Steering Colleges and Universities Toward Distinctive Missions

Christopher Morphew University of Kansas

This is a <u>work in progress</u> prepared for presentation and discussion at Research Seminar on Governance Sponsored by the Center for Higher Education Policy Analysis at the University of Southern California, Santa Fe, New Mexico, June 9-11, 2002. Please do not cite without author's permission.

The Role and Responsibilities of State Higher Education Agencies. Experts on higher education governance argue that every state's higher education board¹ is unique in terms of history, regulatory authority, and the way in which that authority has been exercised. The Education Commission of the States (1997) and Berdahl (1971) sort different types of higher education boards into one of several categories, depending upon duties, regulatory authority, and relationship with the institution and legislature. ECS (1997), for example, characterizes states as either "consolidated governing board states," "coordinating board states," or "planning/service agency states." Berdahl (1971), on the other hand, differentiates between states with a) no state agency for higher education; b) voluntary associations; c) coordinating boards; and d) consolidated governing boards, based primarily upon the regulatory authority of the boards with regard to program approval and budgets. He also makes the argument that, depending upon the type of board, each can be categorized as an advocate for the state or institutions. For example, Berdahl would argue that consolidated governing boards, because of the authority they exercise, the probability that they are made up of gubernatorial appointees, and they multi-campus mentality, generally serve as advocates for the state, rather than the institution. Coordinating

boards, on the other hand, are more likely to act in the interests of the institutions they represent.

Beyond these distinctions, there are historical distinctions with some state boards exercising powers not explicitly granted them and other boards failing to exercise some of their granted authority.

But, while the majority of research on statewide higher education boards notes their differences, there is one thing that almost all such boards have in common: the mandate to promote and maintain their system's institutional diversity. Diversity here can be defined as (and measured by) the number of different types of colleges and universities within a single system of higher education, as well as the geographic diversity in some cases. Different types of colleges and universities – for example HBCUs, women's colleges, liberal arts colleges, and research universities, more selective colleges and universities – are a goal of higher education systems and their governing boards because of the benefits that accompany greater institutionally diverse higher education systems. The diversity of institutional types within systems of higher education is valued because of the belief that greater institutional diversity is related to and promotes efficiency, productivity, and quality in higher education systems.

In support of these assumptions, there is research that documents the relative effectiveness and efficiency of women's colleges (Astin, 1977; Wolf-Wendel, 1998; Whitt, 1994), historically black colleges and universities (Allen, 1992; Wolf-Wendel, Baker & Morphew, 2000), and liberal arts colleges (Clark, 1978). This research suggests that states should work to ensure that there are different types of colleges and universities within their higher education systems because the greater heterogeneity of institutional types will produce better learning environments

¹ The term "higher education board" will be used throughout this paper to refer to the several types of state agencies that are charged with monitoring, planning, regulating, and promoting

for students at a lower per-student cost to the state. Likewise, data that indicate that large research universities spend nearly twice as much as other kinds of colleges and universities to provide instruction for students – and therefore, cost states twice as much to operate per student – show that states would be wise to emphasize greater institutional differentiation (NCES, 2000).

A system of postsecondary institutions with unique and differentiated missions serves states' needs by improving efficiency and effectiveness — goals that are becoming more important in the current era of scarce resources. Multiple types of public (and private) postsecondary institutions within a state, including large and small colleges and universities as well as special focus colleges, provide a diverse set of educational opportunities for students. Diverse higher education systems can help states achieve their goals by improving the chances that students will pursue postsecondary education in the most appropriate development environment, by allowing research universities to drive economic outputs, and by increasing the odds that talented in-state students will stay in the state to pursue their education. These are all important goals for states (Stadtman, 1980).

Because of environmental changes – specifically rising higher education costs and greater competition for state revenues among social service agencies – state higher education boards are placing greater emphasis on objectives such as increasing institutional differentiation. Statewide boards continue to use mission and scope statements for the purpose of making more distinct the role of system universities and placing individual university roles within the context of a larger system mission. Recently, the Georgia Board of Regents in "Mission Development and Review Policy Directive" of 1994; the Kansas Board of Regents, in "A Strategy for Mission Development in the Kansas Regents System" of 1992; the Iowa Board of Regents in

higher education within their respective states.

