for almost 245,000 GMAT takers had increased only 4 points, to 529. In 1997–1998 and 2001–2002, the mean scores of humanities majors were higher than the mean scores of all test takers.

Similarly, the American Association of Medical Colleges (2000) administers the Medical College Admissions Test (MCAT) and reports demographic data for those students interested in medical school. The data reported below are from the two tests administered during the 1999 calendar year. There were a total of 55,961 test takers, and 4,728 took the exam on both administrations. A total of 1,729 humanities majors took the exam, representing 3.4 percent of all test takers. For the verbal reasoning, physical sciences, and biological sciences sections of the test, scores are rated from 1 to 15, where 15 is the highest score and 8 is an average score. The writing sample is scored on a scale of *J* to *T*, where *T* is the highest and *O* is the average score, *M* represents a score in the 25th percentile, and *Q* represents a score in the 75th percentile.

On the verbal reasoning section of the exam, 25 percent of humanities majors scored between 8 and 11. Twenty-five percent of humanities majors scored between 7 and 10 on the physical sciences portion. In addition, 50 percent of the humanities majors scored between *N* and *R* on the writing sample. From these results, it is clear that humanities majors perform fairly well on the MCAT when compared with students with other majors.

In 1994–1995, those students who took the Law School Admissions Test (LSAT) and declared humanities as their major scored well (Nieswiadomy 1998). Of the 5,819 students majoring in history, the mean score was 154, the same score these majors earned in 1991. The 6,324 English majors taking the test scored an average of 153.7 in 1994–1996 compared to 153.9 in 1991–1992. Those students majoring in journalism/foreign languages totaled 2,002 and had an average score of 152.5 in 1994–1995 compared to 152.3 in 1991–1992. Finally, those students majoring in communications/arts totaled 3,898 and earned an average score of 150.7 in 1994–1995 compared to 150.8 in 1991–1992. In reviewing these data, it is obvious that student performance on the LSAT remained fairly constant during the first half of the 1990s.

The Educational Testing Service provides an extensive file on students who take the Graduate Records Exam (GRE). This exam is usually taken by students pursuing post-baccalaureate education in fields other than business, law, and medicine. Ekstrom et al. (1991) examined the relationship between undergraduate debt and graduate school participation and found that aspirations and applications for graduate education were slightly higher for those students who had undergraduate debt compared with those who were not in debt.

In the 1980s, there seemed to be a national trend in which aspirations for graduate education were on the decline. However, the decline in aspirations did not seem to be related to the amount of debt from students' undergraduate educations. On the one hand, Ekstrom et al. (1991) point out, "In 1976,

82% of seniors with debt aspired to graduate education, compared to 73% of seniors without debt. In 1984, 55% of seniors with debt, as compared to 51% of seniors without debt, aspired to graduate education. However, by 1986 debt was no longer associated with aspirations for graduate education” (p. 8).

On the other hand, a study by Baum and Schwartz (1988) reported that 35 percent of study participants explained that their decision not to go to graduate school was because of their concern over borrowing. In a later study, Baum and Sanders (1998) found that 43 percent of those who did not go to graduate school cited undergraduate debt as the reason for their decision not to enroll. Additionally, 28 percent of students reported undergraduate debt as being unimportant in their decision to enroll in graduate school. More recently, Millett (2003) used the 1992–1993 Baccalaureate and Beyond Longitudinal Study to examine the impact of undergraduate debt on graduate and first professional school enrollment. She found that students with \$5,000 or more in undergraduate debt are significantly less likely to apply to graduate or first professional schools than their peers who had no educational debt.

In a GRE study that sought to explore the changes in major from undergraduate to graduate school, Grandy and Robertson (1992) found that for those students with undergraduate degrees in the humanities, a larger percentage of women than men changed their major field upon enrolling in graduate school. For reporting purposes, the arts and the humanities were grouped together because of similar population trends. Verbal scores for arts and humanities peaked in 1980, when the number of test takers was the largest. During the following five-year period, there was a 10-point increase on the quantitative portion of the exam. Quantitative scores increased steadily over the ten-year period 1978–1987. Ekstrom et al. (1991) state, “it appears as if the humanities have been attracting more able students having high aspirations since 1982” (p. 23). A third of undergraduate arts and humanities majors change their major when pursuing graduate education, which remained fairly constant from 1978–1987.

EMPLOYMENT OF HUMANITIES GRADUATES

Post-baccalaureate employment opportunities remain a concern for researchers on humanities majors. There is evidence of high part-time employment for those who hold baccalaureate humanities degrees. Only 59 percent of humanities graduates reported being employed full time in 1985 and 1991, a lower percentage than for all other fields except biology and psychology (Jacobs 1995). Further, a lower percentage of humanities majors had jobs related to their field of study (57 percent in 1985 and 1991). Only the social sciences had lower employment in related fields. Further, while more research is needed on learning outcomes across fields, it is clear that humanities graduates learn to think differently than science majors as Pace (1996) discovered in his research on the outcomes and activities of undergraduate science and humanities majors.

While there is only limited research available on the employment opportunities for humanities majors, the Baccalaureate and Beyond Longitudinal

Study conducted by the National Center for Education Statistics (NCES 2001, 2003) provides a glimpse of the post-baccalaureate employment experiences of those students. This study provides information for students who received baccalaureate degrees in the 1992–1993 and 1999–2000 academic years.

The 1992–1993 college graduates entered a labor market that was in the process of recovering from a two-year recession (Mishel and Bernstein 1994). Of the students who graduated in 1992–1993, 13 percent were humanities majors. This is an increase from past enrollments of humanities majors. Between 1983 and 1993, there was a 15 percent increase in the numbers of humanities majors. However, these numbers still do not make up for the steep decline in humanities majors from 1960, when humanities majors made up 20 percent of all baccalaureate graduates, to the mid-1980s, when they made up 10 percent (Hunt 1988). For the 1992–1993 class, humanities majors were less likely to work full time (79 percent) than other majors in such fields as business, engineering, and computer science, who were all employed full time at over 90 percent (NCES 2001). Further, humanities majors who graduated in 1992–1993 had held 2.9 jobs between graduation and four years after. Forty-seven percent of humanities majors had experienced some unemployment during the four-year period following graduation. In 1994, 73 percent of humanities majors were employed full time, and 15 percent were employed part time, while 6 percent were unemployed, and 6 percent were out of the labor force.

By 1997, 79 percent were employed full time, 11 percent were employed part-time, 4 percent were unemployed, and 6 percent were out of the labor force (NCES 2001). Humanities graduates earned less than baccalaureate graduates in all other fields in 1978, 1985, and 1991 (Jacobs 1995), a pattern that continued into the 1990s (Thomas 1998).

In 1994, humanities majors earned almost the lowest of all salaries (\$22,359) among college graduates, only slightly lower than social sciences (\$23,166) majors, but higher than majors in social work and protective services (\$21,328), communications and journalism (\$22,170), and education (\$20,443). These salaries, however, remain lower than students majoring in business (\$29,017), computer science (\$29,428), engineering (\$32,217), and health/nursing (\$34,194). NCES (2001) reported that by 1997 humanities majors were more likely to earn less than \$25,000 compared with all graduates.

The employment patterns in 1997 for those earning baccalaureates in the humanities were varied. Eighteen percent of majors were employed in education; 23 percent were in business or management; 17 percent were editors, writers, or performers; and 15 percent were employed in service occupations. There were smaller percentages of humanities majors employed in areas such as computer science (4 percent), human and protective services (5 percent), research scientists (4 percent), and administrative, clerical, and legal support (6 percent).

By 1997, 64 percent of humanities majors who graduated in 1992–1993 had not enrolled in any type of graduate degree program. For those who were in the job market, 54 percent said the position they currently held required a col-

lege degree, and 54 percent also said their position had definite career potential. Thirty-three percent said their position both required a degree and had career potential, and 69 percent stated that their current position built on skills they had from a prior job (NCES 2001).

Of the 10,000 students included in the 1999–2000 Baccalaureate and Beyond Longitudinal Study (a representative sample of the national 1999–2000 graduating class), 17 percent were humanities majors compared with 21 percent choosing business, the highest percentage of all majors chosen (NCES 2003).

As of 2001, those students who had majored in the humanities were employed in the following categories: 24 percent were employed in education (K–12 and other instructors); 19 percent were employed in business and management; 1 percent were employed in engineering or architecture; 6 percent were employed in computer science; 2 percent were medical professionals; 13 percent were editors, writers, and performers; 5 percent were human and protective service professionals; 2 percent were research scientists; 10 percent were employed in the administrative, clerical, and legal arena; 4 percent were mechanics and laborers; and 14 percent were employed in the service industries (NCES 2003). The employment distribution of those who majored in the humanities shows the varied skills and abilities that these students bring to the employment arena. One can safely assume that a major in the humanities allows for flexibility and many different career options after attaining the baccalaureate credential.

Low Earnings

Students majoring in humanities earn lower salaries, on average, than students in other majors. Overall, humanities majors from the 1999–2000 graduating class have an average salary of \$28,657, only higher than education (\$26,780), social and behavioral sciences (\$28,539), and life sciences (\$27, 240). These students were compared with those earning the highest average salaries in majors like computer and information science (\$48,425), engineering (\$44,520), and business (\$39,531). Seventeen percent of humanities majors reported they were not working. Twenty-one percent earned less than \$20,000; 27 percent earned between \$20,000 and \$29,999; 23 percent earned between \$30,000 and \$39,999; 6 percent earned between \$40,000 and \$49,000; 3 percent earned between \$50,000 and \$59,000; and 3 percent earned \$60,000 or more. It is obvious from these salaries that students in the humanities are not well paid compared with students in other majors. Half of all humanities majors in the 1999–2000 graduating class earn less than \$29,999 per year (NCES 2003).

For the 1999–2000 baccalaureate degree recipients majoring in humanities, 17 percent reported that they were not working, another 16 percent had been working for pay for sixteen months, and 9 percent had received unemployment compensation (NCES 2003). Further, for those humanities majors who were employed, 61 percent saw their current job as the start of a career, while 39 percent did not see their job as the start of a career. Thirty-seven percent held positions that were not related to their undergraduate major, 22 percent held jobs that were somewhat related to their undergraduate major, and 41 percent held positions that were closely related to their undergraduate major.

For those humanities majors who do not see their job as the start of their career, it is interesting to understand their reasons for holding the positions they currently hold. Twenty percent report that they are holding their current position while they make future plans, 49 percent report they are just paying the bills, 4 percent are continuing in a position they already held, 6 percent are continuing in the career in which they are already employed, 2 percent are working to prepare for graduate school, 6 percent are doing what they want to do, 6 percent are exploring career options, 1 percent are working the only job that was available, and 6 percent cite other reasons for holding their current position (NCES 2003). Further, 17 percent of humanities graduates hold some sort of occupational license, and 8 percent hold some type of professional certification (NCES 2003).

Fourteen percent of students who received a baccalaureate degree in the humanities were enrolled full-time in graduate school. Seven percent were enrolled part-time, and 1 percent were enrolled in more than one graduate program. Of those students who have enrolled in school since receiving their baccalaureate degree, 21 percent were enrolled in graduate school or working on an advanced degree, 2 percent were working on an additional baccalaureate degree, 1 percent were enrolled in an associate's degree program, and 5 percent were enrolled in a certificate program (NCES 2003).

It is important to consider the post-baccalaureate opportunities for humanities doctorate graduates, as well as to consider the career opportunities for students with baccalaureate degrees who go on in other professional fields. The data sources for this type of inquiry have been limited in the past, but new strategies should be developed.

Understanding the Challenge

The juxtaposition of the increasing rate of applications to professional schools by humanities graduates with the employment difficulties of this group reveals the problem and the challenge. The older notion that an education in the humanities prepares graduates for professional work has given way to a new reality: humanities graduates need to attend professional schools to gain entry into the professions. Therefore, we need a better understanding of the postundergraduate choices of humanities graduates.

A FRAMEWORK FOR EXAMINING POST-BACCALAUREATE OPPORTUNITIES

While theory and research in economics, sociology, and higher education can inform the development of a research framework, not one of these fields adequately frames questions about post-baccalaureate choices and opportunities. When considering the conceptual basis for research on the educational choices made by college graduates in the humanities, we need to consider the implicit dialectic within the humanities. On the one hand, it has long been argued that undergraduate education in the humanities is important for the development of the individual and civilization, values that should take precedence over economic considerations (Ullman 1946; Stunkel 1989; Oakley 2002). On the other hand, humanists also argue that their majors help pre-

pare graduates for professional work in a changing world (Brinker 1960; Snell 1965; Gros Louis 1981). While a few have tried to reconcile the two views by offering practical guidance (Berry 1967; Clayton 1981), there is no evidence of unified thought in the humanities about the value of undergraduate and graduate degrees. A conceptual approach is needed that illuminates the choices facing humanities students but creates room for alternative views of the value of the humanities.

Possible Theoretical Frames

Economic theory on human capital (Becker 1964; Paulsen 2001a) provides a basis for thinking about the ways in which economic variables, such as expected earnings and debt burden, influence educational choices. Research in economics has focused on earnings by field and by degree level (Berger 1988; Dohm and Wyatt 2002). This research informs a general understanding of the economic value of educational choice but offers little insight into the motivations for choice beyond economic considerations. Unless the hierarchy of potential earnings is used as a basis for considering post-baccalaureate choices, economic theory has serious limitations. The primary limitation of overemphasizing the economic value of educational choices is that it does not create sufficient room for the humanistic arguments about the value of classical education.

Sociological theory on educational and occupational attainment provides an alternative way of classifying employment and professions, one based on notions of social class (Blau and Duncan 1967; Alexander and Eckland 1974). Sociological research focuses on the role of background variables and achievement in major choices, employment, and earnings (Marini and Fan 1997). However, social attainment theory has an implied hierarchy of professions related to social status. And while social reproduction theory, including the notions of social and cultural capital, can potentially broaden social theory on educational choice (e.g., Bourdieu 1972, 1977), most of the research using this framework has been limited to the study of college preparation and access (e.g., McDonough 1997; Paulsen and St. John 2002).

There are also three potential theoretical frameworks from educational research on college students, but they need to be adapted to the study of post-baccalaureate educational choices. The developmental view of college student choices was widely used in the 1970s (Chickering 1969; Feldman and Newcomb 1969; Perry 1970). This framework frequently views individual development as an outcome of undergraduate education (e.g., Chickering 1976), using stage models similar to moral development (e.g., Kohlberg 1981) and ego development (e.g., Loevinger 1976). Although the developmental approach is compatible with the humanistic view of undergraduate education (e.g., Stunkel 1989) and therefore merits consideration, it is not directly applicable to the study of educational choices.

A second approach, characterized as change theory (Pascarella and Terenzini 1991), focuses on the ways students changed in college (Astin 1993) and on specific outcomes such as college choice (Jackson 1978; Hossler, Braxton, and Coopersmith 1989; Paulsen 1990) and persistence (Tinto 1975,

1987; Bean 1990). This approach has been central to many of the specific studies of post-baccalaureate choices reviewed in this essay, but we need a more integrated approach.

The third approach, the student choice construct (St. John, Asker, and Hu 2001; St. John, Kline, and Asker 2001), provides a starting point for an integrated approach but also needs to be adapted to the study of post-baccalaureate choices. This approach provides an appropriate starting point because it

- views educational choices as a sequence (like the developmental approach),
- provides a basis for assessing the impact of finances (like change theories and economic theory),
- and builds on theories of social attainment and human capital but can be adapted to distinctive aspects of humanities education.

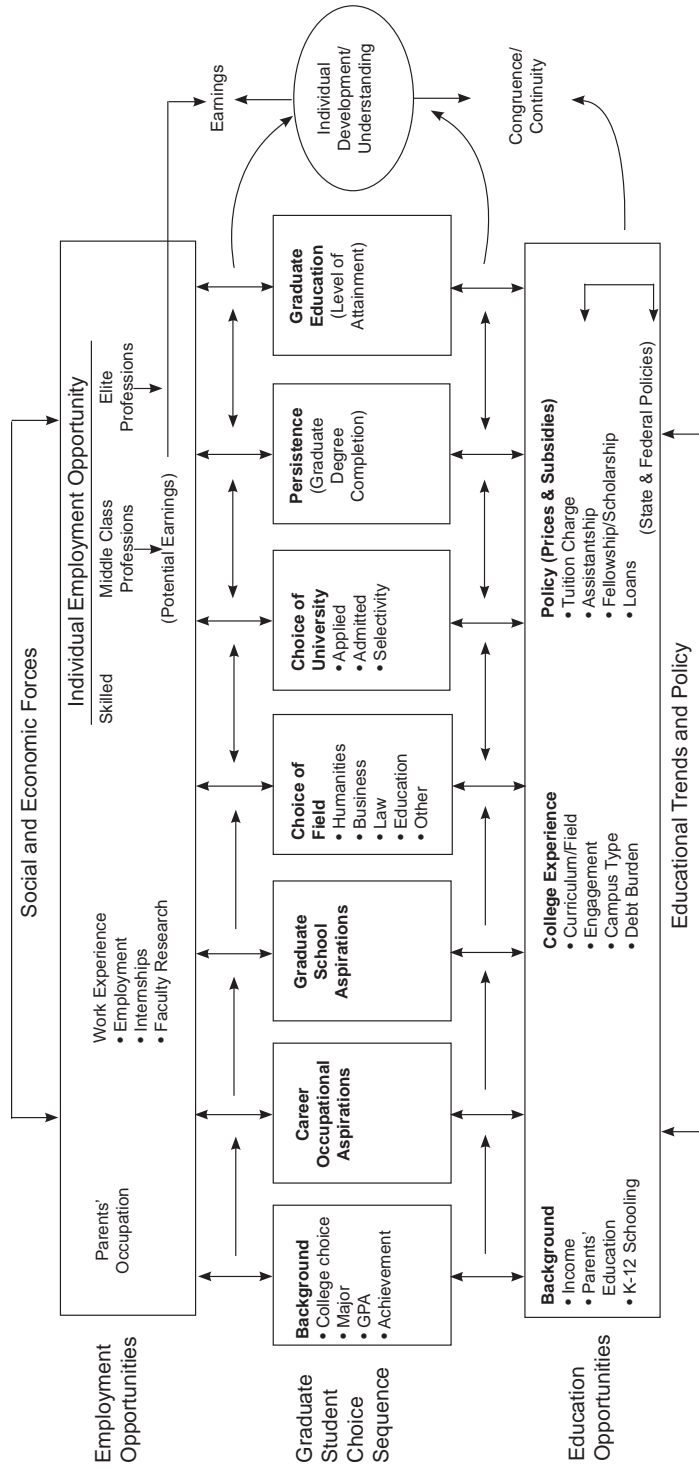
Adapting the Student Choice Construct

The student choice construct for undergraduates considered how the sequence of undergraduate educational choices was influenced by social and economic forces and educational trends and policy. It considered the roles of family background, aspirations, access (opportunity to attend), college choice, major choice, persistence, and graduate education. Research using this logic revealed intersections between financial research for choosing colleges and persistence (Paulsen and St. John 1997, 2002) and between major choices and persistence (St. John et al., in press). Recent research using this logic revealed continuity in concerns about college costs across the full choice sequence (St. John and Chung 2004). The primary limitation of the approach was that it did not fully illuminate the sequence of graduate choices. However, focus group interviews with undergraduate and graduate students who received Gates Millennium Scholarships (GMS) indicated that their choices about graduate education were bound by prior experiences as well as the potential for educational support. Based on this research and observations, it is possible to revise the student choice construct to the study of graduate student choices.

