

Faculty Workload and Productivity: The Next Generation's Plight—and Opportunity

By Henry Lee Allen

Henry Lee Allen is professor of sociology and chair of the Department of Sociology and Anthropology at Wheaton College, Wheaton, Illinois. Along with ongoing sociological research in criminology, he is developing mathematical and computational models of academic systems. Allen currently studies the social phenomena that influence emergent scientific ideas or breakthroughs, particularly within the academic discipline of mathematics.

In fall 2008, attention focused on the unexpected collapse of global financial markets. Stock markets fluctuated wildly, while crumbling credit and housing markets created a massive mortgage crisis. Established financial concerns, especially commercial and investment banks, entered or faced bankruptcy. Citizens questioned the competence of government leaders as the worsening recession cast doubt upon fiscal policies based on free-market ideologies. Daily press reports of government bailouts increased citizen anxiety.

Yet, a less noticeable national crisis also loomed, a crisis affecting institutions older than modern financial markets and touching the life chances of all citizens. Just as Americans are wondering how to repair a faltering economy, we ask how to rebuild a languishing public higher education system. For two generations, Americans have endured increased private debt, lost opportunities, and missed innovations for lack of a long-term policy for enhancing public higher education.

The Humpty Dumpty metaphor may apply here: Some things are irreparable, and some mistakes cannot be rectified. Will our leaders act before public higher education suffers irreparably from confused fiscal policies, reduced student access and social mobility, and reduced faculty professionalism brought about by the growing use of contingent labor? Will this nation favor private (often for-profit) postsecondary interests over public sector synergies? Will market imperatives become the sole arbiter of academic quality and potential? Will government leaders understand the strategic significance of increased investment in public universities? Access, quality, and educational attainment are at risk, so the fate of postsecondary education affects all citizens.

This article addresses faculty workload and productivity. It examines the elements of the decline of public higher education: vision, funding, employment status, and academic work. It then probes the views of the emerging generation of National Education Association

(NEA) union leaders regarding their role in higher education. Last, the essay scrutinizes proposed policies affecting academic work. Will the stakeholders who bailed out Goldman Sachs and Citigroup also rescue postsecondary education?

Unionized faculty members must lead the fight for healthy public colleges and universities. A new generation of union leaders must confront the effects of demographic changes, rising tuition, and reduced affordability. These leaders must also address the increased use of contingent labor, assaults on tenure, culture wars, academic capitalism, and technological competition. Their comments, we conclude, attest to their ability to address these issues collectively and successfully.

STRUCTURAL TRANSFORMATIONS IN PUBLIC HIGHER EDUCATION

What happens in public higher education affects the nation, so let's begin by noting the structural context that shapes faculty work.¹ "Our system today consists of a large number of small, private institutions and a smaller number of *much* larger public institutions," notes a public university president (Table 1).

"Public schools constitute only 41 percent of the total, but they enroll 77 percent of the students, and educate them at about half the cost per student. Economies of scale are even more striking, if you isolate the four-year institutions." "Only 25 percent of the institutions enroll 65 percent of the students," he notes. "Of the 100 largest postsecondary institutions in the country, 92 are public, and *all* of the 25 largest institutions are public, including most of the public flagship institutions of the upper Midwest (the Big Ten schools)."²

Most students and faculty members are located in the public sector, but the distribution of resources is disproportionately skewed to private institutions. "At the start of the twenty-first century, public higher education appears to be in a state of crisis," notes one analyst.³ "The share of state funding going to higher education has declined by more than one-third during the last thirty years."⁴ Another critic of reactive public policies that weaken public higher education noted three key trends in state funding. First, education's share of the state budget has declined. So has higher education's share of state educational funding. Within the higher education funding category, less aid goes to

Table 1. Statistical Overview of the U.S. System of Higher Education

Institution Type	Public	Private	Percent Public
Four-Year Institutions (N=)	631	1,835	25.6
Enrollments	6,236,455	3,440,953	64.4
Average Enrollment	9,883	1,875	—
Two-Year Institutions (N=)	1,081	621	63.5
Enrollments	5,996,701	253,878	95.9
Average Enrollment	5,547	409	93.1
All Institutions (N=)	1,712	2,456	41.1
Enrollments	12,233,156	3,694,831	76.8
Expenditures	\$170,344,841,000	\$85,048,123,000	66.7
Average Expenditures per Student	\$13,924	\$23,018	—