"Memorandum of Institutional Mission Statements" of 1990; the Florida Postsecondary

Education Planning Commission in "Master Plan for Florida Postsecondary Education for the

21st Century" of 1993; and the Missouri Coordinating Board for Higher Education in "Mission

Review and Enhancement" in 1995 have directed their system universities to reformulate or

restructure individual mission statements for the purpose of strengthening the larger system of

higher education. Each of these policies has focused on mission enhancement/differentiation as

a means of increasing productivity and efficiency within their higher education systems.

Institutional diversity and academic drift. Higher education policies and structures developed in the U.S. seek to protect the diversity of higher education systems by limiting the ability of universities to engage in academic drift. Academic drift describes the tendency of colleges and universities to grow more comprehensive over time, regardless of historic mission or program scope. Instances of academic drift have been noted in state and national higher education systems for nearly a century, and were the impetus for the establishment of many state higher education boards. Riesman (1956) constructed some of the earliest and most influential research on academic drift in higher education when he wrote about snakelike movements of higher education: the tail (less successful, less prestigious institutions) follows the movements (i.e., structure and practices) of the head (the more successful, more prestigious institutions) as a means of attaining legitimacy. Riesman, as well as others (Neave, 1979; Huisman and Morphew, 1998; Birnbaum, 1983; Jencks and Riesman, 1968), have pointed out that this kind of mimicry leads to less diversity of organizational form over time.

Research on instances of academic drift paints a picture of colleges and universities veering away from their traditional missions toward those of their more prestigious peers. Neave (1979), for example, examined institutional types that had engaged in academic drift in France

(University Institutes of Technology), Norway (District colleges) and Yugoslavia (two-year post-secondary institutes). His findings indicated that, just after the founding of these unique institutions, each had already been shifting in form toward the dominant research university form. Other evidence of academic drift can be found in the Netherlands, or in the U.S. in states such as California, where institutions founded for the purpose of (and restricted to) offering undergraduate and master's degree programs, are engaged in partnerships for the purpose of expanding their program offerings and, in some cases, offering doctoral degrees. Birnbaum (1983), in the most comprehensive study of institutional diversity in the U.S., assessed change in a sample of American higher education institutions between 1960 and 1980. His research shows that the American higher education system grew – in terms of diversity – very little during the period between 1960 and 1980. Because this was a period of great growth in the numbers and types of students attending colleges and universities, he concludes that the higher education system used the vast increase in student and financial resources primarily to replicate existing forms, rather than to create new forms.

Aldersley (1995) after examining the changes in Carnegie re-classification of 1994, argued that "....ambitious institutions are apparently still beguiled by the promise of prestige associated with doctorate level education" (p. 56). Just as Jencks and Riesman (1968) concluded that the research university form had become the normative model for aspiring colleges and universities, Aldersley's research on changes in Carnegie classification showed that the trend toward toward larger and more comprehensive universities, particularly research universities was continuing.

So, what factors drive colleges and universities to engage in academic drift? Explanations for academic drift vary, but often focus on increased professionalization and specialization

within the academy. For example, research by Fairweather (1995) indicates that expectations among faculty members are driven by professional standards, rather than by institutional type, resulting in pay and reward structures that are driven by faculty research, even at institutions with missions that focus on undergraduates and teaching. From this perspective, academic drift may be a function of increased specialization and faculty members' cosmopolitan attention to discipline-related trends. On the other hand, research such as Morphew and Jenniskens' (1999) study of the role faculty play in the process of academic drift indicates that faculty members are cognizant of both new academic specialties and degree programs, as well as students' and business leaders' demands for new degree programs.

Institutional forces and academic drift. There is a theoretical framework – institutional theory – that seems particularly applicable to understanding academic drift among colleges and universities. Institutional theorists posit that organizations like colleges and universities are highly prone to isomorphic behavior; that is, behavior that leads to greater homogeneity of organizational forms, structures, and practices over time. This susceptibility is a function of the difficulty in measuring the quality of higher education's technical processes (e.g., teaching, learning, research) and outputs (e.g., students, knowledge). As a result, organizational form – and prestige – are used as a proxy for quality. In this sense, then, it is sensible for colleges and universities to try to become more like the dominant organizational form in their environment (Meyer and Rowan, 1977; DiMaggio and Powell, 1983).