The graduate student choice construct (see figure 1) provides a linkage structure between social and economic forces that influence employment opportunities, as well as between educational trends and policies and the sequences of educational choices made by graduate students. These three dimensions of the framework are developed further below, based on a review of the literature on college students, professional education, and graduate education in the humanities.

Social and Economic Forces. The need for a new framework for examining the impact of public policy on post-baccalaureate choices by humanities graduates is a consequence of changing patterns of employment, including the increased need for graduate degrees in professional fields and changes in the values of different types of graduate degrees. Before considering the role of these forces, we need to consider how parents' occupations and individual exposure to work influence educational choice processes.

Figure 1: The Graduate Student Choice Construct: Linking Education and Employment Opportunities with a Focus on Humanities



Parents' Occupation. Social theory has long argued that parents' occupations, especially the father's occupational status, influence the individual's occupational aspirations (Blau and Duncan 1967; Alexander and Eckland 1974). Most recent research on undergraduate access and persistence has focused on the influence of parents' education rather than of occupation (Choy 2002), but there are reasons to consider the role of family occupation as a force in the formation of aspirations. Parental occupation influences the types of work students are exposed to prior to college, and there is substantial evidence that family background influences post-baccalaureate degree aspirations.

Exposure to Work during College. This factor could also influence students' occupational choices. Recent research on minority undergraduates reveals that working with faculty on research and civic engagement during the college years has an influence on major choice and persistence (Allen 2003; St. John and Chung 2004). And because there has been a rationale in humanities education favoring career counseling and internships in related fields (Sharp and Weidman 1989), there is reason to consider the role of internships and involvement in other types of college work experience in the formation of aspirations for graduate education and occupation.

Changes in Potential Earnings for Different Types of Degrees. In the 1960s, doctorate recipients and graduates from professional programs (e.g., business and law) could expect similar future earnings. However, graduates from professional programs now expect substantially higher earnings (Ehrenberg 1992). Further, the prospect for full-time employment is now much more constrained for doctorate graduates in the humanities (Nerad and Cerny 1999). Thus there are compelling reasons to consider factors that influence choice of professional education options outside of the humanities for recent graduates, especially given the long-standing rationale that humanities education prepares students for professional work.

There has also long been a concern that humanities baccalaureate degree holders earn less in the labor market than students with other degrees in other fields (Sharp and Weidman 1989). Analyses of the professional fields of baccalaureate recipients in the humanities indicate that humanities graduates go on to a range of fields (Berry 1967; Sharp and Weidman 1989). These patterns confirm the notion that humanities majors are relatively well prepared for diverse areas of professional work. However, since postcollege employment opportunities are increasingly limited without advanced education, there are compelling reasons to consider the factors that influence post-baccalaureate education choices by humanities graduates. While there has been a decrease over time in the percentage of college graduates with humanities degrees, some universities have actually substantially increased the number of humanities graduates (e.g., Texas A&M University; SUNY, Stony Brook; and University of California, Irvine) according to a report of the American Council of Learned Societies (Levine et al. 1989).

Increased Need for Graduate Education in Professional Practice. It is critical to broaden the lens used to look at undergraduate degrees in the humanities to

include preparation for professional education along with preparation for advanced degrees in the humanities. Historically, a substantial emphasis was placed on the transition from undergraduate education in the humanities to master and doctoral programs in related fields. In the period of expansion, 1954–1962, there was a strong belief that more doctorate graduates were needed for academic jobs, and generous student aid was available (Bowen, Turner, and Witte 1992). However, the academic labor market quickly changed for doctorate recipients (Allen 1998; Mattson 2001–2002). This shift is especially important given the growth in size of professional programs and their importance for acquiring better employment opportunities.

Graduate Student Choice Sequence. The core aspect of the graduate student choice construct is the sequence of choices students make after graduation. Research on the postcollege choices of humanities graduates can inform student advising within humanities programs as well as provide baseline information about the influence of state and federal public finance policies on these educational choice processes. As a guide for research on this topic, we review the knowledge base for such research below.

Background. Theories in economics, sociology, and education provide different conceptualizations of the role of family background in educational choices. Economics focuses on the role of family income (Becker 1964; Hansen and Weisbrod 1969) and frames educational choices as rational decisions. Social attainment theories added parents' occupation and education (Blau and Duncan 1967; Alexander and Eckland 1977). More recently, Bourdieu's (1972, 1977) concept of cultural capital has been used in social and educational research. Indeed, the role of family is critical whether we focus exclusively on individuals or broaden the framework to consider social forces and educational trends and policy.

In addition, for students who have graduated from college, there are a number of variables that need to be considered as individual background variables. Prior experiences—type of college attended, major, and grades—logically should be considered in research on post-baccalaureate choices. In addition, the perceptions and preferences that influenced their early choices may be important factors in subsequent decisions, providing continuity in the choice process.

Career/Occupational Aspirations. While career preferences may not be as important as educational aspirations in research on undergraduates, there are logical reasons to expect that career aspirations have a stronger influence on post-baccalaureate choices. When conceptualizing research on post-baccalaureate educational choices by humanities graduates, it is important to understand the underlying shift in the importance of career preferences.

Choices of undergraduate majors are influenced by grades (St. John 1994a; St. John and Chung 2004), expected earnings (Ehrenberg 1992; St. John 1994a),² and debt burden (St. John 1994b), factors that can influence students to choose new career options as well as majors. Further, not only do most students change majors at least once during college (Pascarella and

2. While these studies indicate a relationship between expected earnings and major choice, not all research confirms this view; e.g., Berger (1988) did not find a relationship between expected earnings and major choice.

Terenzini 1991), but many students start off as undeclared. Thus, issues related to choice of major and career aspirations are worthy of further study.

However, by the time students graduate from college, career preferences have a shaping influence on choice of fields. For example, there is strong evidence that humanities doctoral students have a strong occupational preference for academic careers (Jones 1982; Nerad and Cerny 1999). Indeed, while employment in business, government, and nonprofit organizations represents a viable alternative (Nerad and Cerny 1999), it is hard for many humanities doctoral students to shift toward this preference (Jones 1982). While art history is an exception to this pattern, this difference may be because of the central role of museums in this field. Thus, continuity of preferences appears to be an important force in this process even in the exception.

Further, it is important to consider the role of the general preparatory emphasis in the humanities in the formation of career aspirations, especially if the goal is to examine the choices by humanities graduates to choose professional majors. Humanities graduates who choose to go on to careers in business and government may make this decision based on career goals as well. The decision to go on to business school, law school, and other professional programs apparently has goals aligned with these preferences.

These distinctions have definite implications for academic planning. If some humanities graduate programs desire to shift toward programs that support careers in government, business, or the nonprofit sector, then the switch should be more than an afterthought, since students generally ponder career options before entering graduate school. Providing options to students by restructuring graduate programs, including the prospect of dual degrees, may be critical (Nerad and Cerny 1999).

Educational Aspirations. The level of graduate school aspiration is also an important factor in the analyses of choices by humanities undergraduate majors. In research on persistence by undergraduates and attainment, the level of aspirations is frequently used as a predictor (Alexander and Eckland 1974; Pascarella and Terenzini 1991; St. John, Asker, and Hu 2001). However, for graduate students, the traditional measure of these educational goals is somewhat problematic. Very often in research on undergraduate students, the aspiration for advanced professional degrees—master of business administration and medical and law degrees—combined with doctorates is the highest level of aspiration. Thus, the structure of questions in longitudinal studies is frequently limited in ways that make it difficult to consider appropriately the role of aspirations.

In research on post-baccalaureate choice, it is important to distinguish between three types of degree aspirations: master's only, doctoral, and advanced professional. Having an appropriate logical and statistical control for the type of aspirations students held before they entered their graduate programs provides an important indicator of preferences. However, researchers often must work with extant data, so they need to construct related variables if possible and to conceptualize the role of level of aspiration if such variables are omitted.

Choice of Graduate Field. Conceptually, choices of field are influenced by prior experiences and preferences (background, career aspirations, educational

aspirations), along with social and economic forces and educational trends and policies. Sociological studies have considered the influences of academic achievement (Standard Aptitude Test scores) and social background on choice of field (Davies and Guppy 1997).

Decisions about work after college can influence eventual post-baccalaureate educational choices. As noted earlier, research findings from the Baccalaureate and Beyond Longitudinal Study surveys reveal that humanities graduates earned less than graduates in most other fields (NCES 2001). Further, humanities graduates received fewer job benefits than undergraduates in most other fields (NCES 2001). Therefore, the labor market for humanities graduates may induce some graduates to consider graduate school.

Further, there is a strong indication from research that humanities graduates actually enroll in many different types of graduate fields outside the humanities. The number of men and women earning doctorates in the humanities declined in the early 1980s (Heath and Tuckman 1989). While the number receiving doctorates eventually rose, the earnings of doctorate recipients grew less than the earnings of those with professional degrees in the 1990s (Dohm and Wyatt 2002).

Understanding the factors that influence choices of graduate fields is important for humanities education for several reasons. First, research on choice of graduate field by humanities baccalaureates can inform planning for undergraduate programs in the humanities along with advising for humanities undergraduates. Second, understanding the choice processes can inform the redesign and adaptation of graduate programs in humanities disciplines and in other fields. Actually, given the importance of the knowledge and skills developed in humanities fields to most professional fields, it is conceivable that research universities can make it easier for graduate students to create hybrid doctoral programs that build on the strengths of humanities and professional fields, creating better avenues for humanities graduates into advanced work in government, business, or nonprofit fields.

There is evidence that humanities majors perform well in other fields. For example, while a small percentage of students admitted to medical school are educated in the humanities, these students perform well in medical school (Warren 1984). Recruiting nonscience majors has also become an acceptable practice in minority recruitment for medical schools (Yens, Benenson, and Stimmel 1986). Some researchers have begun to explore ways of integrating humanities education with medical education (Rifkin et al. 2000).

Finally, through redesigning the intersection between academic programs in the humanities (languages, literature, history, philosophy, and related disciplines) and the professional fields, it is conceivable that new areas of research collaboration will be realized. The lack of funding for humanities research has long been a theme in the literature. While the funding challenge has been partially mitigated by foundations and government (Lumiansky 1982), there is still reason to consider ways to integrate humanities inquiry into studies of the professions. By building real academic linkages for students, faculty may find new avenues for collaboration.

Choice of Graduate University. Once a student has chosen a field of study for graduate education, they apply to one or more graduate universities. The

better academic and professional programs are generally located in more selective research universities. However, both professional and doctoral programs are generally available in doctoral universities, if not in comprehensive public and private universities, as well as research universities. Socioeconomic factors are also associated with the selectivity of graduate programs to which students apply and are accepted (Davies and Guppy 1997).

However, the preference of field also influences the level of institutions students attend. Some types of graduate programs, such as education and business, are available at a wide array of institutions, while others, including and especially medical schools, tend to be limited to research universities.³ Therefore, analyses of the type of institution attended for graduate education should control for field of study along with the other background and aspiration variables noted above. In addition, such analyses might also appropriately consider the effects of policy variables. To date, research on the effects of loans on graduate enrollment has been limited (e.g., Weiler 1994), but this area of research could be important in the humanities and other fields.

Analyses of college destinations are proving to be a viable approach to assessing the impact of student aid policies. Research on low-income and minority undergraduates has shown that grants, scholarships, and loans have an influence on the types of colleges students can afford to attend (St. John et al. 2002; St. John 2003b). This type of research might help untangle the ways federal policy on loans, institutional policy on assistantships, and foundation policies on scholarships influence post-baccalaureate opportunity for diverse groups.

Persistence and Graduate Degree Completion. Persistence research has been more limited for graduate students than for undergraduates. Therefore it is important to consider both areas of inquiry when considering persistence by humanities majors in graduate programs.

The logical models for research on graduate student persistence should consider background, aspirations (education and career), field, type of institution, and factors that influence persistence. Research on undergraduate persistence consistently shows that involvement in social and academic activities is related to persistence (Tinto 1987, 2000; Pascarella and Terenzini 1991; Braxton 2000). However, there is also compelling evidence that these integration activities are influenced by perceptions of finances (Bean 1990; Cabrera, Nora, and Castaneda 1992; Paulsen and St. John 2002) and that both integration activities and persistence are influenced by the amounts of aid students receive (St. John 2003b). Thus research on persistence by graduate students should appropriately consider these variables but should also consider the unique circumstances of graduate students.

While research on graduate student persistence has been limited, it has been revealing concerning the circumstances facing graduate students. For example, studies reveal that assistantships are not positively associated with persistence and that expected earnings play a role in the persistence process (Ehrenberg 1992; Andrieu and St. John 1993). Based on these inquiries, Asker

3. However, if we were to broaden the concept of medical schools to include osteopathic medicine and chiropractic medicine, then there would be a wider range of options for students.

(2001) tested the notion that financial aid could have different influences on persistence in different fields, finding that graduate students in business and education responded differently to scholarship and loan aid. Given these findings, it is important to consider how different forms of graduate student support—assistantships, fellowships, and loans—influence persistence and degree completion by graduate students.

Research on time to degree reveals that historically students in the humanities took about the same amount of time as other fields but that it now takes longer to complete a degree (Nerad and Cerny 1999). According to the NCES (2001), at the undergraduate level, 49 percent of humanities majors took four years or less to complete the baccalaureate degree, while 27 percent took more than four but no more than five years to complete the degree. Thirteen percent took more than five but not more than six years to complete the degree, yet 12 percent took more than six years to complete the degree.

Nearly three-quarters of those earning doctorates in 1995, for example, took seven years or more to complete the degree. The time to degree can be influenced by employment options after the doctorate, especially given the expectations of academic careers. More than 81 percent of those who earned doctorates in 1985 sought out academic careers (Nerad and Cerny 1999).

Graduate Education Attainment and Employment. The important question is: How does the level of degree influence future earnings, controlling for field and selectivity? A much larger percentage of students complete master's degrees than doctorates (Clune, Nunez, and Choy 1999). There is little research on the consequences of subsequent degree attainment by humanities baccalaureate recipients, although there is a substantial body of research on earnings by degree level. Humanities graduates earned less than baccalaureate graduates in all other fields in 1978, 1985, and 1991 (Jacobs 1995), a pattern that continued into the 1990s (Thomas 1998). Further, only 59 percent of humanities graduates reported being employed full time in 1985 and 1991, a lower percentage than for other fields except biology and psychology (Jacobs 1995).

It is important to consider the post-baccalaureate opportunities for humanities doctorate recipients as well as to consider the career opportunities for students with baccalaureate degrees who go on in other professional fields. The data sources for this type of inquiry have been limited in the past, but new strategies should be developed.

Educational Trends and Policy. While there is generally less student financial aid available for graduate students than undergraduates, there is a history of specially directed federal funding, especially in the medical sciences, foreign languages, and area studies. In addition, many states are concerned about retaining educated labor and ensuring adequate supplies of nurses, teachers, and other midlevel professionals. Historically, state education policies emphasized the elite professions (Halstead 1974), but retaining middle-class professionals has become a more central concern in many states.

From the perspective of the humanities, the near void of policy concerns about the professional pathways of humanities doctorate recipients is perplexing. Given the high rate of part-time employment, some have suggested public support in the form of work programs (Mattson 2001). Whether or not

one takes a position on specific reform options, national associations and organizations in the humanities need access to research on the role of public policy in promoting post-baccalaureate outcomes for humanities graduates. The third element of the student choice construct provides a means of linking public policies to appropriate outcomes.

Background. Family background is a multilevel issue. Not only does family background have a direct influence on the attainment process and the ways students are exposed to possible career paths, but family background and social class are central to the social and educational contexts that can influence post-baccalaureate educational choices. Researchers using multilevel models should explore these questions further.

From research on high school students, it is clear that family incomes and education levels influence the types of educational opportunities students have in K–12 education (NCES 1997; Choy 2002; St. John 2002, 2003a; St. John and Asker 2003). The process of cultural capital formation begins early, with parents reading to children, and continues through undergraduate education, with future opportunities building on past opportunities for ethnically diverse students (Allen 2003; Hurtado 2003). Therefore an understanding of contexts is especially important for institutions and graduate programs that focus on the goal of improving diversity.

Some researchers who consider educational opportunities for diverse undergraduates consider the types of resources available to students in their high schools (Trent 2003). By extension, for graduate students, it is appropriate not only to consider the type and selectivity of the institutions students attend but also to consider the impact of their locally situated contexts—the types of employment and cultural activities that are available. Most post-baccalaureate educational choices are locally situated, with college graduates choosing programs accessible within their local community. For students in large urban areas, there is a wider range of choices available than for students in rural locales. While these local variables are not typically included in national surveys, they can be added using geocodes, an approach that makes sense in state-level studies on postgraduate choices.

College Experiences. Much of the research on undergraduate persistence focuses on involvement in social and academic activities (Pascarella and Terenzini 1991; Braxton 2000). However, little is known about the residual effects of undergraduate involvement on graduate student attainment. At the graduate level, it is important to consider the involvement opportunities that students had as undergraduates as well as their debt burden. Involvement in academic and social activities as undergraduates influences the predisposition toward graduate education (St. John and Chung, 2004). To date, research on persistence by graduate students has not considered the sustained effects of student involvement. However, as new databases are developed, such as the National Opinion Research Center longitudinal study of GMS applications (NORC 2003), it should be possible to explore some of these linkages.

Prices and Subsidies. Finances have an obvious and direct influence on enrollment opportunities for graduate students. With recent increases in col-

lege prices, graduate school is often not as affordable as it once was. Tuition charges in public colleges have risen as a consequence of declining state support (Hauptman 1990; St. John 1994a; St. John and Asker 2003). Given rising costs, it is important to consider the three markets in which students make choices of institutions.

First, this model is situated in local labor markets. Educators and others situated in local labor markets frequently make educational choices based on what is available in their communities. These local programs have been more important in applied fields—like education and business—than in the humanities. However, master’s programs for teachers in humanities would be subject to these conditions. In addition, a few national universities (e.g., University of Phoenix) have begun to offer web-based programs that are starting to provide options for people situated in local labor markets. Tuition charges, earnings, and loans are the forms of financial support that would likely influence the choice to enroll and persist. State programs that provided specially directed grant aid or forgave loans for employment might be workable strategies for coordinating economic development with educational program development.

Second, there is a national competitive market that is influenced by prestige of programs along with the prestige of universities. Students who consider national options for graduate study are influenced by scholarships, assistantships, and loans along with the costs of attending. Historically, most of the national policy on graduate education has focused on the national market, a market that is most germane to the literature in the humanities. Ehrenberg’s (1992) research on the role of assistantships and time to degree is particularly compelling with respect to this national market. He reported that the increase in time to degree also “increases the time it takes new graduate students to enter the academic labor market” (p. 841).

Third, a new high-prestige market has developed in “executive” programs in business, education, and other fields. Typically these programs have high costs of attending and are offered by high prestige universities. They are intended to appeal to people who have high-paying positions but can benefit from high-degree attainment and who can use their current work experience as a resource for coursework.

The ways in which prices and subsidies influence post-baccalaureate choices have different meanings in these three market contexts. While the first two markets may be most germane to graduate programs in the humanities, all three have implications for education policy.