Source: Wiley, 2006, 329, Table 15.2.

public institutions; more support goes directly to students as grant aid.⁵

The nation, in short, suffers from the systematic neglect of U.S. public higher education.⁶ The public sector faces multiple challenges. First, there's a *funding crisis* as states reduce their investment in higher education by shifting the financial burden to the student and to the federal government. This shift creates an *affordability crisis* for students and their families, who incur massive personal debts. We also confront an *access crisis* as social class origin restricts those who can afford postsecondary education. Last, America faces a *leadership crisis* as policymakers who favor simplistic economic ideologies neglect quality issues and systemic realities.⁷

Support for public higher education benefits all citizens. "There is a social return to higher education," notes one analyst, "that includes increased income for non-college graduates, increased state tax revenues, increased intergenerational mobility, and lower welfare costs." Support for research provides further benefits. "Our nation's level of economic growth is related to the investments that we make in research and development and that graduate students have major input into the research process," this analyst adds. Conversely, cuts in research funding accelerate the atrophy of public higher education: "Any reduction in the quantity and quality of research conducted by our nation's public universities will have serious repercussions for our society's future economic well being."⁸

Public higher education may also be facing a *faculty crisis*. Here are some dimensions of this crisis.

- Average faculty salaries at public doctoral institutions have declined relative to their private counterparts. Public universities therefore, have greater difficulty attracting and retaining high-quality faculty.⁹
- Faculty members must cope with increased student-faculty ratios.
- Faculty ranks face a steep decline in full-time employment and the rise of a permanent

cadre of contingent faculty—a prospect that may adversely affect student retention and the quality of undergraduate education.¹⁰

Table 2 presents scholars' comments about three aspects of state systems: the current state of public higher education; implications for faculty work; and future prospects. Full-time faculty employment is in jeopardy, these scholars conclude, even in flagship public universities. Funding woes pervaded public systems, they note, even before the current national crisis. State supervision of postsecondary education displays a lack of vision, leadership, and coordination. The result: more responsibility on the shoulders of the next generation of faculty leadership.

What explains the malaise in public higher education? Christopher Newfield documents the role of the culture wars.¹¹ Some politicians and ideologues see public universities as radical bastions that must be tamed by public dictates, legal mandates, bureaucratic surveillance, and market regulation. Supporters of public higher education wish to preserve free scholarly inquiry. This tradition, they believe, helped the middle classes flourish in a society where anti-intellectualism reigns. Newfield decries the public disinvestment in public higher education. "American higher education is highly stratified," he writes. "The wealthiest private universities can spend ten times as much per student as can a four-year public university."¹²

Deindustrialization, a conservative ideological backlash, and political shortsightedness, Newfield asserts, gutted the public university's potential for cultural enrichment.¹³ The absence of a collective democratic vision emerging from the discourse within public universities, he adds, "has made the United States far less meaningful to the world, and far more dangerous."¹⁴ He thus connects the problems of public colleges and universities to the eroding status of the middle classes who depend upon them—including union members!

Table 2. Key Policy Issues Affecting Faculty Work in Selected States

State	Status of Public Higher Education	Status of Faculty Work	Future Prospects
California ¹	Economic downturn.	UC salaries below market.	Must hire 7,000 faculty by 2010.
Georgia ²	Reduced state support and limits on tuition increases.	Funding has constrained faculty hiring.	Shift toward contingent faculty.
Illinois ³	Funding crisis.	Unresolved.	Unresolved.
Michigan ⁴	Affordability crisis.	Ranked faculty declined as a percentage of all faculty.	Uncertain political resolve.
North Carolina ⁵	Contention over funding formulas and budgets.	Trend away from full-time tenure track positions.	Budget shortfalls; relative decline in average faculty salaries.
Pennsylvania ⁶	Affordability crisis.	Unresolved.	Unresolved.
Texas ⁷	Affordability crisis.	Declining tenure and tenure-track faculty.	Trend toward contingent faculty.
Virginia ⁸	Stagnant state funding.	Unresolved.	Unresolved.
Washington ⁹	Cost containment; access; financial aid to students.	Annual resignations up; salary compression.	Trend toward contingent faculty.
Wisconsin ¹⁰	Funding crises.	Less contact with undergraduates.	Trend toward contingent faculty.