The research on academic drift presents findings that are consistent with institutional theorists' arguments. Consider the Fairweather (1995) research detailing the importance of discipline and normative expectations, regardless of institutional type. Institutional theorists would argue that as a result of normative isomorphic forces are particularly prevalent in

organizations that are highly professionalized and specialized as a result of the external pressures on organizational actors to act like and exist in structures like their disciplinary brethren. Similarly, the claims of Aldersley (1995) that higher education institutions are "beguiled" by the prestige of research universities and engage in academic drift as a result are supported by institutional theory propositions that posit that, within highly institutionalized (as opposed to technical) fields like education, it is most important to adopt the organizational trappings of the dominant organizational form. Or, to paraphrase Meyer, Deal and Scott's (1981) research: a university succeeds if everyone agrees it is a university.

This project: mission enhancement and academic drift in Missouri. In an attempt to better understand the forces that cause academic drift and how state higher education boards can devise policies that combat drift and promote and maintain institutional diversity, this project was constructed. Because of the author's knowledge of the Missouri Mission Review and Enhancement Program and the program's apparent success in helping colleges and universities to pursue distinctive missions, that program was selected for the purposes of a constructing a case study on how state higher education boards can confront academic drift and promote greater differentiation in mission over time. The central goal of the project was to answer a single question: How did the Missouri Coordinating Board for Higher Education's Mission Review and Enhancement Program retard the forces of academic drift?

In order to answer that question, it became necessary to learn more about the mission review and enhancement program, the policies it produced, and most importantly, the way in which the program affected the behavior of the four-year colleges and universities in the state. As part of the case study approach, interviews with institutional leaders at colleges and universities in Missouri and the Missouri Coordinating Board are being conducted. Beyond

these interviews, analysis of documents describing the program and its policies is being conducted. Site visits to campuses will constitute part of the case study as well. Thus far, visits to the Coordinating Board's offices and Truman State University have been completed. During the visit to Truman State, interviews with the administrative and faculty leaders were conducted (including the President and Chief Academic Officer). Interviews have also been conducted with former Truman State Presidents as well as coordinating board representatives.

Mission Review and Enhancement in Missouri. In response to calls for the state system of higher education to be more accountable and less duplicative in their programmatic missions, the Missouri Coordinating Board for Higher Education (MCBHE) worked with the Missouri Legislature to pass Senate Bill 340 (SB340), which established the mission review and enhancement program for higher education. This bill came on the heels of the Critical Choices Plan constructed by the MCBHE in 1992. Critical Choices required each public institution in the state to choose a distinctive mission, as well as a position on the tiered system of admissions that was to be created. Critical Choices, unlike SB340, however, did not have performance funding provided by the legislature. As a result of the SB340, the MCBHE was directed to conduct

a review every five years of the mission statements of the institutions comprising Missouri's system of public higher education. This review shall be based upon the needs of the citizens of the state as well as the requirements of business, industry, the professions and government. The purpose of this review shall be to ensure that Missouri's system of higher education is responsive to the state's needs and is focused, balanced, cost-effective, and characterized by programs of high quality as demonstrated by student performance and program outcomes. As a component of this review, each institution shall prepare, in a manner prescribed by the coordinating board, a mission implementation plan for the coordinating board's consideration and approval. If the coordinating board determines that an institution has qualified for a mission change or additional targeted resources pursuant to review...the coordinating board shall submit a report to the general assembly that outlines the proposed mission change or targeted state resources. No change of mission for an institution under this subdivision establishing a statewide mission shall become effective until the general assembly approves the proposed mission

change....(Missouri Revised Statutes, Chapter 173, Department of Higher Education, Section 173.030).

_

In effect, SB340 directed the MCBHE and the state's ten four-year institutions² to engage in a bout of mission review that would establish a unique mission – including admissions – for each institution. SB340 also included generous funding (an addition of nearly 20% beyond the state's higher education budget) that the MCBHE was to allocate to institutions that had successfully engaged in mission review and enhancement. SB340 was to be enacted in five year phases with three institutions participating in each cycle. Or, as Missouri's Higher Education Commissioner put it, each institution has "put together a plan to focus on what it does well and needs to enhance, what is does not do but needs to do, and what it currently does that should be eliminated" (Missouri Department of Higher Education, 2001, p. 1).