Outcomes. The graduate student choice construct—the sequence of choices with linkage structures to social/economic forces and educational trends and policy—provides a way of viewing how policy influences educational outcomes. Financial difficulties have long been noted as a barrier to degree completion (Sharp 1966; Ehrenberg 1992), a topic that can be systematically examined using this graduate student choice construct. The framework provides a way of thinking through the ways institutional and public policies influence both intermediate and long-term outcomes.

Graduate Choices as Intermediate Outcomes. The sequence of choices by graduate students provides a framework for conceptualizing how intermedi-

ate outcomes, from aspiring to enter a profession to completing graduate degrees, are influenced by different types of policies. These intermediate outcomes are increasingly important given the growing emphasis on accountability in higher education (Zumeta 2001). In particular, there is a need to move beyond analyses of transition rates (e.g., percent of students completing degrees) to an understanding of the factors that influence these outcomes. The student choice construct for undergraduates was initially developed to provide a more complete basis for thinking about the linking structure between student outcomes and education policy than is typically used in accountability models (St. John, Kline, and Asker 2001). The graduate student choice construct has the same potential uses.

Individual Development (Understanding and Citizenship). The claims by humanities educators that the purpose of the humanities is to build understanding and civic responsibility should not go unheeded, just as the early concern about the development of college students remains important. Although better indicators of the civic and humanistic outcomes of education are needed, the construct provides a way of thinking through the linkages between advanced humanities education and these qualitative outcomes.

Earnings. Earnings have been one outcome frequently used in research on graduate education (Leslie and Brinkman 1988; Paulsen 2001a, 2001b). However, employment patterns of doctorate recipients are complex and varied. For example, female humanities doctorate graduates are less likely to go on to nonacademic jobs than males (Jones 1982). There are also well-documented earnings differences by gender within the humanities (Ginther and Hayes 1999). The factors that influence these patterns should be better understood. The student choice construct provides a basis for linking earnings not only to attainment but also to factors that influence attainment.

Congruence/Continuity. The concept of congruence between education and employment has proven to be an appropriate approach to research on student outcomes of education (Smart 1975, 1985, 1988, 1989; Flint 1997). This research indicates greater satisfaction and productivity on the part of students who find employment in related areas. The coherence of careers has long been a concern in the humanities (Stunkel 1989). However, the percentage of humanities graduates who find related employment after earning the baccalaureate degree is very low (Jacobs 1995).

Some attention has been given to whether humanities graduates find employment related to their education, but this research has not considered the factors that influence this outcome. Some economists have examined the influence of preferences about jobs on earnings of college graduates (Daymont and Andrisani 1984), a topic that illuminates the forces that influence congruence. Sociologists also found differences in aspirations, which influence the earnings gap for males and females (Marini and Fan 1997). The student choice construct provides a framework for research on the impact of experiences and achievement in graduate school on employment congruence after college.

Recent research using the student choice construct (St. John and Chung 2004) has focused on continuity in choice processes. It considers how the rea-

sons for choosing colleges—for example, low costs and college reputations— influence persistence, involvement, and major choices. This research reveals a pattern of continuity. The reasons for making early educational choices have sustained influence on experiences and choices in college and beyond (i.e., major choices and persistence). In this sense, continuity is a factor of importance. Research on the continuity in post-baccalaureate educational choices by humanities graduates can inform program planning and student advising in the humanities.

A LOGICAL GUIDE FOR EMPIRICAL INQUIRY

Research on humanities outcomes has become a priority for good reason. The challenge is to evaluate and improve routines “that create our students, consumers, practitioners, and professionals, and provide them with the opportunity to study, consume, practice and profess” (Solow 2002, p. 2). The proposed framework is a step toward this goal. The graduate student choice construct provides a logical guide to inform studies on post-baccalaureate educational choices by humanities graduates. Data limitations prevent researchers from considering all of the variables that influence an outcome. Further, there are extant databases that frequently have variables that are of little relevance to specific outcomes. Therefore, when developing analytic models, researchers need to select appropriate variables from surveys or other data sources, a process that can be informed by this general framework.

Using frameworks of this type, along with an understanding of related research, can inform decisions about interpreting the results of multivariate analyses of student outcomes. For example, some variables, like parents’ income and student aid, are highly related (Becker 2003), which means that authors should proceed carefully when interpreting the results of models that leave some variables out, possibly because they are not available. This framework provides a basis for informing and guiding this type of interpretive judgment. While some of the predictive factors described above may not be available in research, it is important to think through omitted variables that might relate to the significance of variables that are included in statistical models.

In addition to providing a logical basis for research, the framework can be used to address two additional questions: First, given the types of databases that are currently available, what types of statistical studies could be undertaken by proponents of the humanities? Second, what types of information should be collected if new data collection mechanisms are developed?

Priority Analysis

The first question is informed by Jones’s (2002) review of potential databases for the American Academy of Arts and Sciences, along with the authors’ experience working with national and state groups interested in research on post-baccalaureate outcomes. Two priorities seem evident.

First, Baccalaureate and Beyond, an NCES database that tracks the post-college experience of 1992–1993 and 2000–2001 graduates, is of sufficient size to use to study some of the postcollege outcomes (Jones 2002). Some of the

statistical reports reviewed above used this database (Thomas 1998; Clune, Nunez, and Choy 1999; Stringer 2000–2001). There appear to be a sufficient number of cases in the file to conduct initial analyses of choice of graduate field, type of institution attended, and employment of humanities graduates. In the 1992–1993 cohort, 13 percent of the 10,080 students in the study were humanities majors and in the 2000–2001 cohort, 17 percent of the 10,000 students in the cohort were humanities majors. Analyses of these two cohorts would be especially informative for program development and advising in the humanities.

Other longitudinal databases may also be useful for this type of research, depending on the percentage of their samples with humanities degrees. The framework could be used to guide the logical development of statistical models for these studies. In addition, the National Longitudinal Survey of Youth (Class of 1972) has been used in research on selection of fields by graduate students (Davies and Guppy 1997). Therefore, in spite of the smaller sample size of these databases (Jones 2002), they may be useful in research on graduate student choices as well. There are additional databases that could possibly be used for related studies, depending on the timing of planned follow-up surveys.

While their sample sizes are limited, the High School and Beyond (for the high school class of 1992–1993) and Baccalaureate and Beyond (bachelor's recipients of classes of 1993–1994 and 1999–2000) panel surveys can be used to examine postgraduate educational choices by humanities graduates along with other groups of graduates. These databases can be used to assess the influence of debt on career and graduate school paths, as well as to consider how undergraduates' majors and achievement influence these postgraduate choices. However, the limited sizes of these surveys make it difficult to examine humanities graduates as a group. Instead, it is probably necessary to compare humanities graduates to other types of majors using general models for college graduates. This type of comparative information is useful for groups interested in the humanities, but it would also be helpful to have longitudinal data on a larger sample of humanities graduates.

Second, it is possible that state-level databases could be used to develop state-specific studies. For example, the Indiana Commission for Higher Education (ICHE) maintains an exceptional database on college students. It would be possible to combine files from this source to examine post-baccalaureate choices of field of graduate study by humanities graduates. Such analyses would have implications for public universities in the state, as well as for state policy on labor force development. With some further development (i.e., merger with state employment records or other records of residence), it would be possible to examine factors that influence graduates to remain in the state, an issue of interest to the Lilly Endowment and the ICHE. The framework could be used to guide the development of state-level studies of the nexus between humanities education and the labor market.

Developing new databases has substantial cost implications. There are a number of possible new data collections that could be developed to follow graduates in the humanities. For example, some of the databases developed to follow doctorate recipients in the sciences could be adapted and extended to include humanities graduates. In particular, some of the surveys conducted by the National Science Foundation could be expanded (Jones 2002).

The framework outlined above has some implications for efforts to develop new databases on the humanities. It may be important to decide on the outcomes of interest and to choose questions necessary for research on these outcomes with the populations included in these surveys. The point in time when large-scale surveys are designed is the only opportunity available to introduce new topics into research. There are also some long-standing issues in the humanities, including issues related to understanding and civic responsibility (Gros Louis 1981), that merit consideration for inclusion as topics for questions.

CONCLUSIONS AND IMPLICATIONS

In this essay we have undertaken a review of research on post-baccalaureate education choices by college graduates in the humanities, with an explicit goal of developing a usable framework to guide analyses of existing databases and the development of new databases. In undertaking this task, it was important to recognize some of the distinctive aspects of the humanities, as well as some ways the context for humanities education is changing.

First, there is an apparent tension between utility and inherent value in the literature on humanities education. On the one hand, many humanists argue that humanities education aims to build an understanding of language, culture, and discourse—and that this understanding is vital to a democratic society. On the other hand, many advocates of the humanities have argued that an education in a related major prepares students for professional employment. Additionally, advocates argue that the ability to understand and solve problems, skills related to the pedagogical method in the humanities, has meaning across areas of employment. The historic employment patterns of humanities undergraduates support the argument of general utility of the undergraduate majors, but graduate degrees in the humanities have been closely linked to preparation for academic careers. Part of the answer to questions related to utility versus value in the humanities is related to the level of degree attainment, but changes in the context complicate this partial resolution of the tension.

Second, the changing context of post-baccalaureate educational choices has implications for humanities graduates. Three shifts in the relationship between graduate education and employment have implications for the future of the humanities. First, there has been a shift in the relative economic value of the doctorate. Historically, doctorate graduates received salaries roughly equivalent to graduates of Master of Business Administration and Doctor of Law programs. However, professional graduates now have substantially high-

er salaries than doctorate graduates. Second, there are substantially more professional degree programs in business and other fields, a development that influences the need for an advanced degree for entry into elite professional fields. Third, the relative value of humanities degrees has changed compared with doctorates in the sciences and technology. There are now a large number of aspiring academics who hold doctorates in humanities fields; consequently, there are large numbers of part-time faculty, a factor that substantially depresses the labor market for doctorate graduates in the humanities.

These shifts in the labor market have substantial implications for the humanities, given the embedded tension between the two underlying perspectives on the humanities. For those who argue that a humanities degree is of general utility for employment, there is a need to encourage humanities undergraduates to prepare for post-baccalaureate educational choices. While conceptually we could argue that better information on career options, more internship opportunities for humanities majors, and more integration of humanities courses with courses in other fields might help, better research is needed to inform this type of speculation. Research on the career paths of doctorate graduates can inform the more basic issues about doctoral study and research in the humanities. Thus, well-designed research on choices by humanities graduates about post-baccalaureate education would be of great potential value.

Third, it is possible to develop guiding frameworks for research and database development on humanities graduates. This essay extends and adapts the student choice construct, a new framework for research on educational choices by undergraduates, to the study of post-baccalaureate educational choices, with an explicit emphasis on humanities graduates. To develop the framework, we reviewed research on students' educational choices and on students in the humanities. The framework identifies three dimensions of the choice process along with related educational outcomes:

- *Social and Economic Forces*: Exposure to work and employment experiences influences both educational and occupational aspirations.
- *Graduate Student Choice Sequence*: As a result of their family experiences and undergraduate educations, students develop occupational and career aspirations, make choices of graduate fields, choose graduate institutions, and persist through graduate attainment.
- *Educational Trends and Policy*: Prior and current educational experiences, along with institutional and program characteristics and prices and subsidies, influence student choices of degree programs, as well as the intermediate outcomes related to educational attainment.
- *Outcomes*: The opportunities to enter elite professions and to earn high salaries are two of the long-term outcomes of attaining advanced degrees. However, advanced degrees also provide graduates opportunities for personal development as well as to pursue work related to personal interests and education.

This framework provides a basis for designing research studies using extant databases collected by the federal government, states, or foundations. Given the current state of knowledge, a priority should be placed on research that considers the post-baccalaureate educational choices by humanities graduates, including choice of field and choice of institution. Both state-level and national databases can be used to examine these outcomes. Such studies can inform program development and advising in the humanities.

In addition, the framework can be used to inform efforts to develop national databases on humanities graduates. When new databases are developed, an effort should be made to include the types of questions that are needed to study the intermediate choices by humanities graduates that lead to educational attainment and employment. While not every possible variable related to student choices can be included in national surveys, an effort should be made to ensure that sufficient questions are included to permit future research on the critical topics outlined here.

Research using the proposed framework can also help inform policy development in states and at the federal level. Many states are concerned about retaining college graduates, but issues related to debt burden and employment of college graduates need to be better understood.

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Toward the Development of Liberal Arts Indicators

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EXECUTIVE SUMMARY

What do we really know about the status and vitality of the liberal arts in contemporary colleges and universities? Research efforts to describe and analyze what is occurring within the liberal arts are severely limited by a paucity of information about liberal arts departments, including basic information about core functional areas such as undergraduate majors, course offerings, staffing patterns, and financial resources. Remedying this situation goes beyond cultivating the interest of higher education researchers. The challenge is more formidable: it entails investing in more systematic collection of baseline data at institutional, disciplinary, and national levels. That effort cannot proceed without first identifying the measures and data definitions that would yield comparable data for analysis.

Thus a foundational step in data collection is to develop liberal arts indicators that, once sustained, will generate valuable longitudinal data for assessing conditions within the liberal arts. In addition to substantiating the extent to which and where specific developments have unfolded in different academic settings, those same indicators can also illuminate points of leverage for change, so that institutional leaders and policy makers can subsequently determine whether targeted interventions are effecting the desired changes.

While noting important caveats about the potential for negative consequences, this essay nonetheless seeks to provide a conceptual foundation for developing indicators on major educational and operational dimensions of the liberal arts. Recommendations identify some measures that can be derived from existing data sets as well as others that would be constructed anew.

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The liberal arts are in crisis—or so many observers and practitioners in the United States argue. Yet what data are available to substantiate—or to refute—this strident call to arms?

Published literature within and about American higher education reveals several decades of concern over the conditions of the liberal arts (Bell 1966; Bloom 1987; Botstein 1990; Brint 2002a; Carnochan 1993). Most recently, with successive waves of urgency, accounts weighted by normative anchors declare what must be protected in light of academic legacies, or what must be changed in light of contemporary economic pressures, accountability demands, and vocational interests (Association of American Colleges and Universities 2002; Balch and Zurcher 1996; Connor 1998; Engell and Dangerfield 1998; Scott 1990). For example, the National Association of Scholars calls attention to a dramatic decline in “general education,” marked by trends in general education requirements in its catalog study, *The Dissolution of General Education: 1914–1993* (Balch and Zurcher 1996). From a different vantage point, in the 1990 work *The Liberal Arts in a Time of Crisis*, Scott and her colleagues examine the waning fortunes of liberal arts disciplines and characterize the liberal arts as under siege. They attribute the decline to, among other causes, increased vocational interests of students and employers as well as more professional administrators who have amplified intentions to restructure for anticipated economic and political gains rather than for educational benefits. Although implicating different contributing factors, the perspectives converge in an escalating concern that the liberal arts are endangered (Kernan 1997; Scott 1990). An action agenda is implied: something must be done to improve the quality of education in the liberal arts, to preserve the liberal arts disciplines, or, more broadly, to fortify general education, liberal education, or the core curriculum.

The problematic state of the liberal arts is under discussion in several arenas—on campuses, in professional associations, and even in state legislatures. Perspectives vary widely—from impassioned advocacy, often by faculty in the liberal arts, to impatience and outright disdain, often from outsiders. Many who identify with the liberal arts perceive them as having been displaced from the pinnacle of institutional excellence. In lamenting their relocation to the periphery, liberal arts supporters at times even characterize their situation as abandonment or as a sanctioning of their apparent unwillingness or inability to change. In contrast, critics of the liberal arts tend to adopt a dispassionate stance, noting that higher education institutions are appropriately shifting their material and symbolic investments across academic fields. Professional schools are looked upon favorably for swiftly adapting curricular content to changing student interests, employer expectations that graduates have marketable skills, and public pressure to see higher education’s tangible economic and service contributions to society. Such critics cast themselves as realists who assert that all academic departments must now pull their own weight by improving productivity and cost-effectiveness and that the liberal arts should be neither buffered from these expectations nor protected from the ensuing consequences.

The various perspectives reflect a common concern over the quality of education in the liberal arts, albeit attributing different root causes and promoting different solutions. Some see a crisis in the quality of education. The undergraduate curriculum, especially in the liberal arts, is often spotlighted for lacking coherence (Zemsky 1989; Barnett 2000; Johnson and Ratcliff 2004). Some faculty aim to restore order by adhering to a traditional “Great Books” curriculum, while others assert that the first order of business is to bolster faculty’s decision-making authority—a questionable strategy, given the wide divergence in priorities among faculty today. Still others seek additional departmental resources, especially funds for tenure-line faculty positions and discretionary funds to improve salaries amid the challenges of recruitment and retention, hoping that accruing these resources will sustain and perhaps strengthen educational offerings as well as reputational standing.

Others see turbulence in the academic workplace and a pervasive academic restructuring that changed what and who matters most as related to a declining quality of undergraduate curriculum. Looking more closely at these dimensions, one may conclude that the demise of the liberal arts, as some call it, may be symptomatic of deeper fragmentation. There is talk of strain in the institutional fabric emanating from an erosion of academic ideals that formerly were shared among students, administrators, and faculty. Students have become active players in this regard, as their tastes and priorities increasingly reveal a consumer-oriented perspective: they are demanding training in more relevant skills and more opportunities for choice. They shop for courses, perhaps at more than one institution, rather than identifying as members of the campus community, let alone having an academic home in a department. The increased legitimacy of market forces in the management of higher education has become a prominent driver of related organizational changes (Gumport 2000). Resource commitments to liberal arts departments have become more uneven and uncertain, amid selective budget cuts and periodic resource reallocation. Academic administrators have become more visible as a professional class, with an expanded managerial role in creating standardized measures for productivity and resource allocation to academic areas (Scott 1990; Balch and Zurcher 1996). As campus cultures have become more entrepreneurial, faculty perspectives also reflect intermingling financial and academic concerns (Rhoades and Slaughter 1997). The reward structure provides greater incentives to pursue research and research funding, rather than teaching and service activities, and furthers faculty careers as they advance in narrowly defined specializations more than attending to academic programs, the curriculum, and other “local” responsibilities (Massy and Zemsky 1994). In many universities, teaching assistants, along with part-time and “off-track” full-time faculty, do the bulk of the undergraduate teaching in order to leverage tenure-line faculty time for other priorities. The academic workplace, especially within public universities and colleges, has become a contested terrain at many levels, with explicit deliberations about which programs and departments should be consolidated or perhaps eliminated (Gumport 1997; Gumport and Pusser 1999).

Perspectives of liberal arts faculty themselves shed light on the conditions of the liberal arts. They convey deep concern over the troubling trajectory of

dwindling resources, inadequate staffing, and diluted courses that accommodate student and employer pressures to offer “practical” curricula (Balch and Zurcher 1996; Brint 2002b; Scott 1990). Empirical evidence that corroborates their perceptions is not readily available. Consequently, liberal arts faculty for the most part have only affective evidence to put forward. Especially in the context of budget cuts, they portray their departments as besieged and their colleagues as hunkered down with spiraling morale (Gumpert 1993). Even if not targeted for cuts, faculty have to muster courage, it seems, to contemplate a time horizon beyond the end of each term. Many feel they have become losers in the culture wars and the bitter disputes over curricular requirements—especially within humanities departments in the aftermath of postmodernism’s popularity. Rather than occupying a secure place at the core of the academy with the prospect of long-term institutional support, faculty see unprecedented fragmentation among their colleagues and fear their own institution’s apathy or abandonment. To make matters worse, their views are often dismissed as tainted with self-interest or idealism or both. These faculty are often criticized for being myopic and depicted as self-serving, promoting their own intellectual agendas and careers.