Source: Chapters from Ehrenberg, 2006; ¹ Kissler and Switkes, 85-106; ² Cornwell and Mustard, 107-134; ³ Alexander and Layzell, 135-157; ⁴ DesJardins, Bell, and Puyosa, 159-182; ⁵ Brown and Clark, 183-205; ⁶ Heller, 207-228; ⁷ Dickson, 229-249; ⁸ Turner, 251-274; ⁹ Zumeta, 275-302; ¹⁰ Oliver, 303-324.

Newfield identifies three social crises that affected the role of public higher education in American society. First, a political crisis resulted from the emergence of a multiracial mass democracy, as the interests of dominant status groups and of ethnic and immigrant groups collided. Second, an economic crisis deepened as profits declined and as knowledge workers assumed more economic important roles. Last, a cultural crisis is related to the connections between science, civil rights, and qualitative, context-specific, cross-cultural knowledge.

The cultural crisis, Newfield believes, is centered in the academic disciplines in the public university, especially in nonscientific arenas.¹⁵ “The university’s cultural missions have declined,” Newfield comments, “at the same time as leaders in politics, economics,

and the media have lost much of their capacity to understand the world in non-economic terms, to understand cultural divergence as its own kind of enlightenment and as in any case a fact that will never submit to economic and political coercion.”¹⁶

Newfield shows how non-tangible, symbolic, and cultural phenomena are linked to fiscal stringency and to legislative agendas that assail tenure and academic freedom. Elites wishing to maintain their hegemony, he argues, want to undermine public universities—the central institution threatening their interests. The University of California and its faculty, Newfield argues, capitulated to their assaults. Controversies over affirmative action, multiculturalism in the curriculum, intellectual property rights, privatization, and market

determinism exemplify the ways in which sensationalism undermines faculty autonomy. Conversely, Newfield concludes, strong public universities can strengthen democratic impulses and citizen activism.

PERSPECTIVES OF THE NEXT GENERATION OF LEADERS

The next generation of faculty and their leaders in unions will inherit the fiscal, organizational, and social problems precipitated by neglect of public higher education. Who are these faculty members and how might their leaders confront today's organizational and policy climate? Table 3 presents data on the average age and percentage distribution of full-time and part-time instructional faculty, based on Fall 2003 data from the National Study of Postsecondary Faculty.

The age of full-time faculty members at all types of campuses averages about 50 years; public masters institutions show the highest average (50.2 years). Almost a quarter of faculty

members at all types of institutions are between ages 35 and 54. Private not-for-profit baccalaureate colleges show the largest proportion of full-time faculty members less than 35 years of age (12.1 percent). Between six and eight percent of faculty members are under 35 at all other types of campuses.

Part-time faculty members show a similar age range, though private not-for-profit masters institutions report the highest average faculty age (51.2 years). Save for private not-for-profit masters institutions, about a fifth of part-time faculty members in all institutional types are age 35 to 44. Public masters and doctoral institutions show the greatest proportions of part-time faculty members under age 35. The proportion of part-timers exceeds full-timers in the under 35 group in each institutional category—a potentially ominous trend in itself. But, just as important, only one-third of all part-timers are under the age of 45.

Table 4 presents the average age and percent distribution of full- and part-time instructional

Table 3. Average Age and Percentage Distribution of Full-Time and Part-Time Instructional Faculty and Staff, by Institution Type, Fall 2003

Institution Type	Full-Time Faculty			Part-Time Faculty		
	Average Age	Percent Under 35	Percent Age 35–44	Average Age	Percent Under 35	Percent Age 35–44
All Institutions	49.6	8.2%	24.5%	49.6	12.3%	22.0%
Public Doctoral	49.3	8.3	25.9	48.7	14.9	22.1
Private Not-For-Profit Doctoral	49.7	8.4	26.2	50.3	11.2	22.7
Public Master's	50.2	8.0	23.2	49.6	14.0	22.2
Private Not-For-Profit Masters	50.1	8.3	23.8	51.2	9.5	18.6
Private Not-For-Profit Baccalaureate	48.3	12.1	25.4	49.4	12.4	23.9
Public Associates	49.9	7.0	22.2	49.2	12.3	22.5
Other	49.8	6.1	23.0	50.0	10.4	21.8