Mission review and enhancement was to be accomplished, according to SB340 in three five-year phases that, together, would include all 10 of the state's four-year campuses. The first phase of the review and funding would include Southwest Missouri State University, Missouri Western State College, and Missouri Southern State College. The second phase would include Central Missouri State University, Northwest Missouri State University, and Southeast Missouri State University. Finally, Phase III would conclude with review and funding for Truman State University (Northeast Missouri State University at the time of SB340's passage), the University of Missouri (with campuses in Columbia, Rolla, Kansas City, and St. Louis), Lincoln University, and Harris-Stowe State College. Coincidentally, the latter two of these institutions are HBCUs.

² SB340 also included mission review and enhancement for two-year colleges. However, only four-year colleges will be discussed in this paper.

It will be important to understand the responsibilities and authority of the MCBHE within the context of the different kinds of state higher education boards discussed above. The MCBHE is a coordinating board that was established in 1974. The Board operates within the Department of Higher Education in Missouri, which is a cabinet level agency within the state government. The executive director of the MCBHE is elected by board members, who themselves are appointed by the legislature. The executive director serves at the pleasure of the board members. As far as coordinating boards go – each of which is unique in its authority, responsibilities, and behavior – the MCBHE can accurately be described as an active board with significant authority over most of the state system. The board's reach and authority is handicapped, to some extent, by the constitutional status of the University of Missouri multi-campus system. That said, the board does have significant program approval and budget authority over the rest of the system, which it exercises at opportune times (Education Commission of the States, 1997).

The effects of mission review and enhancement in Missouri – as of 2002. As of 2002, each of the state's ten four-year institutions had engaged in at least one cycle of mission review and enhancement. Funding for the program from FY97 through FY02 had ranged from \$17 - \$24 million, with ongoing funding of \$106.2 being recommended for mission enhancement programs by the Governor's administration as of 2002 (Missouri Office of Administration, 2002). During the five years of mission review and funding for the program between FY97 and through FY2002, each of the ten four-year institutions have developed unique missions that, when combined with their admissions selectivity designation, create the appearance of a highly diverse public higher education system in Missouri. Table 1 below identifies institutions, their programmatic focus and admissions selectivity.

Table 1. Mission Enhancement Programmatic Focus and Selectivity of Public Four-year Colleges in Missouri after Phase III of Mission Review and Enhancement Program.

Institution name	Mission Enhancement Programmatic Focus	Mission Enhancement Selectivity
University of Missouri (four	Graduate education, life and health sciences	Selective
campuses)		
Truman State University	Liberal arts and sciences	Highly selective
Harris-Stowe State College	Applied professional fields	Moderately selective
Missouri Western State College	Access Plus (remediation, historically disadvantaged students)	Open admissions
Southwest Missouri State University	Public affairs, graduate education	Selective
Missouri Southern State College	International programs	Moderately selective
Central Missouri State University	Professional technology	Moderately selective
Northwest Missouri State University	Information Technology	Moderately selective
Lincoln University	1890 Land Grant	Open admissions
Southeast Missouri State University	Experiential learning	Moderately Selective

Truman State University. Truman State University (TSU) began as a normal school with the primary purpose of preparing future teachers for K-12 schools. TSU was founded in Kirksville, Missouri in 1867 as a private institution, affiliating with the state in late 1870. It went through the traditional higher education organizational evolution (i.e., state teachers college, state university) until becoming Northeast Missouri State University (NMSU) in 1972.

The transformation of Northeast Missouri State University to Truman State University – and the transformation of a public comprehensive university to a public liberal arts college – began in 1986 with passage of House Bill 196 by the Missouri Legislature. Bill 196 changed the university's mission from an open enrollment, regional, multi-purpose university to a statewide

public liberal arts and sciences institution with highly selective admission policies. This status was further enhanced in 1992 by the Critical Choices plan and by the passage of SB340 in 1995, which further clarified Truman's role as the highly selective public institution in the state and as the state's public liberal arts college. The legislature's goal was to provide a public institution that could compete with the nation's finest undergraduate liberal arts colleges at a reasonable cost, thus stemming the flow of Missouri's best and brightest students into other states. This designation of NMSU as the state's highly selective undergraduate institution was completed within the context of the MCBHE's larger plan of mission review and enhancement.

Table 2. Truman State University: Institutional Characteristics

Undergraduate Enrollment	6,200
Graduate Enrollment	250
First year retention rate	85%
Six year graduation rate	62%
Percentage of in-state students	76%
Percentage of applicants admitted	79%
Percentage of students who enter graduate	
school within one year after graduation	36%

Some data taken from institutional websites and publications. Other data obtained from *The 2002 Fiske Guide to Colleges*.