Talk among these actors reflects little consensus on what is most problematic for the liberal arts, let alone what are the preferred solutions. Untethered as they are from solid empirical indicators of organizational and educational realities, the published literature and prevailing discourse on the conditions of the liberal arts suffer from speculation. Accompanying the hand-wringing, soul-searching, and occasional hyperbole, a persistent informational lacuna hinders both the description and the analysis of what occurs in liberal arts departments. No common benchmarks have been established for systematically tracking either changes in the liberal arts curricula or the quality of undergraduate education for liberal arts majors. Nor are there comprehensive data to illuminate the adequacy of financing and staffing or the operating conditions for liberal arts departments in different campus settings (Hearn and Gorbunov 2005). Major exceptions to this barren landscape are data collection activities by the American Academy of Religion, the American Historical Association, the American Political Science Association, and the Modern Language Association—professional associations that obtain and disseminate information among their members about departments in their respective disciplines. Similarly, trend data obtained by the Coalition on the Academic Workforce is exemplary in this regard.¹

Aside from these visible initiatives, empirical data about the liberal arts in their varied institutional settings are lacking. Yet they are precisely what are

1. Established in 1997 out of concern about the rise in the proportion of part-time, adjunct, and temporary faculty, the Coalition on the Academic Workforce (CAW) is an effort now involving twenty-five learned societies in the humanities and social sciences. CAW collects data about faculty work conditions, particularly the use of part-time and temporary faculty members, to show implications of workforce changes for students, parents, faculty members, academic departments, and institutions and, more broadly, for the quality of higher education and the public good. CAW also promotes strategies to address the negative impact of using part-time and temporary faculty. It commissioned research published in 1999 on staffing arrangements in the humanities and social sciences, and it would be the most logical source for designing and implementing data collection efforts on faculty work conditions.

needed to ascertain with confidence what has actually been occurring and to move the discussion forward. Researchers need valid and reliable baseline data to determine trends within and across academic settings as well as to conduct comparative studies of liberal arts departments and disciplines at the national level. Campus leaders need data to inform their decisions about where to invest resources, when to allocate different types of faculty positions, and which academic subjects should become programs, departments, or some other organizational form. Moreover, researchers and institutional actors can use data to identify points of leverage for change, and then to determine whether interventions are resulting in the desired changes. Establishing indicators and collecting the corresponding data is consistent with recent calls for academic organizations to create “a culture of evidence,” where campus leaders and policy makers alike can use information about their practices to inform their decision making, and to improve the academic enterprise (Gumpert et al. 2002). Such efforts are especially critical on campuses where the liberal arts are considered the core of the undergraduate educational experience, where it will be prudent as well as timely to replace myths, rumors, and hearsay with data for systematic and comprehensive inquiry.

While there are many potential benefits that could come from longitudinal, comparative data on the liberal arts, it is imperative to consider some inherent challenges and pitfalls to this undertaking. Several issues should make us cautious when it comes to establishing indicators for the liberal arts.

Issues of feasibility are of great magnitude. To define and collect data in a comparable format has formidable technical, political, and financial considerations. The essential first step is to obtain consensus on what should be measured and what are the appropriate measures. This entails making a case based on the need for information to address pressing issues. Our essay is intended to be a first step in that direction. Beyond that, consensus would next be required on data definitions. Presumably those definitions would be incorporated into data collection instruments, so as to ensure accuracy and consistency in data collected across sites and over time. The cooperation of higher education institutions would be critical; and it must be noted that there are already tremendous demands on them to collect and report data on their operations. Aside from the accretion of demands on staff time, there are internal organizational obstacles to collecting departmental data, including structural obstacles in the way information systems are organized, inaccuracies in reporting that stem from highly decentralized practices, and resistance from the academic units themselves in some settings.² Financial resources would be required for each of the above steps, in addition to consensus on a system for storing and retrieving the data in a way that protects its integrity and permits public access.

Even if it is feasible to gather this comparative information on the liberal arts, it is essential to consider on what grounds it is a justifiable pursuit and

2. The University of California, Berkeley, stands out as a pioneer in collecting departmental data and using the information in planning and budgeting deliberations at the school and college level as well as for the campus as a whole. Established in the 1990s as static academic unit profiles and later refined as an interactive web-based information system with data on administrative, research, and academic units, Cal Profiles can be updated by the units themselves and is accessible to the campus community for comparative analysis over time and across units.

how the data are likely to be used. We have well-intentioned descriptive purposes at this stage of building a foundation for data collection, yet future intentions and uses are unknown. The potential perils of establishing liberal arts indicators range from difficulties with validity to unintended consequences from accountability-driven assessment.

Regarding validity of data, the virtue of their parsimony could be outweighed by the failure to capture the complexity of educational practices in the liberal arts. At one level, the measures may simply not capture what they are intended to. At another level, the aggregated data may not lead to meaningful comparison across academic units in the same discipline, let alone across disciplines. Faculty in liberal arts departments may be concerned that the data encourage reductionism in conceiving of the flow of people and resources in their work. Indicators make visible only those features of departments that can be quantified, that promulgate a standardized view of departmental operations. Neither aligns well with the spirit of liberal arts educators who would argue that such measures do not depict the meaningful characteristics of their departments, including many intangible features that support diverse educational practices, unexpected synergies, and serendipitous pedagogical opportunities. The point here is that the best of intentions to describe key features of departmental conditions necessarily generate an incomplete, and possibly misleading, view of organizational realities.

A second set of difficulties is that data used for descriptive purposes can be subsequently used for evaluative judgments. This concern focuses on the ways in which information on, for example, student-faculty ratios, time to degree, or degrees awarded exacerbates the vulnerability of liberal arts departments. This has occurred when departments have undertaken self-studies and produced candid portraits of their strengths and weaknesses, only to have the findings used against them. Self-studies conducted in the spirit of improvement have later been used to justify budget cuts and program consolidation rather than to augment departmental resources that would help strengthen them. A related problem occurs when what is measured becomes equated with what is valued in the organization, for example, counting student credit hours per faculty as an indicator of faculty workload or departmental productivity. At a basic level, such a standard measure sends a message to faculty about a desirable target and in the process obscures the organization's interest in the quality of student-faculty interaction. With or without noting the strong legacy of seminar-style courses in the liberal arts, faculty teaching seminars may be cast as not pulling their weight when compared to those who teach large lectures, even though the seminar may require more faculty time to prepare and to give feedback on student writing. The result is that faculty could perceive their hard work as not reflected in the quantitative data. The same reasoning holds for time to degree data: as students take longer to complete their degrees, this may be a sign that faculty are working harder rather than being less productive. Collecting data on these dimensions has forced department chairs, deans, and faculty to be creative and strategic in their reporting of data.

A third and final set of considerations is that liberal arts indicators, and the ensuing data collection activities, may facilitate the expansion of accountability-

driven assessment. What we have learned from K–12 education is that information on inputs, resources, staffing, students, and so forth can be used as performance indicators unrelated to learning, and output indicators can be used to benchmark school performance. The output indicators can in turn reorient individual and organizational behaviors to the activities captured by the measures, as we have seen when teachers “teach to the test.” In this sense, the presence of the indicators has a distorting effect, displacing the focus from educational quality to the indicators themselves, an ironic byproduct of efforts to establish measures to improve educational quality. This could lead to some further long-term negative consequences. Shavelson and Huang (2003) note the risk of assessing learning in higher education: “[W]e need to be careful. We may in fact get what we measure. And we might not like what we get” (p. 19). In a climate of mixed sentiment about the desirability of assessment in higher education, we must consider that we may not like what we see, how the data are subsequently used, and how individual or organizational behaviors change as a result of it.

Thus, even if the obstacles to feasibility are overcome, establishing liberal arts indicators and concomitant data collection mechanisms could result in the anticipated benefits intended by the designers, but they could also result in unanticipated negative consequences. The case to proceed down this path rests on believing that the potential gain exceeds the risk. A compelling reason to do so is the demonstrated value emanating from the extensive national enterprise of collecting data on science and engineering. The latter has involved collecting longitudinal quantitative data on several major dimensions, with an eye toward informing policy makers and ultimately ensuring the strength of the nation’s international competitiveness. According to the letter of transmittal reporting data on 2002 (National Science Board 2002): “The Science Indicators series was designed to provide a broad base of quantitative information about U.S. science, engineering, and technology for use by public and private policy makers. Because of the spread of scientific and technological capabilities around the world, this report presents a significant amount of material about these international capabilities and analyzes the U.S. position in this broader context” (p. iv). While similar data on the liberal arts could be collected routinely, the additional prospective benefit, as we have seen in the Science and Engineering Indicators, is to develop a comprehensive and robust set of data for the liberal arts to inform strategic decision making and priority issues at the national level.

In order to begin to collect such useful data on the liberal arts, this essay lays the conceptual groundwork for developing indicators that, if sustained, would yield valuable longitudinal data on the conditions of the liberal arts in the twenty-first century. Our examination of relevant literature and existing data sources has led to several observations on the status of existing data that could be used for establishing liberal arts indicators.

- At the institutional and national level, the best longitudinal data across all disciplines are on degrees awarded.
- Some faculty salary data by discipline are also available. One example is the comprehensive National Study of Postsecondary Faculty, adminis-

tered by the National Center for Education Statistics in 1988, 1993, 1999, and 2004. This survey reports a wide variety of additional faculty variables that may be analyzed by teaching or research field. These data are gathered using a multiple-stage, systematic, and stratified sample of institutions and faculty. The results are weighted to provide estimated percentages of the population.

- At the institutional level, financial data are available, but they are not disaggregated by department when reported to the federal government. Department-level financial data are essential to understanding the condition of the liberal arts. While one might assert that reporting financial and operational data on departments should become routinized as standard institutional practice, many methodological, financial, and political factors obstruct such a process.
- Data on curriculum—whether course offerings, course requirements, or change over time in course content—are nonexistent except in selected case study sites and in studies for limited time periods. The main data source is course catalogs, which are problematic on several grounds. One is that they are quickly outdated. The other is that they only depict the formal curriculum, rather than the enacted (what is actually taught) or learned (what students take away from the classroom) curriculum. By adhering to already established course titles and descriptions, catalogs mask substantive changes that occur in course content and in the classroom. A number of catalog-based case studies of curricula are available (a notable one being the National Association of Scholars study of general education), but they are not ongoing studies conducive to longitudinal comparative analyses.
- Students' course-taking patterns and learning outcomes in the liberal arts departments are not tracked, with the exception of Adelman's 1992 transcript study, and Astin's ongoing Cooperative Institutional Research Program College Student Survey (available from UCLA's Higher Education Research Institute), which provides a more limited, self-reported account of students' educational experience. Kuh's National Survey of Student Engagement (NSSE, available from the Indiana University Center for Postsecondary Research and Planning) and the spin-off Community College Survey of Student Engagement (CCSSE) provide a wealth of data on learning outcomes and college impact, but they report generalized educational activities rather than course-based data or course-taking patterns.

Given this informational lacuna about the liberal arts, we identify certain steps to be followed, from determining baseline definitions to deciding which data best inform us about key issues. We have organized this essay accordingly. Part I explicates the need to define major parameters of the liberal arts. Part II identifies some pressing issues in the liberal arts, matters of central concern evident in the published literature. To address these issues, part III discusses

which indicators would be suitable measures with which to gauge the conditions of the liberal arts, the extent to which these measures already exist, and, where they do not exist, what new measures should be developed. We identify the different levels at which key data can be obtained and analyzed. Part IV offers a set of recommendations for investing in institutional data collection to enable longitudinal analysis of changes, particularly in four critical areas: student participation, the liberal arts curriculum, departmental resources, and staffing patterns. These first steps, while not purporting to resolve the alleged problems and crises in the liberal arts, should demonstrate what is entailed in building a foundation of data to advance our understanding of what is occurring and where attention is warranted.

DEFINING THE LIBERAL ARTS

The first step is to define the parameters—what is meant by the liberal arts. A foray into this terrain risks not only pitfalls of appearing arbitrary but, given the political climate, embedded minefields. Below we propose the parameters that define the liberal arts as a meaningful term for this undertaking, and we consider some distinctions among related terms.

Developing liberal arts indicators presupposes agreement on the phenomena to be measured. Historically, the concept of the liberal arts has been inextricably intermingled with liberal education, general education, and the missions of liberal arts colleges. To lay the groundwork for establishing indicators, we must ascertain what counts as liberal arts curricula, faculty, departments, and disciplines. Implicit in identifying these parameters is that some areas are included as liberal arts, while others by definition become “not liberal arts” or at least ancillary to them. The distinction has to be made in order to contrast what is going on in the liberal arts with other non-liberal arts areas, such as the professional schools. Still, delineating this particular boundary can be shortsighted. The principal critique is that professional schools have been known to incorporate liberal arts subjects or content in their undergraduate offerings. The failure to examine forms of liberal arts and liberal education in non-liberal arts departments and professional schools understates the importance of the liberal arts, as they flourish in myriad forms (Lewis and Liegler 1998; Stark 1987). Yet, determining what constitutes liberal arts content on a course-by-course basis would require even finer discrimination, risking even more extensive disagreement over the focus for establishing baseline liberal arts indicators.

In addition to making a distinction between liberal arts and non-liberal arts, we propose that the academic department be located in the foreground of our concerns, as the major organizing unit of colleges and universities. Departments are commonly regarded as the local manifestation of the disciplines, although there is no presumption of a direct one-to-one correspondence. Resources and faculty lines are allocated to departments, and academic programs tend to be housed in departments. Departmental boundaries have enormous structural and functional importance in academic organizations. Identifying departments that are foundational to the liberal arts will facilitate developing indicators that can be parsed on a discipline-by-discipline basis. Patterns of sim-

ilarity and difference may then be examined, of course noting the imperfect correspondence between disciplinary indicators and the formal organizational landscape of academic departments. We advise focusing initially on academic departments within arts and sciences colleges and schools.

For issues where departmental data are nonexistent and unlikely to be collected, we advise aggregating them in broad disciplinary groupings, such as the humanities, the social sciences, and the natural sciences. There is widespread acknowledgment that the conditions of these broad disciplinary domains vary within the liberal arts, with a concentration of resources and attention on the sciences. The United States, through the National Science Foundation, has already made a major investment in the sciences, not only in funding research but also, as mentioned earlier, in systematically collecting data on indicators for both engineering and the sciences, thereby signifying that these branches of knowledge are vital to the national interest. There is no comparable national investment in data collection on the humanities or the social sciences. Within the humanities, the American Historical Association has pioneered exemplary data collection activities in history departments in order to assess the state of affairs in the discipline. By contrast, little is known about most of the other fields in the humanities. Most discipline-specific commentary about the liberal arts that has been published can be read as concern about the marginalization of and lack of funding for the humanities and about the declining fortunes of specific humanities departments (Hearn and Gorbunov 2005; Kernan 1997; Solow et al. 2002). Less has been written about these conditions for the social sciences.³

The following list includes the disciplines that we define as within the liberal arts. While any disciplinary classification is arguable, for purposes of later comparing the liberal arts to non-liberal arts, it is not essential to determine whether history is considered a social science or among the humanities, or if fine arts are a separate category differentiated from the humanities. At this early stage, the important consideration is which disciplines fall within the purview of liberal arts disciplines. The categories are listed as follows:

Natural sciences:

- Astronomy
- Atmospheric sciences
- Biological sciences
- Chemistry
- Earth sciences
- Oceanography
- Physics
- Mathematics
- Statistics

3. See Gerstein et al. (1988) for useful albeit dated documentation, as well as Gumpert's account (2002).

Social sciences:

- Anthropology
- Area and ethnic studies
- Economics
- Political science
- Psychology
- Sociology

Humanities:

- Architecture
- English and literature
- Fine arts
- Foreign languages
- History
- Philosophy
- Religion and theology
- Interdisciplinary liberal arts studies

Note that we have included a category for interdisciplinary liberal arts because of the continued emergence of interdisciplinary programs and degrees.

At this early stage of defining the parameters of the liberal arts, we propose focusing on the development of indicators for undergraduate education. The rationale is that undergraduates and their educational experiences are central to many pressing issues—that is, the types of resources, activities, outcomes, and structures that define the prevailing organizational and educational contours of the liberal arts. This essay will demonstrate the dearth of data for the systematic study of undergraduate education, including several components of academic departments that are tracked institutionally, but not generally reported nationally. Indicators for graduate education will only be mentioned in this essay insofar as they are relevant to the preparation and socialization of future faculty in the liberal arts—for example, doctoral degree production.⁴ As a first step in considering liberal arts indicators, we have also set aside concern about the conditions of scholarship in the liberal arts disciplines, except insofar as those conditions affect teaching, course offerings, and staffing. The intellectual vitality of the disciplines—especially the humanities—has been taken up by others analyzing the forces that affect the advancement of knowledge in these areas (e.g., Graubard 1997*a*, 1997*b*; Kernan 1997). It has also been taken up in the sciences as the ebb and flow of research funding has affected specific

4. Readers interested in graduate education indicators should note that there is a robust longitudinal data set of doctoral degrees awarded, the National Science Foundation's Survey of Earned Doctorates, with complete data since 1957 and more limited data for 1920–56. Current information is available at <<http://www.nsf.gov/sbe/srs/ssed/>>. The Council of Graduate Schools makes data on graduate student participation available at its Virtual Center for Research, <<http://www.cgsnet.org/VirtualCenterResearch/index.htm/>>. See the work of the Preparing Future Faculty Program, a national initiative to broaden our conception of faculty work and roles beyond the research university model at <<http://www.preparing-faculty.org/>>. Also see the ongoing work of the Carnegie Foundation for the Advancement of Teaching's Initiative on the Doctorate that aims to improve discipline-specific preparation of graduate students as they train for faculty careers at <<http://www.carnegiefoundation.org/>>. For a thoughtful analysis of U.S. graduate education in cross-national perspective, see Clark (1995).

academic specializations. For example, the plight of theoretical physics in the 1990s—and more generally, physics departments and their faculty—has been examined (Wilms and Zell 2002). Researchers should examine the conditions that are required to sustain and advance knowledge in the liberal arts disciplines and delve into the question of what scale of institutional investment and activity would be sufficient to support a critical mass at the nation's leading universities. Delving into these questions is essential for considering how to maintain the vitality of the liberal arts, although it is beyond the scope of our immediate task of developing baseline data on educational and operational conditions in liberal arts departments.

Definitions of Related Terms. As suggested, one major impediment to establishing a common ground for measuring and studying the liberal arts is the lack of agreement as to what is denoted by the term. A number of related terms are often conflated or confused, and previous discussions of the liberal arts have inadvertently slid from one term to the other.

The American Association of Colleges and Universities (2002) in a report outlining its major initiative, entitled *Greater Expectations: A New Vision for Learning as a Nation Goes to College*, provides brief definitions that help distinguish among the most common terms. The terms follow.

Liberal Arts. Specific disciplines of the humanities, social sciences, and natural sciences. For this essay, we will emphasize tracking the conditions of the departments within each of these broad disciplinary domains.

Artes Liberales. The historical basis for the modern liberal arts: often referring to the basic categories of the quadrivium (arithmetic, geometry, astronomy, and music) and the trivium (grammar, logic, and rhetoric).