Source: U.S. Department of Education, National Center for Education Statistics, 2004 National Study of Postsecondary Faculty (NSOPF: 04).

faculty and staff by program areas in Fall 2003. Again, the average age for full-time and part-time faculty hovers around 50 years for nearly all program areas. The proportion of full-time faculty members under 35 ranges from 5.6 (business) to 10.6 percent (social sciences). About a fourth of all full-time faculty members are found in the 35 to 44-age cohort (high to low: health sciences = 28.5; education = 16.8). About 22 percent of part-time faculty members in all program areas are 35–44. The proportion of part-time faculty under 35 is greatest in the humanities (17.6), social sciences (15.9), and fine arts (15.6); it is least in engineering (3.9), education (7.3), and business (7.4).¹⁷ The proportion of part-time faculty under age 35 exceeds full-time colleagues in all fields except education and engineering.

The next generation of faculty leaders in public higher education will come from the

two youngest groups. But these groups make up only one-third of the professoriate—and not all are unionized. We must therefore make special efforts to identify and prepare potential faculty leaders for the difficult times ahead.

To enhance this leadership potential, the NEA created an Emerging Leaders Academy in 2002. In 2008, NEA examined the backgrounds and activities of 54 academy members, mostly from the under 35 and the 35–44 age groups. A diverse group, most academy members came from either community colleges or universities.¹⁸ A majority of participants came from the ranks of full-time faculty and from the Midwest or Pacific regions.¹⁹ Their leadership roles included chairing their union local (68 percent, including 11 presidents and six vice-presidents), serving as delegates to the state association assembly (47 percent), recruiting new union members (62 percent), serving

Table 4. Average Age and Percentage Distribution of Full-Time and Part-Time Instructional Faculty and Staff, by Program Area, Four-Year institutions, Fall 2003

Program Area	Full-Time Faculty			Part-Time Faculty		
	Average Age	Percent Under 35	Percent Age 35–44	Average Age	Percent Under 35	Percent Age 35–44
All Program Areas	49.5	8.4%	25.0%	49.2	12.2%	21.6%
Agriculture/Home Economics	50.1	6.3	20.0	49.7	7.1	16.5
Business	50.0	5.6	23.1	50.6	7.4	20.5
Education	51.4	8.2	16.8	50.5	7.3	15.5
Engineering	49.1	9.1	26.5	50.9	3.9	29.8
Fine Arts	49.4	7.3	22.9	48.0	15.6	23.1
Health Sciences	48.7	7.0	28.5	46.7	10.9	23.6
Humanities	49.6	9.5	26.3	50.9	17.6	22.7
Natural Sciences	49.5	7.9	27.1	50.0	14.0	22.9
Social Sciences	49.1	10.6	25.9	49.2	15.9	20.4
All Other Fields	49.5	10.0	22.1	47.3	11.0	23.5

Source: U.S. Department of Education, National Center for Education Statistics, 2004 National Study of Postsecondary Faculty (NSOPF: 04).

on a committee (64 percent), and “campus activism” (47 percent).

Academy members have a personal stake in the future of public higher education. These leaders must address diversity and gender concerns, issues related to cost containment and institutional location, the quality of undergraduate education, the adequacy of funding, and most important, they must defend job security and full-time academic employment.

The NEA academy taught members how to organize for concerted action within unions or associations, while remaining conversant with key trends in postsecondary education. Members studied the history of unionism, agenda setting, minority recruitment, leadership development, managing locals, networking, and modes of establishing communication with members. These leaders were eager to learn more about leadership development, self-development, and networking with colleagues—more than half of the academy members remain in touch with other graduates. Going beyond local campuses, they must negotiate links across academic disciplines, professional associations, and think tanks just to survive!

