

A History of Change in the Third Mission of Higher Education: The Evolution of One-way Service to Interactive Engagement

Carolyn D. Roper, Marilyn A. Hirth

Abstract

This investigation traces the history of change in public higher education as it relates to its third mission, from the traditional service to the contemporary engagement. The article begins with the emergence of U.S. higher education institutions in the 1600s and documents the changes era by era to the present. In each era, higher education's third mission contributed what society needed and positioned the institution to receive the democracy's support and its financial resources. This investigation and a subsequent study creating a framework for third mission activities are steps toward wider understanding and appreciation of this important segment of higher education.

Introduction

This investigation traces the history of change in public higher education as it relates to its third mission, from the traditional service to the contemporary engagement. The article begins with the emergence of the institutions of higher education in the United States in the 1600s and documents the changes era by era to the present. Along the route, there is abundant evidence that higher education, through its third mission especially, transforms itself to meet the changing needs of its society. The journey began as service to community in the 1800s, shifted to research in the mid-1950s, then merged with a new form of service in the late twentieth century. One-directional service—the university giving its intellectual products to society—transformed to bidirectional engagement, a hybridized version of the original roots that emphasizes relationships and interactions between the university and its society. The final section of this article shows how changes in the terminology for the third mission summarize its evolution and suggest future directions.

The First 150 Years: For the Few and the Elite

According to March (2002), distrust of the masses can be traced at least as far back as the elitism of Plato and Aristotle. The first American colonial colleges, beginning in the 1600s, set out to form the intellects and the characters of their students, character being defined to include moral and civic aims (Colby *et al.* 2000). Hollander and Saltmarsh (2000) concluded that higher education's founding missions were to produce good citizens for the emerging democracy. This tradition from England was one-track, broad, general education (Bender 2001).

When America was a collection of colonies, higher education consisted of seminaries to prepare religious leaders and liberal arts colleges to prepare the wealthy to become the leaders of society (Bringle, Games, and Malloy 1999). It was intended for the few and the elite, so they could lead the uneducated masses. The concept of extension, an early term for the third mission, started at Oxford and Cambridge (Thompson and Lamble 2000). After Harvard College opened its classrooms in 1636, teaching was the major task for a college intellectual and the source of achievement for 150 years (Boyer 1997). As the 1800s approached, the concept of state universities *per se* came into existence to promote "social improvement and individual happiness." The first such institution was the University of Georgia, created in 1785 and opened in 1800 (Pulliam 1995, 67).

1800s: Legislative Acts Open Higher Learning to the Practical Arts and the Masses

As the 1800s unfolded, higher education's endeavors escalated to speed the building of the nation. Through its legislative powers the government would change higher education tremendously, from religious and liberal education for the few and the elite to practical arts for the masses. Key (1996) carefully traced the changing public policy positions regarding the government's disposal of public lands—either directly through sale of land or indirectly through donations for public purposes such as land-grant colleges—to bring about economic expansion and thus more federal revenue. The Morrill Act of 1862, which established land-grant institutions, was an economic development initiative by which the young federal government hoped to encourage prosperity through widespread education in agricultural and practical arts. The resulting increased revenues would enable the government to pay war debts and expand. Education was the means; revenue was the end.

The Morrill Act created land-grant institutions to assist with the agricultural, mechanical, and technological changes affecting America, establishing the mission of public service (Boyer 1997; Thompson and Lamble 2000). At the time, a majority of Americans were engaged in agricultural work. To build agriculture was to build America. This change to a craft view of scholarship and teaching reflected an epochal shift in the philosophy underlying higher education (Boyte 2000). Each state was allotted thirty thousand acres for each Congress member, yielding twelve million acres of public land devoted to practical and mechanical higher education (Meyer 1965). As the country recovered from the Civil War, sixty-seven land-grant institutions emerged (Bender and Schorske 1998).

Some states formed new colleges, including those denoted A and M (agricultural and mechanical); others transformed old ones. However, there was no science of agriculture, and engineering was just beginning to form a set of scientific principles. Farmers in particular were slow to accept the need for education, preferring to rely on experience (Rudolph 1990). Because classical higher education institutions wanted to promote "the education of a man as man, rather than that which equips him for a particular post of duty," they fought the development of land-grant institutions (Rudolph 1990, 256).

The Hatch Act of 1887 created agricultural experiment stations as part of the land-grant mission. By bringing concrete information to farmers about seeds, livestock, and chemicals, these stations connected the common man and woman with the services of higher education (Thompson and Lamble 2000). Because they produced knowledge critical to the development of agriculture, agricultural experiment stations were key in gaining popular support for the land-grant institutions (Rudolph 1990). As a result, Congress in 1890 passed a Morrill Act Amendment that provided \$15,000 to \$25,000 annually to support each institution, beginning the concept of federal funding for public higher education institutions (Mungazi 1999). Expanding engineering science helped

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to develop the new industrial factories. Higher education was meeting the significant needs of public policy, and the result was harmony of interests between higher education and the society (Singleton, Hirsch, and Burack 1999).