Liberal Arts Colleges. A particular institutional type—often small, often residential—that facilitates close interaction between faculty and students, while anchoring its curriculum in the liberal arts disciplines.

Liberal Education. A philosophy of education that empowers individuals, liberates the mind from ignorance, and cultivates civic responsibility. Characterized by challenging encounters with important issues—and connoting a distinctive set of goals and pedagogy rather than specifying content—liberal education can occur at all types of colleges and universities.⁵

5. Liberal education is a set of pedagogical practices and educational goals that transcend the liberal arts disciplines. Two characterizations are worth noting. According to Sullivan (2001): “Liberal education aims at human betterment, but in a distinctive way. Its mission is essentially pedagogical, toward shaping participants to join a public able to inquire, deliberate, and judge. In the larger sense, this is a mission to apply intellectual skills toward turning the de facto interdependence on which our lives depend into more conscious, and coherent, common purpose. On the individual level, liberal education promises the development of wide understanding and reflective discernment. Serious investigation of issues of identity and purpose, the traditional focal issues of liberal learning in all fields, opens up the world of learning by demonstrating that knowledge applies to life, and that inquiry can change the way life is lived. The disciplined pursuit of these issues is ultimately more than a benefit to individuals. It is a public good” (p. 6). In a similar spirit, Schneider (2003b) underscored liberal education’s unlimited reach in her president’s message: “Though liberal education has assumed many forms over time and place, it has always been concerned with broader educational aims: cultivating intellectual and ethical judgment, helping students comprehend and negotiate their relationship to the larger world, and preparing graduates for lives of civic responsibility and employment. On the merits, we might expect that liberal education would be the uncontested preference of virtually everyone who goes to college” (p. 2).

General Education. The part of a liberal education curriculum shared by all students. It provides broad exposure to multiple disciplines and forms the basis for developing important intellectual and civic capacities. It often is institutionalized as core requirements.

Among these definitions, for this essay, we are primarily concerned with the liberal arts, the disciplines within the humanities, social sciences, and natural sciences. The other terms, however, remain important to assessing the status and vitality of these disciplines in the aggregate as well as the variation among them. Hence they deserve further comment.

The health, birth, and death of liberal arts colleges, while problematic to measure, are indirect indicators of the strength of the liberal arts. Like many terms in the domain of the liberal arts, the label “liberal arts college” is a contested term. In the most widely used taxonomy to classify institutions of higher education, the *Carnegie Classification of Institutions of Higher Education*, baccalaureate colleges are now classified as “liberal arts,” “general,” or “associates” to distinguish the schools that grant at least half of their degrees in liberal arts disciplines from other bachelor’s degree-granting colleges (commonly referred to as liberal arts colleges; Carnegie Foundation for the Advancement of Teaching 2001). Other than the Carnegie Classification, definitions of liberal arts colleges tend to rely on setting a standard measured by the percentage of degrees granted in liberal arts disciplines (Breneman 1990; Carnegie Foundation for the Advancement of Teaching 2001; Gilbert 1995). Breneman (1990) used a standard of 40 percent of an institution’s degrees granted in liberal arts disciplines, while the current Carnegie standard to classify a baccalaureate institution as liberal arts is granting at least 50 percent of bachelor’s degrees in those disciplines. It is evident, then, that the condition of liberal arts colleges is an indicator of the condition of the liberal arts, but only by association. The problems suffered by many liberal arts colleges cannot be attributed solely to their liberal arts departments. The closing of liberal arts colleges is a result of many other factors, including the high costs of education at small private colleges. Both Breneman (1990) and Gilbert (1995) demonstrate a decline in the number of liberal arts colleges over the past several decades, but indicate that the actual number, at any point in time, is not stable as it depends highly on the definitions of liberal arts colleges and liberal arts degrees used in the counting. Using the various labels for top-rank liberal arts colleges over the years (Liberal Arts I, Baccalaureate I, Baccalaureate-Liberal Arts), the number of colleges in the Carnegie Classification declined in the 1970s and 1980s but increased in the 1990s. The changing definition of the category, again, makes it difficult to interpret the changing numbers. In 1973, 146 colleges were classified in the top rank and represented 5.1 percent of all institutions. The number declined to 123 (4.0 percent) in 1976, rose to 142 (4.2 percent) in 1987, then 165 (4.6 percent) in 1994, and finally, 228 (5.8 percent) in the most recent 2000 classification.

Liberal arts courses figure largely among the offerings in college and university core curricula. Examining general education as well as data that measure and describe general and core curricula is essential to evaluating the condition of the liberal arts. The breadth, depth, and structure of general education on any given campus can be seen as reflecting the condition of the liberal arts

(Balch and Zurcher 1996; Massy and Zemsky 1994). Changes in general education requirements affect liberal arts departments because of predictable increases or decreases in student credit hours (but not majors).

When questions about general education arise, especially those related to quality and to content, the term “liberal education” takes on great importance. Confounding the definitional issues, there is little agreement on what constitutes a genuine liberal education (Bell 1966; Bloom 1987; Carnochan 1993; Glyer and Weeks 1998; Levine 1996). In his thoughtful history of the development and changes in liberal education, Rothblatt (2003) identifies its historical purposes as character formation, leadership, breadth, personality development, critical thinking, and general education. It is clear that those purposes are not only the domain of the liberal arts disciplines, and that they could be accomplished by education in other disciplines. General education, liberal education, and the liberal arts disciplines are bound together in this way. The philosophy and purposes of liberal education are used as a guide for creating general education goals and requirements. General education courses are most often courses taught by departments in the liberal arts disciplines. Faculty in liberal arts departments use the pedagogical methods of liberal education to accomplish the goals of general education. Organizational arrangements, purposes, and goals, however, vary from campus to campus and on any given campus over time.

The content and practice of general education and liberal education are, of course, of great import to the quality of undergraduate education. In fact, several significant efforts are presently underway to address the quality of undergraduate education, particularly by the Carnegie Foundation for the Advancement of Teaching and the American Association for Higher Education. Major reports have been directed at these questions, notably the Boyer Commission’s *Reinventing Undergraduate Education: A Blueprint for America’s Research Universities* (1998), and the Association of American Colleges and Universities’ *Greater Expectations: A New Vision for Learning as a Nation Goes to College* (2002). Following the establishment of effective indicators of liberal arts departmental activities, resources, faculty work conditions, and curricula in their respective departments, it will also be essential to build on the work of others to develop measures of how liberal arts departments advance the quality of undergraduate education. The goals of undergraduate education reformers are quite consistent with those of the liberal arts, grounded as they often are in the idea of strengthening liberal arts disciplines and liberal education practices.

While these terms are unquestionably linked to understanding how the liberal arts are faring on today’s campuses, the project to develop indicators must focus first on the major liberal arts disciplines and their primary institutional form—the academic department. While disciplines reflect bundles of ideas and professional affiliations that transcend institutional boundaries, it is the academic department that historically has served as the local home for the curriculum, students, and faculty engaged in a specific set of disciplinary pursuits. Moreover, resources are allocated to departments, including space, funding, and equipment. Of all the resources, tenure-line faculty positions are the most valued. The levels of these resources from one department to the next are im-

portant indicators of how different areas of knowledge are supported and valued on a campus (Gumport 1993; Hearn and Gorbunov 2005). Furthermore, a department's resources determine whether it has a critical mass, with a core group of faculty (and in a research university, doctoral students), a sufficient base of resources, and an infrastructure to keep pace with rapid changes that occur—for example, in technology—for gathering and communicating information about its admissions, programs, policies, and procedures. A viable academic department must also have the means to keep current with disciplinary knowledge, which is why departments need effective leaders to make the case for hiring new faculty when vacancies occur and when they need to expand. Obtaining additional faculty lines signals the institution's ongoing commitment to the department, hence its sustainability. In contrast, a proposal to target a department for consolidation threatens the department's identity as well as its autonomy. In a different light, the prospect of collaborating with one or more departments to launch an interdisciplinary course or program can be a sign of instructional and intellectual vitality in the subject matter and among the faculty. These categories often signify emerging fields and thus have some inherent dynamism, which confounds efforts to track changes over time.

The intrinsic complexity in this terrain is at once frustrating and fascinating, and perhaps it is best suited for those with expertise on taxonomies. Nonetheless, the terrain must be covered and acceptable tradeoffs determined in order to define the parameters for what constitute the liberal arts as opposed to non-liberal arts as well as appropriate categories of disciplines and departments within the liberal arts.

SOME PRESSING ISSUES

Working within the parameters set out in part I, we proceed with a rationale for developing indicators at the department level in the liberal arts disciplines within the humanities, social sciences, and natural sciences. A number of pressing issues come to the fore for the liberal arts, and the indicators proposed in this essay are anchored in these issues within liberal arts departments and disciplines.

We identify four clusters of issues that could benefit from indicators and subsequent data collection activities: (a) enrollments, degrees, and majors in the student pipeline; (b) the rigor and quality of the curriculum; (c) the state of liberal arts departments, their finances and status; and (d) the adequacy of faculty staffing. We then point out some existing knowledge about each issue and the conditions that have shaped them. (In part III we explore what data are available, what data could be collected, and what are the potential uses.)

The Student Pipeline

A major set of concerns focuses on the student pipeline, especially the flow of undergraduates. Even though overall enrollments in higher education have increased, the question remains whether the liberal arts have seen a proportional increase or decrease in student enrollments and majors. Also, on many campuses the increased popularity and institutionalization of interdisciplinar-

ity has been palpable since the early 1970s, yet it is not clear what is known about those enrollments and degrees awarded.

Issue 1: Are fewer students enrolling in liberal arts courses?

Issue 2: Are fewer students majoring in liberal arts disciplines?

Issue 3: Are interdisciplinary enrollments and degrees awarded in the liberal arts increasing or declining?

Enrollments and Degrees. Educators have expressed concern that liberal arts enrollments are not keeping pace with the steady increase in national higher education enrollment levels. Enrollment data for undergraduates by field of study—even those provided by the national government—is not self-evident. The *Digest of Education Statistics* (National Center for Education Statistics 2002) reports undergraduate enrollment by field of study, estimated from the data gathered in the National Postsecondary Student Aid Study (NPSAS) from 1986 until the present. It does not aggregate liberal arts enrollments; and even though it does list many subfields, the field categories are not consistent. For example, architecture (often viewed as within the liberal arts, but sometimes not) is listed separately in 1993 but is aggregated with city planning (never considered among the liberal arts) in 2000. The number of students enrolled in architecture is small, however, accounting for about 0.7 percent of all degrees, and their inclusion or omission will not heavily impact the analysis of the liberal arts.

During 1986–1987, the earliest year for which NPSAS data are available, 4.9 percent of undergraduates majored in science/math, 13.8 percent in social sciences/humanities, and 6.6 percent in general studies, providing a very approximate estimate of 25.3 percent majoring in liberal arts fields. Using these rough estimates, it appears that percentage enrollments in liberal arts fields decreased to 22 percent of all fields in the academic year 1993, and then increased to 27 percent in 2000.

Despite this recent growth in liberal arts majors and enrollment in liberal arts fields,⁶ degrees awarded in the liberal arts have declined relative to other disciplines. This discrepancy indicates that enrollment does not necessarily lead to degree completion. That is, using enrollment as an indicator of the condition of the liberal arts may present a more positive picture than data on degrees granted.

During the years 1970–2000, bachelor's degrees granted for all degree-granting institutions increased at an annual rate of just under 2 percent (National Center for Education Statistics 2002). For the same period, degrees granted in liberal arts fields increased at about 0.5 percent annually, while degrees granted in non-liberal arts fields increased at an annual rate of nearly 2 percent.

Many speculate about declines in liberal arts disciplines and departments, attributing them to increased student interest in vocational and professional fields (Adelman 1992; Brint 2002b; Scott 1990). Delucchi (1997) shows that even for colleges self-identified as liberal arts in the *Peterson's Annual Guide to Undergraduate Education*, students' majors are dominated by vocational fields.

6. This is not the same measure as course enrollments mentioned later.

Paulsen (1990) comments, “Back in 1984, we passed the point at which 50 percent of our nation’s undergraduates had chosen to major in vocational or occupational fields rather than in traditional liberal arts and sciences disciplines. This is a disturbing statistic for anyone who believes that a generous portion of undergraduate education should consist of general or liberal education” (p. 2). On the one hand, this quotation captures the concern that fewer are enrolling or majoring in liberal arts fields, and that instead students are opting for more practical majors and degrees with short-term instrumental value. On the other hand, other scholars suggest that the liberal arts would be better off adapting to this trend by integrating liberal arts goals and instruction with those of vocational and preprofessional programs (Baumann 1987; Lewis and Liegler 1998; Stark 1987).

Concerns about enrollments are also evident in a few studies on the share of degrees granted in the liberal arts. It is clear that, since the peak year of 1970, the percentage of all bachelor’s degrees granted in liberal arts fields has declined. However, studies reaching further back, into the 1950s, illustrate the value of examining longer time periods. Brint (2002*b*) provides data showing the relative growth, stability, and decline in liberal arts degrees and the rise of “practical” degrees, but his data begin in 1970. Gilbert (1995), analyzing a longer time period beginning in 1956, shows a substantial increase during the years 1956–1970 in the percentage of degrees awarded in the liberal arts, followed by a substantial decrease during 1970–1984, and then a more gradual decrease during 1985–1990. The liberal arts share of all degrees was about 40 percent in 1956, 50 percent in 1970, and 33 percent in 1990. A rough calculation shows that in 2001, about 39 percent of degrees granted were in liberal arts fields, not far below the 1956 number. Gilbert (1995) states: “Because 1970 was the high point of a bulge that constituted an anomaly in the century-long pattern of decline in the liberal arts, the data for that year do not provide an appropriate standard against which to judge recent experience” (p. 40). Turner and Bowen (1990) report similar results for the years 1954–1986.

When the numbers are disaggregated by institutional type, Gilbert (1995) further shows that the percentage of liberal arts degrees granted at selective liberal arts institutions remained steady, but for prestigious research institutions, it increased strongly. Scott (1990) corroborates that “elite colleges,” both liberal arts colleges and undergraduate colleges in prestigious research universities, are perhaps the “Last Bastions of the Liberal Arts?” (p. 28). In all other less prestigious types of institutions, the percentage declined.

To summarize, the liberal arts have seen a long historical decline in relative enrollments and degrees granted at the baccalaureate level. In 1890, liberal arts degrees were about 75 percent of all degrees awarded. The expansion of many new vocational or professional fields, and increased interest in them, has resulted in a proportional decline in the liberal arts. The apparent severity of the decline, however, depends greatly on the time period chosen. The implications warrant consideration as well, particularly in terms of ensuring that talented students are considering graduate education and academic careers in liberal arts disciplines.

Massification. One commonly cited cause for the relative decline in the liberal arts is the massification of higher education, a term used to designate the nature and consequences of expanding enrollments, particularly during the 1960s, and the emergence of large, complex public higher education institutions and systems. In a thesis depicting a long historical process of moving from “elite” to “mass” higher education, Trow (1970) explained how increased participation rates in society changed views about access to higher education, that higher education shifted from a privilege to a right, to—essentially—an obligation. Campuses became populated by students who had highly divergent needs, including many who lacked genuine academic ambition and achievement. Trow theorized that increased participation rates in turn transformed higher education’s functions from autonomous to popular, the latter signaling (among other things) the presumption that higher education respond more directly to society’s changing needs.

Trow’s characterization proved to be correct in subsequent decades; increasing access and participation brought new generations of student consumers with shorter-term vocational interests, including credentials rather than degrees. Student interests moved away from the liberal arts and toward vocational or preprofessional programs. To expand the provision of higher education, colleges and universities responded to shifts in demand by adjusting their academic offerings, allowing for part-time enrollments, developing technological solutions like distance education and automated learning, and simply creating larger classes taught by teaching assistants and non-tenure-line faculty. Observers have been concerned that these changes have had a de facto negative effect on liberal education, which was traditionally practiced in small classes with extensive interaction between faculty and students. Of course, liberal education is not the liberal arts—it is a pedagogy—but it is highly linked to the liberal arts in the general education or the core curriculum, as we have already discussed. But to many observers, it seemed inevitable that massification would precipitate a marked decline in the viability and quality of liberal education, along with a decline in student interest in the liberal arts.

This contention is arguable, as it has not been demonstrated that massification of higher education produces declines in the liberal arts across all institutional settings. First of all, it is clearly a choice—educational and economic, political and moral as well, some would argue—whether or not to provide the same high quality liberal arts education in public institutions as is offered by private colleges and prestigious universities. The institutional drive for revenue does compound the pressure on all types of institutions to alter courses and programs to accommodate shifts in student demand; yet the nature of the institutional response and lag time varies considerably. Second, even as massification has occurred as a national phenomenon, the liberal arts have maintained their strength in the most elite institutions (Gilbert 1995; Turner and Bowen 1990), which include both private colleges and research universities, many of which are large or public institutions or both. Thus, massification could be seen as influencing, but not causing, a change in the condition of the liberal arts or a de facto decline in educational quality.

Interdisciplinarity. Knowledge advancements in the last twenty-five years have accelerated specialization within the liberal arts disciplines. While these advancements have defined new lines of inquiry, with collaboration across fields, some observers note that faculty spend more time working in narrow, specialized tunnels, which results in faculty having more contact with colleagues at other campuses rather than in their own departments (Balch and Zurcher 1996; Scott 1990). The implications for educational practices in the liberal arts warrant some consideration, and we can only speculate as to the dynamics at work. Less contact among faculty members within and between departments could lead to fragmentation that would be detrimental to liberal education and humanities education, as they have historically been predicated on the cooperation of liberal arts departments, with a pedagogy that crosses disciplinary boundaries to treat subjects in a more holistic way (Lenning and Ebbers 1999; Sorum 1999). Interdisciplinarity could mitigate this in local settings where there is collaboration in teaching and research. With advances in knowledge, interdisciplinary courses, programs, and majors have been the primary institutional solution for adapting to rapid change, to offer students cutting-edge curricula without making fixed investments in tenure-line faculty positions and establishing additional departmental infrastructure (Gumport and Snyderman 2002). Yet, even as interdisciplinarity may reflect unprecedented lines of cooperation, increases in scholarly specializations could have the opposite effect, an unwillingness to cover introductory general education requirements, or a diminished sense of solidarity to promote and preserve the liberal arts on their campuses.

Furthermore, data are even more difficult to secure for interdisciplinary enrollments and degrees than for conventional academic programs that reflect long-existing categories. Often, interdisciplinary resources are disaggregated and attributed to constituent departments. Specific departments are where faculty are appointed and budgets allocated; from there, faculty get approval to teach courses that are cross-listed with interdisciplinary programs. Since few programs have full departmental status, it can be more difficult to track data on course enrollments, majors, and degrees awarded at either institutional or national levels. In major national databases, enrollments and degrees are attributed to “interdisciplinary and other,” or “interdisciplinary science” categories, in a very inconsistent way. The broad and inconsistent categorization and reporting generate little confidence that interdisciplinary education in the liberal arts is being adequately captured in available data.

The Rigor and Quality of the Liberal Arts Curriculum

Issue 4: Are liberal arts courses declining in number?

Issue 5: Are liberal arts course requirements declining in number?

Issue 6: Has the content and rigor of liberal arts courses changed to accommodate the need for basic writing instruction, both to provide remedial (basic skills) training and to accommodate the vocational needs of nonmajors?