In a world of globalized technologies, these leaders must see the connection between the fate of public higher education and the conditions of academic work. They must lobby for conditions conducive to maximizing faculty productivity while assuring the well being of professors. They must also advocate for tenured full-time academic employment as the standard academic career model amid pressures toward contingent workloads. This generation must act in a proactive fashion to mitigate damage from myriad crises; they must transcend short-term thinking and the lure of immediate payoffs.²⁰

THE IMPERILED LEGACY OF ACADEMIC WORK

What can be done to reverse the decline of public higher education? New faculty leaders must monitor the context in which these universities and colleges operate while assuming key

leadership roles in governance. Privatization, politicization, restructuring, and tensions between accountability and autonomy, one observer notes, imperil the academic role. Expressing alarm about the decline of full-time tenured faculty employment, this observer adds: “Those who are full-time tenure track faculty are increasingly expected to generate revenue.”²¹ Public universities must be regarded as public goods, especially in their core functions of research, teaching, and public service.²² Such a designation implies increased public funding and legal protections that insulate universities from market forces and inappropriate partisan intrusions.²³ These protections will in turn safeguard faculty autonomy.²⁴

The challenge for the next generation of leaders, notes another observer, “is to maintain public spaces for shared scholarship and the exchange of ideas while transforming governance to enable innovative institutional responses to complex social challenges.”²⁵ Public higher education, these observers agree, requires a revitalized vision for shared governance in an era of globalization, diversity, inequality, and unexpected financial or international crises. In turn, our public institutions must recommit themselves to a democratic vision that includes racial equality and increased student access. “Culture-wars values have poisoned the American appreciation of public systems,” Newfield asserts. The human sciences must cultivate curiosity, imagination, and self-development. They must encourage the best values of academic work by transcending the instrumental dictates of workload and productivity.

Public higher education is central to the nation’s welfare. “There is no realistic possibility of providing high-quality postsecondary education for the vast majority of high school graduates with a purely private financial model,” notes a university chancellor.²⁶ Another college president proposes several key reforms:

- Mandate that all institutions use “net tuition” in assessing financial aid.

- Design a federal program that “would impose disincentives on states that provide inadequate or declining tax efforts.”
- Allow the federal government to stabilize funding akin to Medicaid and Title I federal directives.²⁷

The next generation of faculty leaders should consider these suggestions, and become strong advocates for policies that pass muster.

CONCLUSION

Last November, our nation concluded a strategic election. The next generation of faculty leaders must convince President Obama and all other elected officials that the U.S. can thrive globally only by strengthening public higher education.²⁸ Right now, a lack of vision, inadequate resources, and a focus on short-term fixes endanger this sector. This is not the best of all possible worlds; making it better starts with us.²⁹

NOTES

- ¹ Karp, Yoel, and Vann, 2004; Scott, 2008.
- ² Wiley, 2006. Wiley is Chancellor of the University of Wisconsin-Madison.
- ³ Ehrenberg, 2006.
- ⁴ *Ibid.*, xiii.
- ⁵ Rizzo, 2006, 3-35.
- ⁶ Wiley, 2006.
- ⁷ Senge, 1997.
- ⁸ Ehrenberg, 2006, xix.
- ⁹ *Ibid.*, xiv.
- ¹⁰ *Ibid.*, xvi.
- ¹¹ Newfield, 2008. Newfield is a professor of English at the University of California at Santa Barbara.
- ¹² *Ibid.*, 3.
- ¹³ *Ibid.*, 3-11.
- ¹⁴ *Ibid.*, 14.
- ¹⁵ *Ibid.*, 23-78.
- ¹⁶ *Ibid.*, 14-15.
- ¹⁷ Nearly a third of part-time engineering faculty members are 35-44.

¹⁸ White = 38; Black = 10; Asian = 2; Hispanic = 3. Two year colleges = 24; universities = 19.

¹⁹ Full-time = 26; part-time = 13. Midwest = 19; Pacific = 15.

²⁰ Brainerd, 2008; Rand Corporation, 2008a and 2008b.

²¹ Tierney, 2006, 4-5.

²² *Ibid.*, 1-10.

²³ Newfield, 2008, 272-273.

²⁴ Pusser, 2006, 12-23.

²⁵ Holley, 2006, 205.

²⁶ Wiley, 2006, 334.

²⁷ Alexander, 2006. F. King Alexander is President of California State University, Long Beach.

²⁸ Wagner, 2008.

²⁹ Ekland, 2006.