Academic institutions and the nation flourished as the development of mass communication, transportation, electricity, and steam power transformed the country. There was an immense need to develop new technology and to transfer associated skills to an ever-eager public. According to Lucas (1996), these state-assisted universities distinguished themselves by concentrating on practical, applied knowledge and a public service bent. He described the innovations achieved by 1900.

... almost all of the basic elements of the public university's service role existed in embryonic form: university-sponsored colloquia and conferences open to the public; short courses; extension work; off-campus practica and student internships; and faculty consultation with business industry and agricultural organizations. . . . Academic expertise was no longer something to be found exclusively within some campus enclave. Now it was moving off into society. (62)

During the last decades of the 1800s, another major force was transforming academe from within: the movements for graduate education and research based on the European, especially German, model. Institutions of higher education were changing their emphasis from undergraduate education of the citizen to specialized study, a paradigm shift that would lead to the current academic disciplines (Boyer 1990). The first research institution was Johns Hopkins University, which emerged in the 1870s, followed by a changing Harvard University in 1890 (Baker 2001). So as the 1800s ebbed, universities embraced missions for both societal needs and research (Checkoway 2000).

The First Sixty Years of the Twentieth Century: Service Wanes as Research Takes Dominance

The support for the land-grant service mission continued with the passage of the Smith-Lever Act in 1914, which gave permanent funding for cooperative agricultural extension through the land-grant colleges for the purpose of distributing the results of research to the public (Thompson and Lamble 2000). The democracy was essentially legislating technology transfer. Following

soon after in the interest of growth of the nation were federal funds for higher education. In the early 1900s, some universities refused to accept federal funds, believing that undue influence would result, just as academic professionals would later pursue federal funds with zeal while mistrusting private funds for similar reasons (Etzkowitz and Stevens 1998).

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The modern American university emerged between the Civil War and World War I as a bifurcated hybrid of the tradition from England of one-track, broad, general education to prepare the elite to be leaders and the tradition from Germany of preparing for specialization in a field of work and carrying on research. The German model brought the numerous separate disciplines and loyalty to the professional specialty and its organizations rather than to the institution. The modern university combined

these two in an educational program comprising general education requirements followed by a specialized major (Bender 2001).

Gradually, higher education professionals became more and more concerned about the level of control placed with the masses and more and more interested in exercising their own authority. By the 1920s, higher education faculty in the United States were beginning to look inward to autonomy and academic freedom. The curriculum began to be organized around disciplines, which advanced the needs for new knowledge but were also artificial constructs dividing the world in ways that prevented holistic inquiry. By the 1940s, the disciplines narrowed further, and academics worked even harder for autonomy. The post-World War II prosperity and growth in enrollments, fostered in part by the G.I. Bill, brought significant private and federal funding, leading to even stronger holds by the disciplines. Audiences for the disciplines became, more and more, other academics, rather than members of the public (Bender 2001).

Bender and Schorske (1998) described the next decade. With the 1950s came the aftereffects of the atomic bomb in World War II: McCarthy's investigations, which threatened academic freedom and other forms of free expression; the Cold War; and late in the

decade, the launch of Sputnik. These events inspired fear and awe among Americans. Higher education reacted by looking inward for self-preservation, forming ever-tighter controls for its own authority. This change from within the academy motivated scholarly research, often with federal or private funding, and usually in science

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areas. Creation of the National Science Foundation in 1950 elevated the role of peer review, in contrast to lay or political decision making. The growth in the postwar economy and expanding faith in the power of education to transform lives intermingled to cause significantly increased federal funding for higher education. Generally, support for scientific research flourished between 1945 and 1975 (Ousley 2005).

With widespread support for the preeminence of research and scientific inquiry (Richardson 1996), the land-grant tradition of service declined significantly during the 1950s. Faculty wanted research opportunities, better colleagues, better students, and greater autonomy. Raising academic standards for faculty brought about more elitism and more power for departments over administrators, the institution, and local concerns. In a return to attitudes of former times, these events caused scholars to worry that the general population was not adequately prepared to make intellectual decisions (Bender and Schorske 1998). The Cold War encouraged faculty to turn full force to scientific research and objectivity and to be aloof from the affairs of public life (Hollander and Saltmarsh 2000). The ivory tower was established and growing tall. The leaders of the democracy tended to agree with academe, as was reflected, for example, in allowing peer review in the grant competitions for federal dollars. These movements toward research, peer review, autonomy, and publication as indicators of academic success “shifted the balance of faculty work . . . to a preoccupation on research and discipline-based work, at the expenses of teaching and service” (Bringle, Games, and Malloy 1999, 6). The precepts of education for democracy or citizenship lost favor as faculty and administrators at American research universities redefined their roles as teaching and research, activities that emphasized academicians as the source of

prestige achieved via a rewards system that honored publications and presentations among a small number of peers, often limited to a particular discipline (Checkoway 2001). The scene was set for a divergence in the interests of the academic and public venues.