Issue 7: Given that a large number of courses offered via distance learning technology are in the liberal arts, are these courses of comparable quality to traditionally offered courses?

Issue 8: What is known about student learning outcomes? Are students gaining skills in the liberal arts, in reasoning, critical thinking, expository writing, generalization, synthesis, tolerance, and so on? Are students prepared to be engaged and knowledgeable citizens?

Courses. Are liberal arts courses declining in number? This question and its implications have been confounded by the increased specialization of disciplinary knowledge and by perceptions of a resulting fracturing of disciplines into many subdisciplines. Each new specialization does give rise to new courses, yet this is only one part of the picture. The National Association of Scholars' (NAS) historical review of general education in fifty institutions illustrates the problem with this indicator (Balch and Zurcher 1996). In 1914, the average number of courses per institution was 304. The average was 537 per institution in 1939, 739 in 1964, and 1,418 in 1993. Yet the number of courses is a weak indicator of the condition of the liberal arts, because it is a constantly expanding number that can be seen as a measure of knowledge change within disciplines rather than an indicator of institutional commitment to particular areas of knowledge. Similar studies that count courses have been conducted (Blackburn et al. 1976; Toombs, Amey, and Chen 1991). However, for none of these was the goal comprehensive course counts; they were aimed instead at understanding general education requirements.

The primary method for counting courses is to scan course catalogs for each institution; this was the basis for the NAS case studies. Catalogs are notoriously weak indicators of courses offered in any given year, as campuses often keep more courses "on the books" than are actually taught. Course counts also do not reflect the magnitude of student participation; for example, they treat small seminars the same as large lecture courses. Data on course taking and size of enrollments are available on an institution-by-institution basis, but no national studies aggregate the data to report course taking by discipline or type of institution.

Requirements. Critics interested in the health of the liberal arts express concern about maintaining the place of the liberal arts within the core curriculum (Kernan 1997; Scott 1990). Conflict over the core curriculum and general education is not just a contemporary phenomenon. Carnochan (1993) amply illustrates the historical conflict over the content and structure of general education in *The Battleground of the Curriculum*. Major reform efforts, like Harvard University's *General Education in a Free Society* and the University of Chicago's *The Idea and Practice of General Education*, have considered restructuring general education to offer different content through different structures (Glyer and Weeks 1998).

Much contemporary concern about the condition of the liberal arts has been expressed in studies of general education and general education requirements. These also frequently take the form of historical studies of course cata-

logs. Blackburn et al. (1976) sampled more than 200 colleges and studied course requirements over a seven-year period and found decreases in the percentage of colleges requiring English, math, and foreign language courses (Bastedo 2000).⁷ Toombs, Amey, and Chen (1991) studied 652 catalogs for the academic year 1989, and after comparing the data to 1974 requirements, found an increase in required general education courses. Balch and Zurcher (1996), in *The Dissolution of General Education: 1914–1993* (p. 5), found that “the proportion of the undergraduate curriculum devoted to general education in 1993 was only three-fifths of what it had been in 1914.” The ratios refer to the “average percentage of the graduation requirement comprised by general education requirements.” In their study, this finding holds in spite of large increases in the number of courses offered in humanities, social sciences, mathematics, and natural sciences.

Adelman (1992) took a much more difficult and detailed look at student course taking using data from the National Longitudinal Study of High School Seniors in 1972. The study followed the educational careers of a sample of students graduating from high school in 1972. He found that students took little general education coursework in the liberal arts. Twenty-six percent of bachelor’s degree recipients never earned a college credit in history, 40 percent never earned a credit in English or American literature, and 58 percent did not earn credit in any foreign language.

That general education requirements exist does not necessarily insure that the liberal arts are part of students’ learning experiences. This comports with the NAS study’s finding of a decline in requirements for courses in liberal arts fields. Adelman (1992) distinguishes the educational experience of students at elite colleges and universities from the common experience of students in the United States. He says that “The curriculum of students at elite colleges (3% of all bachelor’s degrees in the National Longitudinal Study of High School Seniors in 1972) is so different from that followed by the other 97% that it is irrelevant to discussion of the diffusion of cultural information” (p. vi). Of bachelor’s degree students at “highly selective” institutions, 81 percent majored in physical sciences, math and computer sciences, life sciences, humanities, arts, and social sciences. At “selective” institutions the number was 55 percent, and at “not selective” ones, 38 percent (Adelman 1992, p. 46). It is important to remember that the number of majors is a markedly different measure from course-taking patterns.

Content and Rigor. The notion of what constitutes an appropriate and sufficient education is, of course, an arguable construct and has been at the center of numerous reform movements (Botstein 1990; Glyer and Weeks 1998). Some critics have attributed what they see as a decline in rigor to faculty’s growing enthusiasm for relativism and their own specialized academic interests as displacing all-important convictions about what constitutes a proper “education” (Balch and Zurcher 1996; Bloom 1987). Others argue that such principles of openness and mutability are precisely what define high quality liberal education (Carnochan 1993; Connor 1998). A number of observers are concerned that increased needs for remediation among entering college freshmen signal a declin-

7. Some material on course requirements reported here relies on Bastedo (2000).

ing quality of higher education, although remediation upon entry reveals inadequate academic preparation from high school (Gumpert and Bastedo 2001).

Claims that curricular quality has eroded often manifest in two arguments, one about the erosion of structure and the other about the lack of skills. In terms of structure, there is widespread agreement that good education is thoughtfully structured, with prerequisites and required courses leading to acquiring a body of knowledge; as these things erode, so does quality (Balch and Zurcher 1996; Massy and Zemsky 1994). The major study tracing declining rigor and quality, conducted by NAS, illustrates how the “structuralists” measure quality (Balch and Zurcher 1996). Its variables include the number of required courses, when required courses must be completed, the number of courses with prerequisites, and what courses are required (with special attention to the liberal arts—in math, foreign languages, history, philosophy, and natural science). Unlike Massy and Zemsky (1994), who focused solely on structure, sequence, and number, the NAS study also examined course content and activities: Does required math instruction include calculus? Are laboratories required in science? Are theses required? In terms of skills, educated people should be able to exhibit a set of skills (critical thinking, presenting an argument, civic engagement, etc.), such as a liberal education purports to accomplish; the absence of these skills sparks concern about quality of the curriculum (Schneider 2003a; Scott 1990). Skills development is much more difficult to measure, but both the National Survey of Student Engagement developed by George Kuh of the Indiana University Center for Postsecondary Research and Planning and the Higher Education Research Institute’s College Student Survey by Alexander Astin at UCLA attempt to measure the quality of the student learning experience by asking students to report their learning activities and skill development (indirectly, by measuring attitudes or experiences). These two surveys do not directly analyze courses, but they do identify students by their disciplinary major.

Further concern about curricular quality has been expressed with the proliferation of electronic course offerings. This strategy for “distributing” education to place-bound or underserved populations through “distance learning” has been touted both as a cost-saving measure and as a way of democratizing the provision of education. Many observers are concerned about the quality of both content and instruction, although it has not been substantiated by good research. Only a few studies comparing traditional courses to electronically provided ones have been conducted, and Phipps and Merisotis (1999) conclude that the findings tell us little about the relative merits of the different methods of delivery.

Empirical indicators of course quality are difficult to locate, although interest in developing them has been galvanized by the assessment movement that has gained momentum since the 1980s. Its initial purposes were to hold institutions accountable as a way of justifying to the public the higher education allocations made by state legislatures. As it developed, a number of people interested in educational quality promoted “authentic assessment,” which was more for the purpose of evaluating student gains in learning than for accountability. The American Association for Higher Education spearheaded assessment as a positive tool for promoting higher education, by illustrating its re-

sponsiveness to public concerns. Most assessment mandates left the design of assessment efforts to the discretion of the institutions, and within institutions, to individual departments. Few ventured beyond using standardized tests (e.g., GRE area tests) to measure learning in their disciplines. Researchers with the National Center for Postsecondary Improvement report that, as of the mid 1990s, there was little progress in developing satisfactory assessment systems in the states (Nettles and Cole 1999), a mix of organizational initiatives on different types of campuses (Peterson, Vaughan, and Perorazio 2002), and a general absence of effective measures of student learning (Dey, Hurtado, and Associates 1997).

If they show positive results, indicators of student learning outcomes could strengthen perceptions of and support for the liberal arts. The liberal arts have long been considered the core of college and university curricula—what educated people should know—although, as noted earlier, there is widespread disagreement on what the liberal arts curriculum should include. Effective measures of student learning in the liberal arts are still under development, and for now researchers can most readily examine numbers of courses, structures of curricula, learning activities, and attitudes of students. Despite the lack of good indicators, the liberal arts continue to thrive, although more so in some settings than others. (If one is interested in examining this variation systematically, we need to develop empirical anchors for determining the relative position of liberal arts as core vs. periphery in different institutional settings.) Studying the nature of the curriculum, its structure, its depth and breadth, and its requirements is essential to understanding the condition of the liberal arts. Much of the ongoing concern about these topics is evident in discussions about a core undergraduate curriculum and general education requirements.

The State of Liberal Arts Departments: Their Budgets and Status on Campus

- Issue 9: Are liberal arts department budgets shrinking or growing?
- Issue 10: Do liberal arts departments have the resources, technology, funding, and personnel to keep pace with rapid changes in disciplinary knowledge?
- Issue 11: Does the “new entrepreneurialism” disadvantage liberal arts departments that cannot generate revenue in addition to tuition? Is there a danger of losing long existing areas, like classics or less-practiced foreign languages, when restructuring occurs? Are some liberal arts departments more vulnerable targets for consolidation or elimination than others, and what are the consequences of restructuring?
- Issue 12: What is the disciplinary background of campus leaders (e.g., presidents, provosts, deans) across institutional types? Is there evidence of a decline in leaders coming from the humanities and social sciences relative to an increase in people with backgrounds in sciences, engineering, and business?

Organizational Responses to Financial Pressures. For public campuses in general, state revenue constitutes a smaller proportion of total revenue, as revenue from nonstate, especially private, sources has increased. Campus leaders at all levels have been spending more time in fundraising activities, while faculty have been encouraged to obtain additional external funding for their research, whether as grants or as collaborative initiatives with private companies. There is some concern that these activities draw attention away from teaching students, especially undergraduates. There is also concern that prioritizing the search for external funding and rewarding faculty who are most successful have cumulatively altered who and what is most valued on campuses. One manifestation is a change in how departments and disciplines are regarded. It is now presumed that departments or disciplines generating revenue are valued more highly than those that do not (Engell and Dangerfield 1998; Gumpert and Pusser 1999). Within the liberal arts, the natural sciences are most likely to generate external funds for research, the social sciences less so, and the humanities even less. Private donations from individuals and for-profit companies tend to be larger for the sciences than for other fields. The greater magnitude and visibility of that funding is in part tied to the greater need by these cost-intensive fields, as they call for renewed investment to maintain the infrastructure, as facilities and equipment become obsolete in light of advancements in knowledge and technology.

Changes in the conditions of academic fields are also prompted by the broader climate beyond the academy, which currently emphasizes competition and adaptation to market forces over egalitarianism and staying the course regardless of changes in the marketplace. Engell and Dangerfield (1998) offer a compelling description of how the dominance of market-model thinking is problematic for the humanities, and by extension the liberal arts. On campuses, internal strain has been exacerbated when departments compete for resources, when a concentration of capital is permitted to remain within academic units, and when parsimonious measures of productivity are used to evaluate and reward departments. There is also concern that performance-based paradigms and market-oriented decision-making practices have proliferated with the increased managerial authority of academic administrators and faculty abdication of local responsibilities, as an increasing number of “star faculty” are recruited to enhance the national and international reputation of universities. Speculations abound that this climate has a cumulative negative effect on liberal arts departments, especially those without appeal or proximity to lucrative markets.

Financial resources must be examined to determine the relative health of academic departments. Budgets represent material and symbolic commitments by a campus to particular areas of knowledge (Gumpert 1993). When resources are scarce, those commitments are brought into relief by strategic decisions to eliminate or retain programs (Gumpert 2000). Gumpert’s research on restructuring and academic program reduction is grounded in in-depth historical case studies. Unfortunately, department-level financial data are difficult to obtain; and national databases with data on academic expenditures and revenues do not disaggregate to the department level. Hearn and Gorbunov (2005) review the available information on financial contexts of academic departments in the

humanities; their essay clearly illustrates the elusiveness of departmental data available and the ways in which that gap hinders our understanding of what is happening in the humanities.

The most consistent and comprehensive indicator of financial conditions by field is faculty salary data, which can be examined by discipline and institutional type over time. Such organizations as the American Association of University Professors and the College and University Professional Association for Human Resources are among those who have reported and interpreted these data. While salaries are a significant portion of departmental budgets, they are only a limited proxy for the general condition of liberal arts departments and their prospects for future vitality. To complete the picture, we need data on funding patterns to cover fixed costs as well as discretionary expenses such as travel and equipment; facilities and infrastructure (including library resources); faculty appointments by rank and employment status (tenure-line or not, and full- or part-time); resources for graduate education (size of cohorts and support for them); and teaching responsibilities and release time, to name a few. In the context of financial constraints on a campus, the threat of consolidation and elimination can figure prominently in the subjective experiences of faculty, students, and staff. Thus there is an interplay between material resources and the morale of people who make the department their academic home.

It is a challenge to determine the relative financial conditions for broad disciplinary domains—humanities, social sciences, or natural sciences. As Hearn and Gorbunov (2005) show, disinvestment in the humanities has been of greater concern than in the other two areas. In contrast, the natural sciences have received extensive funding by federal agencies; as this funding is allocated for academic research, the departments are able to accrue resources from grants, contracts, and opportunities to commercialize research (while the campuses are in part compensated by indirect cost recovery). Even within the natural sciences domain, however, differences can be observed among specialized fields. Organismal biologists, for example, have been faring less well than molecular biologists. For the most part, trends in the conditions of the natural sciences can be examined because they are included in the national Science and Engineering Indicators. The absence of such a comprehensive, longitudinal database for the humanities and the social sciences results in little knowledge about relative investments in these fields at any point in time, let alone over time. This is one reason that local knowledge and anecdotal experiences tend to dominate the discussions.

The Adequacy of the Faculty Staffing

Issue 13: Are there fewer full-time, tenure-line liberal arts faculty positions?

Issue 14: Are staffing patterns negatively affecting some liberal arts departments more than others?

Hiring patterns and working conditions have been changing significantly for faculty members over the past few decades. “Off-track” full-time faculty now

constitute approximately half of new hires nationally, and the proportion of part-time faculty has steadily grown. The palpability of a broader change is evident in the titles of Schuster (1995), *Whither the Faculty? The Changing Academic Labor Market*, and Finkelstein, Seal, and Schuster (1998), *The New Academic Generation: A Profession in Transformation*; both books describe and reflect on the nature and implications of these changes. New employment conditions offer less job security; part-time and adjunct faculty have less time to teach and advise, and often they are not rewarded for those activities. In fact, adjunct faculty are commonly asked neither to participate in governance nor to provide advising to students. These developments may have been driven by institutional attempts to enhance cost savings and flexibility by reducing fixed costs. Anderson (2002) attributes these patterns to additional institutional interests—maintaining small class size and gaining the benefit of experienced practitioner-instructors—as well as to fluctuations in state support, technological advances, and student markets. Critical concern over the results of these changes have recently focused on exploitation of the faculty and inequitable pay for part-timers (Anderson 2002; Smallwood 2003).

To examine how these trends unfold across the liberal arts disciplines and locally on campuses in liberal arts departments, simple numerical indicators would be insufficient. The most detailed information on faculty employment status is held within institutions, which vary enormously in how they categorize personnel. As a result, acquiring and aggregating such data would be very expensive and time-consuming. The main extant source of national data, the National Study of Postsecondary Faculty (NSOPF) conducted by the National Center for Education Statistics (NCES), has limitations. It has only been administered in academic years 1988, 1993, 1999, and 2004. Using NSOPF data for continuing indicators requires substantial time lags for reporting the latest conditions, and future availability of data is uncertain. (For further discussion, see part III of this essay.)

The data from NSOPF provide a vantage point for examining the employment of faculty by discipline and institutional type. Anderson's 2002 analysis of the latest NSOPF data shows us that from 1992 to 1998, the percentage of part-timers increased from 53 to 57 percent for faculty in fine arts, from 50 to 52 percent in humanities, and from 47 to 51 percent in social sciences, but decreased from 33 to 32 percent in the natural sciences. At the same time business part-timers dropped from 51 to 48 percent, and engineering was stable at 36 percent. The percentage of tenured or tenure-line faculty members dropped in all disciplinary groups except engineering, which again remained stable. These are useful data. NCES regularly analyzes NSOPF to report statistics of interest, or to provide summary analyses (Zimble 2001). NSOPF provides a good model for extended efforts to collect information that will inform us about the employment of liberal arts faculty. The question concerning the impact of staffing patterns on different disciplines will require new data collection and correlational studies that relate changes in faculty work conditions to other variables, like the widely available salary data. NSOPF provides a wide variety of other variables for this purpose.

In this section, we have identified four clusters of issues in the liberal arts that we consider critical enough to inform the subsequent development of data collection for indicators: concerns about the pipeline of students, the rigor and quality of the curriculum, the state of liberal arts departments and their budgets and status on campus, and the adequacy of faculty staffing. These pressing issues must be studied systematically if we are to understand the changing condition and status of liberal arts departments and disciplines. That said, creating indicators is an entirely different task from identifying priority issues. It is a process of identifying empirical sources of information that are valid measures and suitable proxies for our conceptions of these complex problems.

ESTABLISHING THE INDICATORS

We begin this section with a reminder of the cautionary note at the outset of the essay: The fact that indicators exist implies that what is important is being measured, or that what is measured is important. But indicators are most commonly constructed of what is easily measured, what is easily quantified. Scott (1990) argues that liberal arts disciplines must not give undue legitimacy to data that will advance market-driven decision making and managerial ideology. Engell and Dangerfield (1998) present a similar argument, expressing concern for disciplines already undervalued in market-model conceptions of higher education. While some disciplines may demonstrate large enrollments and numbers of courses they provide for general education, they may also appear very weak on measures of external funding. Moreover, some of the most valued features of the liberal arts, including their track record in cultivating undergraduates' analytical and communication skills, have not lent themselves to measurement. The concern is twofold: the most important features are not being measured, and developing indicators on what is easily quantified may end up weakening the position of the liberal arts.

These risks notwithstanding, we forge ahead to consider which measures may shed light on the conditions of the liberal arts on today's campuses. To design indicators, a number of decisions must be made concerning the types and sources of empirical information. As implied above, indicators must be selected or constructed not simply because data are available, or because they are the easiest to measure.

General Methodological Considerations

First, we discuss key methodological issues related to developing indicators.

Qualitative Indicators in Addition to Quantitative. While quantitative indicators are most amenable to standardization and thus longitudinal analyses, they can be supplemented by qualitative indicators, such as attitudinal, opinion, and subjective evaluation measures. Often these are quantified into numerical scales, so they can be more easily analyzed on a large scale. (We revisit this possibility in the essay's conclusion.)

Absolute Versus Relative Numbers. Trends can be tracked by counting, reporting, and analyzing the increase or decrease in numbers. But simple numbers can be misleading. Enrollments in liberal arts courses may be increasing,

but they may be increasing much less than in non-liberal arts disciplines. An effective means to meaningful comparison is to create ratios. For the enrollment question, a useful ratio may be liberal arts course enrollments compared to all course enrollments in an institution, and the ratio could be constructed for different points in time.