This was the first step in NMSU's attempt to distinguish itself among the state institutions.

This was often difficult because, as one of six regional universities, NMSU shared similar names with its sister regional institutions across the state – Northwest Missouri, Missouri Western, Missouri Southern, Southwest Missouri, Southeast Missouri. The instances of Northeast being confused with Northwest Missouri State University or other regional institutions were numerous, among the media, the legislature, prospective students, educators, and the general public. Even the post office was known to deliver to the wrong address. TSU's faculty senate president Randy Smith shared several stories of misidentification, including when the marching band was performing at Arrowhead Stadium for the Kansas City Chiefs and the big screen flashed the

name Northwest Missouri State University. Smith also tells of being confronted by a former colleague who argued, "I don't understand why Northwest isn't good enough for you guys." to which Smith responded, "that's exactly the reason."

Still even though NMSU's program offerings and students indicated its newfound status and mission, the university's "directional name" projected an image as a regional multi-purpose institution, rather than reflecting its evolving role in higher education as one of the finest public liberal arts and sciences universities. The perceptions inherent with the regional name caused problems with student and faculty recruitment as well as with the university's efforts to garner grants and other funds from the private sector. In essence, NMSU, even though it was the only public institution in the state with a highly selective mission, shared the status of the other regional universities in the state because of the nature of its name.

When the Legislature changed the school's mission in 1986, a name change also was discussed. However, the Coordinating Board felt the university first should prove itself as a statewide liberal arts university. In 1993, after the university had documented the changes to its enrollment and program offerings, the Coordinating Board agreed to the establishment of a Commission to Study the University Name Change. By then, as the Commission concluded, Northeast has transformed itself from a regional university with relatively open enrollment to being the only university in Missouri to use the Coordinating Board for Higher Education's highly selective admissions category.

Mission review and enhancment at Truman State University. So, what progress has Truman State made since its designation as the state's public liberal arts college? Below are some of the changes that have occurred at Truman since 1986.

Since 1985, Truman State University has

- a) reduced the number of undergraduate programs from 140 to 43;
- b) reduced the number of graduate programs from 38 to 8;
- c) increased foreign language enrollments from 417 to 2304;
- d) increased the % of undergraduates enrolled in core liberal arts from 36% to 60%
- e) increased study abroad numbers from 12 to 428;
- f) increased the number of student faculty comprehensive projects from 96 to 1035 annually;
- g) increased the number of full-time faculty from 265 to 375;
- h) decreased the student faculty ratio from 21:1 to 15:1
- i) increased the number of students of color from 209 to 414;
- j) increased the average ACT score of incoming freshmen from 24 to 27;
- k) increased the average GPA of incoming freshmen from 3.3 to 3.7.

The difficulty in determining the effect of SB340 and the MCBHE's Mission Review and Enhancement Program on Truman, however, comes from the fact that Truman was already engaged in mission definition prior the Critical Choices and SB340. Indeed, the trajectory of the improvements in quality and mission focus outlined above were already present in 1995 when SB340 passed the legislature and was signed by Governor Carnahan.

However, when you speak with leaders on Truman State's campus, the effects of SB340 come through. Faculty and administrators on Truman's campus point to specific funding that came through the MCBHE and SB340 as impetus for their continued improvement since 1995. Faculty members, when asked about Truman's ability to sustain its faculty members, even as it cut the numbers of students, pointed to SB340: "we've seen three new [faculty] lines of history, which is part of mission enhancement." And, while Truman was able to secure funding for its transformation prior to 1995, the passage of SB340 "institutionalized our status" and it made it easier for them to protect their status as the highly selective institution in the state.

More specifically, those at Truman State that were interviewed for this project point to the special projects that were funded at Truman (and other four-year institutions in Missouri) as a result of SB340. As part of the Mission Review and Enhancement Program, institutions were

able to designate performance monies for specific projects that were previously not a part of the budget. At Truman, mission enhancement monies have funded a Visiting Scholar Program, Computer Technology, and Study Abroad Programs, all of which help to contribute to the liberal arts mission.

If, however, factors like specialization, professionalization, and organizational mimicry are the causes of academic drift, it becomes necessary to examine the effect of the Mission Review and Enhancement's Program on the attitudes of faculty and administrators at Truman, in order to assess whether the impetus for academic drift still exists on campus. That is, if the funding for Mission Review and Enhancement went away (as it will in FY03 as a result of budget cuts), is it likely that Truman will still be susceptible to the forces of academic drift outlined above?