REFERENCES

- Alexander, F.K. “Concluding Remarks,” in R. Ehrenberg, ed. *What’s Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 337-344.
- _____. and D. Layzell. “Changing Priorities and the Evolution of Public Higher Education Finance in Illinois.” In R. Ehrenberg, ed. *What’s Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 135-158.
- Bettinger, E.P. and B.T. Long. “The Increasing Use of Adjunct Instructors at Public Institutions: Are We Hurting Students?” In R. Ehrenberg, ed. *What’s Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 51-70.
- Blose, G.L., J.D. Porter, and E.C. Kokkelenberg. “The Effect of Institutional Funding Cuts on Baccalaureate Graduation Rates in Public Higher Education.” In R. Ehrenberg, ed. *What’s Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 71-82.
- Brainerd, L., ed. “2008/2009 Top 10 Global Economic Challenges Facing America’s 44th President.” Washington, D.C.: Brookings Global Economy and Development, 2008. <http://www.brookings.edu/global>.
- Brown, B. and R.L. Clark. “North Carolina’s Commitment to Higher Education: Access and Affordability.”

- In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 183-206.
- Cornwell, C. and D.B. Mustard. "Assessing Public Higher Education in Georgia at the Start of the Twenty-first Century." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 107-134.
- DeJardins, S.L., A. Bell, and I. Puyosa. "Michigan Public Higher Education: Recent Trends and Policy Considerations for the Coming Decade." In R. Ehrenberg, ed., *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 159-182.
- Dickson, L.M. "The Changing Accessibility, Affordability, and Quality of Higher Education in Texas." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 229-250.
- Ehrenberg, R., ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006.
- _____. "Introduction." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, xiii-xxii.
- _____. and L. Zhang. "Do Tenured and Tenure-Track Faculty Matter?" In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 37-50.
- Ekeland, I. *The Best of All Possible Worlds*. Chicago: University of Chicago Press, 2006.
- Heller, D.E. "State Support for Public Higher Education in Pennsylvania." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 207-228.
- Holley, K. "Defining Governance for Public Higher Education in the Twenty-First Century." In W. Tierney, ed. *Governance and the Public Good*. Albany, N.Y.: State University of New York Press, 2006, 199-206.
- Karp, D.A., W. Yoels, and B. Vann. *Sociology in Everyday Life*. Long Grove, Il: Waveland Press, 2004.
- Kissler, G.R. and E. Switkes. "The Effects of a Changing Financial Context on the University of California." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 85-106.
- Newfield, C. *Unmaking the Public University*. Cambridge, Mass.: Harvard University Press, 2008.
- Olien, D.W. "Consequences of a Legacy of State Disinvestment: Plunging State Support Reduces Access and Threatens Quality at University of Wisconsin System Institutions." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 303-324.
- Pusser, B. "Reconsidering Higher Education and the Public Good: The Role of Public Spheres." In W. Tierney, ed. *Governance and the Public Good*. Albany, N.Y.: State University of New York Press, 2006, 11-28.
- RAND Corporation. *U.S. Competitiveness in Science and Technology*. 2008a. <http://www.rand.org>.
- _____. "Issues Over the Horizon: Eleven Emerging Challenges." *RAND Review*, 32 (2) (Summer 2008b), 16-27. <http://www.rand.org>.
- Rizzo, M.J. "State Preferences for Higher Education Spending: A Panel Data Analysis, 1977-2001." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 3-26.
- Scott, W. *Institutions and Organizations*. Beverly Hills, Calif.: Sage, 2008.
- Senge, P. *The Fifth Discipline*. New York: Doubleday, 1990.
- Tierney, W., ed. *Governance and the Public Good*. Albany, N.Y.: State University of New York Press, 2006.
- _____. "The Examined University: Process and Change in Higher Education." in W. Tierney, ed. *Governance and the Public Good*. Albany, N.Y.: State University of New York Press, 2006, 1-10.
- Turner, S. "Higher Tuition, Higher Aid, and the Quest to Improve Opportunities for Low-Income Students: The Case of Virginia." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 251-274.
- U.S. Department of Education, National Center for Education Statistics. *2004 National Study of Postsecondary Faculty* (NSOPF: 04) Washington, D.C.: Author, 2004.

- Wagner, T. *The Global Academic Achievement Gap*. New York: Perseus Books, 2008.
- Wiley, J.D. "Why We Won't See Any Public Universities 'Going Private.'" In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 327-336.
- Zumeta, W. "Public Higher Education in Washington State: Aspirations Are Misaligned with Fiscal Structure and Politics." In R. Ehrenberg, ed. *What's Happening to Public Higher Education?* Westport, Conn.: American Council on Education/Praeger Series on Higher Education, 2006, 275-302.