Disaggregation by Discipline and Department. The indicators need to be disaggregated because, as discussed above, the data are likely to reveal significant differences between the liberal arts and non-liberal arts as well as among the liberal arts. Some liberal arts science disciplines are well funded, while most humanities disciplines are not. Further, some humanities departments are enjoying high enrollments and amassing student credit hours, while others are in low demand. Indicators for change in the curriculum will be especially challenging to establish because neither the institution nor the departments tend to track changes in what is offered and required, let alone student learning outcomes.

Levels of Indicators. Different indicators require collecting data at different levels: institutional, departmental, curricular, course, faculty, and student data. Individual student and faculty data are more difficult to obtain than institution-level data. Similarly, department-level data are less available and more difficult to gather than institutional data. Since we argue that department-level data are required to create meaningful indicators, steps will have to be taken to ensure that the data are available. While we argue for collecting department-level data, we also believe it is important to be able to distinguish among institutions by type (the Carnegie Classification provides a good method to do this). Lumping data across all institution types masks important known differences among public and private and doctoral, master's, baccalaureate, and two-year institutions. Data on institutional characteristics are obtainable through the Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics Survey. The discussion of available data sources below will list only those sources that provide department or disciplinary variables, as data aggregated without regard to department or discipline do not shed light on the condition of liberal arts departments and disciplines.

Sampling Versus Universal Measures. It is most likely that data for indicators will be a sample of the universe of liberal arts departments. Although time-consuming and expensive, it is possible to do a complete survey of departments nationwide and hope for a reasonable response rate. A survey becomes, then, a sample of the willing or able; and interpreting the data would require analyses of nonrespondents to determine if the voluntary, self-selected sample is different from the nonrespondents. If comparing liberal arts with non-liberal arts departments, all other departments would have to be included.

Alternatively, we could intentionally set out to develop purposeful samples. Any sampling methodology still must deal with the problem of nonrespondents to determine if the respondent pool is different from the population. First, we could use different techniques to identify a random sample of institutions and departments. This would minimize biases in the data, if a sufficient number of institutions respond. Or we could select institutions that are regarded by knowledgeable people as important "index institutions," either rep-

representatives of institutions in general or organizations that are harbingers for the universe of institutions. Such a sample would, of course, not be representative of the population; but if used repeatedly over time, it could illustrate important trends. Or we could intentionally create a stratified sample of institutions that is representative of all institutions, including institutions of the same relative number and characteristics to represent all institutions. Typically this is done by weighting the selection according to the Carnegie Classification.

Indicators. As a starting point, we describe the indicators that may be developed corresponding to the four clusters of issues delineated in part II, and the fourteen issues therein. The indicators that may be constructed (whether quantitative or qualitative) will provide empirical grounding to characterize the state of the liberal arts curricula, the condition of liberal arts departments, and trends among liberal arts faculty. For each issue, we first list data sources that are currently available, note their strengths and weaknesses, and present possible indicators. Where new data are needed, we review the problems associated with obtaining new data. Finally, we recommend which indicators should be pursued and which should not, and we discuss the rationale for their inclusion or exclusion.

The Student Pipeline

Issue 1: Are fewer students enrolling in liberal arts courses?

Issue 2: Are fewer students majoring in liberal arts disciplines?

Issue 3: Are interdisciplinary enrollments or degrees awarded in the liberal arts declining?

Possible Indicators

1. Number of students enrolled in liberal arts courses
2. Number of students enrolled in liberal arts courses compared to all course enrollments
3. Number of students majoring in liberal arts disciplines
4. Number of students majoring in liberal arts disciplines compared to all majors
5. Number of degrees awarded in liberal arts disciplines
6. Number of degrees awarded in liberal arts disciplines compared to all others
7. Number of students enrolling in interdisciplinary liberal arts courses
8. Number of students enrolling in interdisciplinary liberal arts courses compared to all course enrollments

9. Number of students majoring in interdisciplinary liberal arts programs
10. Number of students majoring in interdisciplinary liberal arts programs compared to all majors
11. Number of degrees awarded in interdisciplinary liberal arts programs
12. Number of degrees awarded in interdisciplinary liberal arts programs compared to all others

Available Data Sources. The title of the data source is followed by the provider of the data source in parentheses.

1. Minorities in Higher Education, Annual Status Report (American Council on Education analysis of NCES IPEDS data)
 - a) Conducted annually
 - b) Provides data on degrees conferred by field of study
 - c) Limited to minority data
2. College-Bound Seniors Reports (The College Board)
 - a) Reported annually
 - b) Provides data on intended areas of study, optional self-reported data
 - c) Does not report actual enrollment or major
 - d) Provides data only on SAT takers, not a representative sample
3. College Student Survey (Higher Education Research Institute [HERI], University of California, Los Angeles [UCLA])
 - a) Annual
 - b) Provides data on majors
 - c) Provides data on student learning experiences
 - d) Self-reported data lead to inaccuracies
4. Open Doors (Institute of International Education)
 - a) Annual
 - b) Reports academic level and field of study of international students
 - c) Limited to data on international students
5. Baccalaureate and Beyond Longitudinal Study (NCES)
 - a) Limited to experience of students graduating in 1992–1993 from degree-granting institution, new cohort in 1999–2000
 - b) Can provide some comparison information on student experience and future employment
 - c) Some limited transcript data for first cohort
 - d) Taken from National Postsecondary Student Aid Study (NCES), which is a more comprehensive source
6. National Longitudinal Study of the High School Class of 1972 (NCES)
 - a) Longitudinal studies
 - b) Participants in the study were selected when they were 1972

- seniors in high school with a supplementary 1973 sample drawn in 1973. Follow-up surveys in 1973, 1974, 1976, 1979, and 1986; high school records; and postsecondary transcripts (collected in 1984)
- c) Best data available on student course-taking experience
7. National Postsecondary Student Aid Study (NCES)
- Annual
 - Provides data on educational objectives and degree attainment
 - Weighted sample estimates
 - Reports major field of study
8. High School and Beyond (NCES)
- Limited to a sample of 1980 high school sophomores' experiences through 1992
 - Includes transcript data
 - Could provide baseline information on postsecondary education experience
9. IPEDS Completions Survey/Degrees and Other Awards Conferred by Institutions of Higher Education (NCES)
- Annual
 - Provides data on degrees and awards by programs/fields of study and level
 - Best available source for degrees
 - Disciplinary categories available in three different levels of aggregation using Classification of Institutional Programs (CIP) codes
 - The CIP taxonomy does not always match institutional practice
10. IPEDS Fall Enrollment Survey (NCES)
- Annual
 - Major field of study collected only in even years from four-year institutions
 - Best source for enrollment
 - Similar, but greater potential problems with categorization of major fields of study for degrees compared to the above IPEDS source. Among the liberal arts disciplines, only sciences and mathematics are identified:
 - Education
 - Engineering
 - Law
 - Biological Sciences/Life Sciences
 - Mathematics
 - Physical Sciences
 - Dentistry
 - Medicine
 - Business Management and Administrative Services

11. National Longitudinal Study of High School Seniors in 1972 (NCES)
 - a) Sample of 1972 high school graduates
 - b) Transcript data collected in 1984
 - c) May provide some baseline data on educational plans and experience, and employment

12. Recent College Graduates Study (NCES)
 - a) Replaced by Baccalaureate and Beyond
 - b) Data up to 1987
 - c) Could provide baseline information on field of study and employment

13. National Survey of College Graduates (National Science Foundation [NSF])
 - a) Provides data for sample survey of individuals with science and engineering employment starting in 1962 and conducted intermittently
 - b) Includes information on educational history, field of study, and employment

14. National Survey of Recent College Graduates (NSF)
 - a) Similar to number 12 above but for holders of bachelor's and master's degrees in science and engineering
 - b) Provides data from 1976, but changes make data hard to compare over time
 - c) Data on educational history, field of study, and employment

15. Survey of Earned Doctorates (NSF)
 - a) Annual since 1957
 - b) Best source on doctorates in all disciplines
 - c) Includes data on educational history, field of study, and post-graduate employment plans

16. Survey of Graduate Students and Postdoctorates in Science and Engineering (NSF)
 - a) Annual since 1966
 - b) Data from all institutions offering graduate science, engineering, and health programs by department
 - c) Includes data on science and engineering graduate enrollment status, field of study, level of study, and other measures

17. Science and Engineering Indicators (NSF)
 - a) Biennial report
 - b) Provides data for science and engineering only, although includes psychology and limited other social science data from the liberal arts
 - c) Provides data on degrees of all levels

18. Higher Education Arts Data Services (HEADS)
 - a) Annual since 1983
 - b) Data provided by members of four organizations of accredited arts schools
 - c) Provides data on degrees awarded, enrollment, and graduate students
 - d) Good source for arts overall, many variables

19. Institutional in-house data records
 - a) Costly and time-consuming to obtain
 - b) Requires institutional cooperation
 - c) All data analysis must be developed from the beginning, proceeding from data gathering and cleaning, through problem resolution, database building, definitions and categories, and analytical processes
 - d) Two major problems loom:
 - (1) In-house institutional research offices are already facing an extremely heavy reporting burden for many surveys
 - (2) Variation in local practices and reporting can create comparability problems

20. Many states also gather information on colleges and universities within their borders. Methods and measures vary by state, presenting some of the problems discussed under item 19 above, but they may prove to be useful data sources.

Discussion. To develop the indicators suggested at the outset of this section, a number of problems must first be overcome. It is not presently possible to track actual course enrollments, except in the few, time-limited NCES longitudinal studies, or by examining institutional in-house records. To collect these data would require mounting a full-scale survey on either a nationwide or sampling basis. Doing so for interdisciplinary courses adds the further problem of definitions of interdisciplinary courses changing from institution to institution and would probably require lumping all interdisciplinary course data together and either including or excluding courses that are only partially liberal arts courses. Total enrollments for institutions by course would also have to be gathered by survey. Total institutional enrollments are obtainable, but not by course, without additional data collection activities. Data on majors could be gleaned from the NCES field of study data gathered every two years, but as stated earlier, the categories do not include liberal arts enrollments other than in the sciences and mathematics. Better indicators can be developed using earned-degree data. But even here, the categories available require compromises in that they aggregate disciplines in arguable ways. If the categories are acceptable, the problem diminishes. The only way to obtain department-level data on all these measures according to a scheme that varies from those used in national data sources would require developing independent surveys and databases.

Observations

- a) Course-level data will be extremely difficult and costly to obtain. They provide very important information, however; if resources are available, it would be good to do so.
- b) Categories of departments, definitions of interdisciplinary courses, and schemes for discipline classification are dynamic. To get maximum use of existing data sources, their definitions must be acceptable, and appropriate caveats must be provided when comparisons are made between data with different definitional schemes.
- c) The most simple comparisons can be made using the IPEDS degree completion data, and using the NCES definitions for field of study.

The Rigor and Quality of the Liberal Arts Curriculum

- Issue 4: Are liberal arts course offerings declining in number?
- Issue 5: Are liberal arts course requirements declining in number?
- Issue 6: Has the content and rigor of liberal arts courses changed to accommodate the need for basic writing instruction both to provide remedial training and to accommodate the vocational needs of nonmajors?
- Issue 7: Given that a large number of courses offered via distance learning technology are in the liberal arts, are these courses of comparable quality to traditionally offered courses?
- Issue 8: What is known about student learning outcomes? Are students gaining liberal arts skills: reasoning, critical thinking, expository writing, generalization, synthesis, tolerance, and so on? Are students prepared to be engaged and knowledgeable citizens?

Possible Indicators

1. Change in number of liberal arts courses
2. Change in number of liberal arts courses compared to all other courses listed
3. Change over time in number of general education liberal arts courses required
4. Change in course content descriptions
5. Change in descriptions of learning activities

6. Changes in the goals of liberal arts courses
7. Changes in liberal arts course prerequisites
8. Changes in liberal arts majors, number of courses required
9. Changes in liberal arts majors, number of courses with prerequisite
10. Changes in GRE, LSAT, MCAT, GMAT, and other graduate admissions test scores

Available Data Sources

1. Campus Trends (American Council on Education)
 - a) Annual since 1984
 - b) Survey of more than 400 senior administrators of different types of institutions
 - c) Reports information on general education requirements
2. The College Handbook (The College Board)
 - a) Annual survey of about 4,000 accredited postsecondary institutions
 - b) Reports information on degrees and majors offered
 - c) Data set available
3. Higher Education Directory (Higher Education Publications)
 - a) Annual directory of over 3,600 institutions
 - b) Limited information on program offerings and highest degree offered
4. Higher Education Arts Data Services
 - a) Annual since 1983
 - b) Data provided by members of four organizations of accredited arts schools
 - c) Provides data on degrees awarded, percentage of course credits designed for nonmajors
 - d) Good source for arts overall, many variables
5. IPEDS Institutional Characteristics Survey (NCES)
 - a) Comprehensive annual survey of institutions
 - b) Best general source on information about institutions
 - c) Provides data on types of degrees
6. Existing Studies
 - a) Extant studies of educational quality include Adelman's transcript studies, the NAS study of general education, and Massy and Zemsky's study (1994) of curriculum structure
 - (1) These are time limited, not ongoing
 - (2) Might provide some guide or baseline for evaluating future data

- b) The RAND/CAE Value Added Assessment Initiative, the National Survey of Student Engagement, the Community College Survey of Student Engagement, and the UCLA HERI College Student Survey reports
7. Institutional General Education Requirements and Curriculum Structure
- a) Internal documents
 - b) Course catalogs, oversampling institutions with available electronic catalogs
 - c) Expensive in terms of resources needed to gather and analyze the information

Discussion. The best available sources for data on the number of liberal arts courses and liberal arts course requirements are institutional course catalogs. Most current course catalogs are available in electronic form. Reviewing even a sample of course catalogs would be extremely labor- and resource-intensive. Course catalogs also tend to represent inaccurately the current state of course offerings. Many institutions keep courses on the books even though they are not being taught. And course content can change, even as there is continuity in titles and general descriptions. Much course content is determined by professors in the classroom. This is also true of learning goals and activities. A better data source would be syllabi and other internal campus documents, which would be even more expensive to collect and examine. Course catalogs do, however, present an accessible source that stipulates current course requirements, prerequisites, and major requirements. To develop data on instructional activity, surveys would have to be mounted, along with structured interviews for a sample of instructors.

Observations

- a) Collect data on numbers of courses and general education and major requirements using an unobtrusive examination of electronic course catalogs.
- b) Create a sample of catalogs that represent the universe or specific institutional segments, to reduce the resources required.
- c) Create an even more strictly limited sample within the catalogs sampled to examine change over time in required course descriptions.
- d) If resources are available, do a survey of faculty to understand course goals and learning activities (i.e., Is writing required? How many papers? Is there a major research project?). This information is but one piece of the information that would help determine whether there are changes in the quality or rigor of liberal arts courses. This survey could have a counterpart with students to obtain their perspectives on the same course characteristics.

- e) Do not use trends in course grades as an indicator of quality, as they are neither standardized nor comparable over time.

The State of Liberal Arts Departments: Their Budgets and Status on Campus

- Issue 9: Are liberal arts department budgets shrinking or growing?
- Issue 10: Do liberal arts departments have the resources, technology, funding, and personnel to keep pace with rapid changes in disciplinary knowledge?
- Issue 11: Does the “new entrepreneurialism” disadvantage liberal arts departments that cannot generate revenue in addition to tuition? Is there a danger of losing valued areas, like classics or less-practiced foreign languages, when restructuring occurs? Are some departments more than others the target of consolidation or elimination, and what are the consequences of such decisions?
- Issue 12: What is the disciplinary background of campus leaders (e.g., presidents, provosts, deans) across institutional types? Is there evidence of a decline in the proportion of leaders coming from the humanities and social sciences relative to an increase in people with backgrounds in sciences, engineering, and business?

Possible Indicators

1. Changes in overall liberal arts department budgets
2. Changes in overall liberal arts department budgets compared to other departments
3. Changes in liberal arts department faculty salaries
4. Changes in liberal arts faculty salaries compared to other departments
5. Budget allocations per faculty member, course, or student in the liberal arts compared to other departments
6. Instructional allocations per faculty member, course, or student in the liberal arts compared to other departments
7. Technology allocations per faculty member, course, or student in the liberal arts compared to other departments
8. Faculty support allocations per faculty member in liberal arts departments compared to other departments

9. History of percentages in budget cuts or increases in liberal arts departments compared to others
10. History of new departments created or existing departments eliminated

Available Data Sources

1. IPEDS Finance Survey (NCES)
 - a) Annual
 - b) The best, most comprehensive general source on finances
 - c) Reports many important financial variables
 - d) Does not report by department, therefore allows no comparisons by department
 - e) Changes in IPEDS surveys and reporting requirements (offering alternative accounting methods in 2000, reporting of hospital data in 1986) introduce comparability problems
2. Survey of Scientific and Engineering Expenditures at Universities and Colleges (R & D) Expenditures (NSF)
 - a) Annual
 - b) Reports expenditures by field, for science and engineering, including some social science data
3. The Annual Report on the Economic Status of the Profession (American Association of University Professors)
 - a) Annual
 - b) Reports salary, benefits, and employment conditions by rank and type of institution
 - c) Again, no breakdown by discipline, so of limited use, except as a basis of comparison to all departments
4. National Faculty Salary Survey by Discipline and Rank in Private Four-Year Colleges and Universities (College and University Professional Association for Human Resources [CUPA-HR])
 - a) Annual
 - b) Surveys more than 500 institutions
 - c) Provides data on salary by discipline and rank, and percentage of teaching faculty by discipline
5. National Faculty Salary Survey by Discipline and Rank in Public Four-Year Colleges and Universities (CUPA-HR)
 - a) Annual
 - b) Surveys more than 300 institutions
 - c) Provides data on salary by discipline and rank, and percentage of teaching faculty by discipline

6. Almanac of Higher Education (National Education Association [NEA])
 - a) Annual
 - b) Reports faculty salary, benefits by rank, institution type and control, department and discipline
7. Faculty Salary Survey by Discipline and Rank (Oklahoma State University)
 - a) Annual since 1974
 - b) Reports only data for the National Association of State Universities and Land-Grant Colleges
 - c) Good source for public, four-year data
8. HERI Faculty Survey (UCLA)
 - a) Teaching practices and research activities
 - b) Interactions with students and colleagues
 - c) Professional activities
 - d) Faculty attitudes and values
 - e) Perceptions of the institutional climate
 - f) Job satisfaction
 - g) Survey administered every three years since 1989
 - h) Full-time only
9. National Study of Postsecondary Faculty (NCES)
 - a) Periodic national survey (1988, 1993, 1999, 2004)
 - b) Reports many variables, including salary and conditions of employment by principal field of teaching and principal field of research
 - c) Can provide analyses by institutional type
10. Higher Education Arts Data Services (HEADS)
 - a) Annual since 1983
 - b) Data provided by members of four organizations of accredited arts schools
 - c) Numbers and salaries
 - d) Good source for arts overall, many variables
11. Institutional financial files
 - a) Difficult to obtain
 - b) Expensive to process
12. Institutional course catalogs
 - a) Record for department names
 - b) Source for historical analysis of birth/death of departments

Discussion. The best data available are faculty salaries. The National Study of Postsecondary Faculty is an excellent source of population estimates of many variables, and provides the possibility of analyzing them by discipline. NSOPF is only available on an approximately five-year cycle, making it less useful for immediate needs.