After visiting Truman's campus and speaking with faculty and administrators about their mission and aspirations, there are several reasons to believe that Truman is less susceptible to academic drift than it was when it was a typical regional public university without a unique statewide mission. First, the Mission Review and Enhancement Program – and the efforts of Truman's leaders – have succeeded in changing Truman's position in the larger higher education market. Prior to its adaptation of the liberal arts mission, Truman's position in the higher education market was more general and, as a result, faculty, students and administrators at Truman were more likely to aspire to become larger and comprehensive, in an effort to achieve status. However, Truman now sees itself as part of a much smaller and well-defined market: the market for highly selective public liberal arts colleges. As a result, faculty speak of competing for high quality students that seek out this mission, rather than adding graduate degree programs. And, because Truman aspires to become the best public liberal arts college it can be, the notion

of reducing the number of undergraduate and graduate degree programs is accepted as consistent with that mission.

Simultaneously, the process that Truman (and the other public colleges and universities in Missouri?) have had to go through as a part of the Mission Review and Enhancement Program has been beneficial in helping the campus community to discover, articulate, and address what kind of an institution they want to be. Speaking with faculty at Truman bears this out: faculty recently hired by Truman came here because of its reputation for liberal arts and high quality, faculty that remain at Truman do so because they are devoted to its mission. Unlike most other campuses of this size, one doesn't sense the multiple mission mentality – the "multiversity, if you will – that is present on other comprehensive and research university campuses. Members of the community understand and appreciate and can define what Truman's mission is.

References

- Aldersley, S.F. (1995). 'Upward drift' is alive and well: Research/doctoral model still attractive to institutions. *Change*, 27(5), 50-56.
- Berdahl, R.O. (1971). *Statewide Coordination of Higher Education*. Washington, DC: American Council on Education
- Birnbaum, R. (1983). Maintaining Diversity in Higher Education. San Francisco: Jossey-Bass.
- Board of Regents of the University System of Georgia. (1994). *Mission Development and Review Policy Directive*.
- Clark, B.R. (1978). The role of distinctiveness in college development. In H.B. Sagen, H.R. Bown & B.R. Clark, *Career Preparation in the Independent Liberal Arts College*. Chicago: Associated Colleges of the Midwest.
- DiMaggio, P. & Powell, W.W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160.
- Education Commission of the States. (1997). *State Postsecondary Education Structures Sourcebook: State Coordinating and Governing Boards*. Denver, Colorado: Education Commission of the States.
- Florida Postsecondary Education Planning Commission. (1993). *Master Plan for Florida Postsecondary Education for the 21st Century*.
- Iowa State Board of Regents. (1990). Memorandum of Institutional Mission Statements.
- Kansas State Board of Regents. (1992). A Strategy for Mission Development in the Kansas Regents System.
- Meyer, J.W. & Rowan, B. (1977). Instituionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Meyer, J.W., Scott, W.R. & Deal, T.E. (1981). Institutional and technical sources of organizational structure: explaining the structure of educational organizations. In H.D. Stein (Ed.), *Organization and the Human Services*. Philadelphia: Temple University Press.
- Missouri Department of Higher Education. (2000). Blueprint for Missouri Higher Education: 1999 Annual Report.
- Missouri Department of Higher Education. (2001). Building one system. 2000 Annual Report.

- Missouri Office of Administration, Division of Budget and Planning. (2002). Available online at http://www.oa.state.mo.us/bp/bib2002/chapter 2/page10.html.
- National Center for Education Statistics. (2000). *Digest of Education Statistics*. Washington, DC: Department of Education.
- Stadtman, V.A. (1980). Academic Adaptations: San Francisco: Jossey-Bass.
- Whitt, E.J. (1994). "I can be anything!": Student leadership in three women's colleges. *Journal of College Student Development*, 35(3), 198-207.
- Wolf-Wendel, L.E. (1998). Models of excellence: the baccalaureate origins of successful African American, European American and Hispanic women. *Journal of Higher Education*, 69(2), 144-172.
- Wolf-Wendel, L.E., Baker, B.D. & Morphew, C.C. (2000). Dollars and \$ense: Institutional resources and the baccalaureate origins of women doctorates. *Journal of Higher Education*, 71(2).