Many data sources on finance do not report by department or discipline and thus cannot be disaggregated consistently. The first three sources listed above are intended as examples to show limitations of the major sources and do not provide useful sources of data for liberal arts indicators. Hearn and Gorbunov (2005) provide an excellent detailed explanation of the limitations of finance data available for humanities departments; their paper should be reviewed for a complete understanding of the problems and data resources. Many limitations they note apply to other liberal arts departments as well, except that more data is available for the science disciplines in NSF's science and engineering database.

Observations

- a) Indicators of relative faculty salaries may be constructed.
- b) Any department-level or discipline-level analysis will require the creation of new sources of data or the modification of existing ones.
- c) An effort to encourage the American Association of University Professors, NCES, and other major data providers to require departmental information may be less expensive than creating a new survey. However, it must be noted that NCES just implemented a major revision in IPEDS financial data reporting and is unlikely to entertain another major revision soon. Earlier caveats about the massive reporting burden and survey requests on institutional research offices apply here as well.
- d) If a new survey is used, a small indicator set of departments in a representative sample of institutions would be most feasible.
- e) Measures of the relative institutional valuing of departments may be best gathered by reviewing a sample of institutional strategic plans, or by surveying planning and financial officers.
- f) History of the birth and death of departments could be constructed using course catalogs. (See Gumpert and Snyderman [2002] for a methodology to study academic structure.)
- g) A survey of the disciplinary backgrounds of institutional leaders could be constructed using college bulletins or course catalogs and online resources.
- h) Without financial data to compare at the department and discipline level, it is difficult to assess which departments are disadvantaged in campus environments with a strong entrepreneurial and competitive ethos. In some of our own work, we have attempted to do this for institutional case studies, using financial documents and interviews with administrators and faculty at all levels. A survey could be designed to gather similar information, and it could be compared to other indica-

tors, such as faculty salaries, department births and deaths, and the disciplinary background of institutional leaders. While difficult to produce, such a picture is essential to understanding how liberal arts departments are faring.

The Adequacy of Faculty Staffing

Issue 13: Are there fewer full-time, tenure-line liberal arts faculty positions?

Issue 14: Are staffing patterns negatively affecting some disciplines more than others?

Possible Indicators

1. Change in number of liberal arts faculty by employment status (full- or part-time) relative to other departments
2. Change in the tenure status (tenured, tenure-track, off-track) of liberal arts faculty relative to other departments
3. Change in the distribution of rank among liberal arts faculty relative to other departments
4. History of addition or withdrawal of faculty tenure lines among departments
5. Faculty morale

Available Data Sources

1. National Study of Postsecondary Faculty (NCES)
 - a) Periodic national survey (1988, 1993, 1999, 2004)
 - b) Reports many variables, including salary and conditions of employment by principal field of teaching and principal field of research
 - c) Could be a valuable resource on completion of 2004 survey
 - d) Can provide analyses by institutional type
 - e) Full-time, part-time, and disciplinary affiliation available
2. Almanac of Higher Education (NEA analysis of NCES IPEDS data)
 - a) Annual
 - b) Reports institution-level faculty terms of employment including percent tenured by rank, institution type and control, department and discipline

3. Higher Education Arts Data Services (HEADS)
 - a) Annual since 1983
 - b) Data provided by members of four organizations of accredited arts schools
 - c) Numbers and conditions of employment
 - d) Good source for arts overall, many variables

4. HERI Faculty Survey (UCLA)
 - a) Teaching practices and research activities
 - b) Interactions with students and colleagues
 - c) Professional activities
 - d) Faculty attitudes and values
 - e) Perceptions of the institutional climate
 - f) Job satisfaction
 - g) Survey administered every three years since 1989
 - h) Full-time only

5. Institutional files
 - a) Difficult to obtain
 - b) Expensive to process

Discussion. The best source for department-level or discipline-level analysis of faculty numbers and conditions of employment is institutional records. Data on changes in the distribution of tenure-line faculty positions among departments can only be obtained by examining institutional records. As stated earlier, these are time-consuming and costly to obtain. The most efficient strategy would be to create a representative survey sample. Many of the national databases with information on faculty, including the IPEDS surveys of staff and salaries, do not provide disciplinary comparisons, or they only include information on full-time faculty. The NEA Almanac of Higher Education appears to be the best general annual source. NSOPF is the only source that reports measures of faculty satisfaction by discipline categories. As noted above, NSOPF is only periodic, on a five- or six-year cycle. Almost all other sources of information regarding faculty satisfaction are aggregated by institution or institutional type.

Observations

- a) Indicators regarding faculty work conditions should first be constructed from the existing NSOPF and Almanac of Higher Education Data.

- b) An examination of the changes in the distribution of tenure-line faculty positions among departments will be very expensive, and historical data will be difficult to obtain. Any indicator created to measure through a survey should be viewed as establishing a baseline for ongoing data collection.

- c) NSOPF is probably the best data source for faculty morale measures or proxies. If data are required at an interval of less than five years, this will require a separate (and expensive) survey effort.
- d) Morale measures are difficult to interpret because they are often measures of multiple factors. Nevertheless, they provide a critical vantage point on the condition of faculty and thus a window into prospective futures for the liberal arts disciplines.

Moving beyond observations about specific data sources that could be used to develop indicators relevant to the issues we identified, we next propose a set of recommendations that would extend these efforts more systematically and on a larger scale.

RECOMMENDATIONS

Having reviewed the landscape of existing data sources, we find good data available about particular dimensions of higher education. However, the data that permit trend analysis and comparisons among disciplines or departments are only a very small subset. Some indicators of the liberal arts could be constructed immediately from existing data. Other indicators would require new data collection efforts, as well as a large and ongoing investment of funds to support them. If there is interest in developing the indicators and linking them with data, we offer the following recommendations.

Recommendation 1. Indicators should be constructed that enable comparisons across disciplines using, for example, ratios or other normalizing techniques. Simply reporting the magnitude of, or changes in, liberal arts data can mask whether the liberal arts disciplines are surpassing or lagging behind changes in the other disciplines.

Recommendation 2. Historical perspective is important to interpreting present data. Where possible, any data examined for a particular year should be compared to earlier data. Where data are being gathered for the first time, they should be preserved as a baseline against which to compare future data.

Recommendation 3. Using the available data sources noted in part III, indicators should be developed on the following items:

1. Degrees and awards
2. Numbers of courses
3. General education requirements
4. Requirements for majors
5. Course prerequisites
6. Faculty salaries
7. Addition or elimination of departments

8. Faculty employment status
9. Faculty tenure status
10. Faculty rank
11. Faculty satisfaction, morale

It should be very evident from the preceding discussion that available data to compare the state of liberal arts disciplines to others are quite limited. But the situation is not entirely hopeless. Institutions themselves do collect and maintain data on many of the suggested measures. However, these are not consistently tracked, whether at departmental or disciplinary levels, and they are rarely reported outside the institution in summary reports that are publicly available, except where noted above.

At the national level, the construction of a full set of liberal arts indicators would require changing the way the National Center for Education Statistics and other agencies and organizations collect, analyze, and summarize data from higher education institutions. NCES's Integrated Postsecondary Education Data System is a comprehensive series of surveys that was recently reviewed and revised. The strengths of NCES's oversight and IPEDS are their ability to require institutions to submit data, the use of agreed-upon definitions to categorize the data, and the financial support to NCES by the federal government. Suggestions for a major overhaul of IPEDS would require years of scrutiny and planning before it is implemented. Moreover, mounting additional efforts to develop national data at the discipline or department level will require the support of an agency like the NCES because significant amounts of money, time, and expertise are required. The National Science Foundation's Science and Engineering Indicators is a good illustration of the magnitude, complexity, and cost of collecting, maintaining, and reporting longitudinal disciplinary data.

Recommendation 4. Although discipline-level or department-level data are not available for many indicators that would illuminate the conditions of the liberal arts, a number of steps can be taken to begin developing discipline-level and department-level data that would permit meaningful comparisons. Data should henceforth be gathered by discipline or department in the following areas:

1. Course enrollments
2. Majors
3. Financial data
4. Tenure-line faculty positions

Recommendation 5. Where new data are required and must be collected, two approaches are recommended:

1. Persuade the federal government to require the reporting of the data

2. If the federal requirement is neither feasible nor desirable, develop representative samples to reduce survey costs

Recommendation 6. It is essential to have an agreed-upon set of categories of disciplines that constitute the “liberal arts.” A list should be created and verified by knowledgeable people both inside and outside of the liberal arts domain. The list of disciplines and categories therein should be communicated as a desired classification in the data collection effort.

Recommendation 7. Interdisciplinary courses, programs, and departments have become an increasingly important dimension of the liberal arts. Although there is variation in organizational forms and resources allocated to interdisciplinary activities, with some located within departments and others outside of them, data should be collected where possible. A complicating factor is that the organization of knowledge is dynamic, and this dynamism is reflected in changing academic structures. An illustration of this is evident in two methodological challenges encountered by the National Research Council in preparing for the next round of doctoral program rankings. One is the change in the taxonomy of academic fields, which increased from forty-one in 1995 to fifty-seven slated for 2005. The other is that 40 percent of faculty in the pilot study reported involvement in more than one program, pointing to an increase in faculty with multiple disciplinary affiliations.

Recommendation 8. A set of measures or information needed to construct indicators should also be identified, discussed, and agreed upon. For a comprehensive portrayal, a start-list of variables would need to include: enrollment, degree completion, general education goals, general education requirements, academic major goals, academic major requirements, tenure-line faculty positions, faculty employment conditions, faculty salaries, and departmental financial data.

Recommendation 9. Variables should also include course learning activities to examine the impact of liberal arts education on students, especially those majoring in the liberal arts disciplines—the skills they learn, the attitudes and beliefs they develop, and undergraduate education’s influence on their future employment and education. The impact of the liberal arts on students’ learning and lives is, perhaps, the most important indicator of the success or failure of liberal arts education. At present, however, much work is still underway to understand how to measure student learning, its short-term and long-term effects. We therefore recommend that course-level and student-level measures of learning and educational impact not be pursued until our understanding of learning and its assessment improves.

In addition to the use of survey instruments (e.g., NSSE), a program of qualitative research could yield important insights. That is, in-depth interviews with faculty and students could bridge some gaps in our understanding of the formal curriculum compared to what is actually learned. Developing a practical strategy to take advantage of such valuable information would be difficult, especially if attempted at the course level. A structured set of faculty and student department or disciplinary focus groups at a sample of institutions could help determine how to frame questions for future research.

Recommendation 10. Given its unique perspective and national stature, the American Academy of Arts and Sciences (AAAS) could encourage deliberation about and investment in the development of liberal arts indicators. AAAS could urge a concerted effort among methodological experts and higher education researchers to explain what would be entailed in collecting department-level and discipline-level data on a large scale. Its insight could be presented to such agencies and organizations as the National Center for Education Statistics, the Association for Institutional Research, the National Association of College and University Business Officers, the American Association of University Professors, and other groups with an interest and a stake in data development. Together they could identify which data are already generated at that level but are not yet made available for cross-institutional and public analysis. AAAS should also encourage the appropriate organizations to consider investing in large-scale data collection along these lines and to help ensure the availability of disciplinary and departmental data. Without these data, only a limited and incomplete understanding of the condition of the liberal arts departments and disciplines is possible.

CONCLUSION

The paucity of data on the liberal arts has blocked inquiry into their vitality and quality, especially at the undergraduate level. Without investing time and fiscal resources in data collection and analysis, the discourse at national, institutional, and professional levels will remain dominated by significant concerns that cannot be examined systematically. Decision makers at all levels are working with researchers to generate their own data on a small scale, but their well-intentioned efforts are too disparate to establish a comprehensive knowledge base for longitudinal, comparative analyses of the liberal arts. A large-scale initiative is necessary to inform our understanding of current practices and how they compare with the past, and in so doing substantiate where improvements are needed. Such an initiative has potential to fulfill an array of educational, institutional, and national interests that converge around one major goal: to ensure that higher education meets society's current expectations as well as the long-term public interest. Monitoring the conditions of the liberal arts provides a meaningful gauge of the general condition of higher education and how well its institutions are fulfilling the social charter. Beyond that, data on the liberal arts are necessary to make more informed decisions about their future.

In this essay, we have proposed some first steps: carefully deliberating to determine the parameters of the liberal arts, defining the indicators worth tracking over time, and considering the specific purposes they may serve. We identified several measures that may effectively address contemporary concerns about the student pipeline, curriculum, departments, and staffing. Data on the student pipeline will show changes in liberal arts majors and degrees, changes that would have immediate implications for the organizational and resource needs of the undergraduate enterprise in addition to longer range implications for attracting talented students into graduate education and ultimately academic careers. Baseline data on the undergraduate curriculum is necessary before

we can examine either its change over time or its quality. Faculty data will illuminate who teaches what to whom and how, and with what consequences for student learning, curricular offerings, and faculty career satisfaction. Departmental data are critical for understanding the impact of local academic contexts on the conditions of the liberal arts compared to other fields. At stake in the short term is understanding how local departmental contexts are shaping teaching and research activities as well as professional identities; and in the long run, we need empirical anchors to determine which resources are necessary to sustain the viability of specific academic fields.

Certainly other issues could be argued as more compelling, depending upon one's location inside or outside of the academy and one's priorities, such as bolstering the case or dispelling the speculation that liberal arts are of declining importance in the contemporary era. We have proposed this set of issues as a starting point for obtaining information about core educational activities in liberal arts departments within and across today's campuses. In the present climate, the related questions are frequently articulated: How are departments adapting to changes in funding, technology, knowledge, personnel, and student demand? Are liberal arts departments losing resources or becoming less central to campus priorities? In campuses where the curriculum appears vocationalized, have the liberal arts been repackaged for practical value; and if so, devalued? Across different institutional types, are there more or fewer tenure-line faculty positions? Does this correlate with changes in student demand or with some other factors? Have liberal arts departments been consolidated? And if so, in which fields and with what consequences? As concerns proliferate and crystallize into more urgent questions, there will be more widespread recognition that existing data sources are inadequate.

The feasibility of developing large-scale systematic data collection on well-defined indicators is an entirely different task from establishing consensus on the issues most in need of data. Both will require an unprecedented multilevel collaborative initiative that over time needs to be routinized into campus information systems. As mentioned earlier, one precedent for cooperative data collection and dissemination is the Coalition on the Academic Workforce. In order to expand collaborative efforts to a much larger and more systematic scale, numerous practical, intellectual, economic, and political challenges loom large. Campus information systems will need to use standardized categories of measurement and decision rules for data collection. Furthermore, as we mentioned at the outset of the essay, it is essential to consider the potential negative consequences of facilitating data collection on the liberal arts in a climate of accountability-driven assessment.

Indeed, public opinion is an important phenomenon in its own right, as public scrutiny raises questions about higher education's costs, value, efficiency, and politics. Just as the NSF obtains public views of science and its uses, a valuable line of data collection could focus on public attitudes and understanding of the liberal arts. Data could be collected from particular subpopulations to examine varying perceptions of the liberal arts' benefits to society as well as their attendant costs. In the absence of historical data, this type of public opinion data could still be interpreted within the context of important political eco-

conomic currents. For example, states with antitax backlash may or may not show segments of the public questioning the value of continued investment in expensive liberal arts disciplines with little apparent economic return, or that pale in popularity compared to media-hyped “hot” fields, such as those in computer-related technologies and applied sciences. Public attitudes and their underlying critiques are significant because they redefine the broader stage upon which the liberal arts play.

As a variety of stakeholders seriously weigh the anticipated benefits and liabilities of developing liberal arts indicators, we propose that quantitative and qualitative data are complementary in depicting key features of the liberal arts in the twenty-first century, for presenting a more fully rounded portrait of how the liberal arts are affected by changing conditions, what could be effective leverage points for change, and how new initiatives are faring. As we have discussed, quantitative data will enable much-needed trend analyses, whether within a campus or aggregated by discipline and institutional type at the national level. Obtaining good quantitative data requires suitable measures and data collection practices to meet standards for validity and reliability. Quantitative data can be supplemented with qualitative data, often drawn from institutional documents and archival records, interviews with administrative, faculty, and student informants, as well as structured observations at several levels, even committee meetings and classrooms. Qualitative inquiry can shed light on the ways in which institutional practices have been shaped by academic legacies, underlying values, and belief systems about what the liberal arts are and should do. In so doing, qualitative research can make transparent some complexities and ambiguities of the liberal arts in different academic settings.

The coupling of both types of data can illuminate changes in several academic arenas, including resource allocation patterns, pedagogical approaches, curricular requirements, and degree programs. For example, one could study whether there has been a shared understanding of criteria used in allocating tenure-line faculty positions, examining quantitative data on types of faculty appointments alongside interview data with provosts, deans, and faculty in different departments. Similarly, as institutions have contemplated selective investment in academic departments, one could look at the mix of data used in deliberations in academic program review to see the relative weight given to such factors as degree production, cost-effectiveness, projected student demand, alumni support, employer expectations, or a program’s comparative advantage vis-à-vis competitors. It would also be possible to examine whether these factors were juxtaposed with considerations of centrality to mission or the need to preserve long-established fields. Thus, collecting and analyzing both types of data can enhance our understanding of the interplay of subjective and objective realities, thereby providing a different light on the nature and consequences of changes in the liberal arts.

Looking to the future, data on the liberal arts can also be a basis for strategic action. Data could inform institutional deliberations over long-term organizational strategies: whether attempting to buffer liberal arts departments is effective in a climate of heightened accountability and constrained public fund-

ing, and whether new approaches are required. Informed by data, liberal arts faculty could contribute to the development of new strategies on their campuses rather than lamenting them or passively awaiting their consequences. Liberal arts faculty would be better positioned to participate more actively in a variety of educational, institutional, and political venues as informed spokespersons. In this era of interest-driven politics and cost-benefit calculations, the faculty could become more visible as knowledgeable leaders working to shape national priorities, advocating for investments in the liberal arts, cultivating demand for their disciplines, and inspiring future generations to engage in the liberal arts in the twenty-first century.

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In 1998, the Academy and the President's Committee on the Arts and the Humanities co-hosted a meeting of the leaders of several national organizations that sustain the humanities. In response to expressions of concern about the lack of public support and understanding of the humanities, the Academy created the Initiative for the Humanities and Culture. Predicated on a strong conviction that humanists must take the lead in communicating the significance of their research and teaching to a wider audience, the Initiative aims to articulate the continued importance of the humanities to our national life and to help develop the intellectual and material resources that will enable the humanities to thrive. The Initiative has focused on two distinct but related efforts:

- A series of research projects about the evolution of the humanities disciplines, the institutional settings that support the humanities, and the influence of American cultural diversity on the development of the humanities. Two studies are forthcoming in Spring 2006: *The Humanities and the Dynamics of Inclusion since 1945* (Johns Hopkins University Press) and *Considering the Humanities*, a special issue of *Daedalus*.
- A sustained effort to improve the collection, analysis, and dissemination of data about the humanities, which will provide a much-needed empirical base for decision making by educators and policy makers. Recent publications include *Making the Humanities Count: The Importance of Data* (2002) and, with The Foundation Center, *Foundation Funding for the Humanities* (2004).

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