The 1960s: Social Unrest and Questioning Higher Education

The social unrest of the 1960s was framed by the unpopular war in Vietnam and social innovations such as the birth control pill. New horizons like space flight and technological advancements such as television and mainframe computers fomented massive alterations in society. Protest marches and sit-ins hit campuses across the country, culminating with the Kent State violence and underscoring the need for better town-gown relationships. Some in society saw higher education as part of the problem rather than as the solution. Some felt the same way about the government (Bender and Schorske 1998).

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The 1970s: Economic Turmoil Brings Competition to Campus

High inflation along with wage and price spirals in the 1970s created a new set of pressures for higher education. Economic disorder brought decreasing resources (Bender 2001; Dill 1997). The financial pressures forced institutions to reevaluate programs, cutting some in order to preserve and improve others. In the process, an institution would select "the niche in which it will choose to compete and the social values by which it will shape its scale, scope, and core competencies" (Dill 1997, 188). The Nixon cover-up controversy caused distrust of public entities, including higher education (Bender and Schorske 1998).

Competition arrived on campus, and the idea of one institution meeting all needs of all constituents began to wither. With the economy in trouble, the democracy turned again to higher education to solve society's economic and social problems as it had in the mid-1800s (Holland 1999). The professoriate began to diversify to become more female and more minority, changing

the faces at the front of the classrooms from the 1950s white, male, elitist, European model (*Bender and Schorske 1998*).

The 1980s: The Third Mission Reemerges as Pathway to Economic Renewal and Accountability

The next decade began with the government encouraging higher education to help solve economic woes with the passage of the Bayh-Dole Act in 1980; universities could patent research funded by the federal government and then earn royalties by licensing the results of research to private-sector businesses (*Slaughter and Leslie 1997*). It was key to university financial health and something of a milestone in partnerships between higher education and business. In the mid-1980s the tradition of broad, general education was ending (*Bender 2001*), and universities began to change from centers of knowledge to complex businesses with products to market. New roles such as economic development were attractive in the face of declining enrollments, funding decreases, rising costs, and a reluctance to follow the business model for downsizing (*Goldstein and Luger 1997*). Campus Compact was founded in 1985 to foster the civic purposes of higher education; it would eventually boast over seven hundred higher education presidents as members (*Hollander, Saltmarsh, and Zlotkowski 2001*). Ewell (1997) described this change in the 1980s as a shift from the public utility policy role to the "corporatist" role. Championed by governors, this change saw higher education as a good for society and the economy in developing a better workforce and fostering healthy businesses. Since higher education was supposed to be good for the democracy, the policymakers for democracy should measure the value it provided. Therefore, state mandates for assessment, funding initiatives for quality efforts, and national education goals all descended to campuses (*Ewell 1997*). Those interested in better public funding and greater public service lauded this renewed political interest in higher education, while those interested in autonomy and control by the professoriate bemoaned it. Indeed, the fifty years from 1940 to 1990 saw federal funds increase by a factor of twenty-five and enrollment by a factor of ten while teaching loads were cut in half. From 1950 to 1970 government spending on higher education increased from \$2.2 billion to \$23.4 billion, reaching \$31 billion by 1991 (*Bender and Schorske 1998*). The democracy was contributing major funds to higher education, and its policymakers felt justified in demanding a return on their investment.

The 1990s: Engagement Links Academe and Community to Cope with a Changing World

As the 1980s gave way to the 1990s, higher education was forced to reexamine itself and seek alternative sources of funding as public support dwindled because increased global competition diminished state and federal tax revenues (Ousley 2005). Some in society began to call for more diverse roles for universities and a return to community service as a part of scholarship (Holland 1999). An eminent change agent was at the forefront of the movement: Dr. Ernest L. Boyer. A leader of four decades, he was sixteen-year president of the Carnegie Foundation for the Advancement of Teaching, a U.S. commissioner of education, and chancellor of the State University of New York. In a landmark report in 1990, Boyer said, "... linkages between the campus and contemporary problems must be strengthened" (76). He inaugurated a clarion cry for new definitions of scholarship:

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"And to sustain the vitality of higher education in our time, a new vision of scholarship is required, one dedicated not only to the renewal of the academy but, ultimately, to the renewal of society itself" (81). The American public had begun to view the practice of peer review with its concentration on the scientific method and narrow focus as "elitist and irresponsible" (Bender and Schorske 1998, 29).

In the early 1990s another public policy shift from the corporatist view occurred (Ewell 1997). The "New Right" considered higher education a good that bestowed private rather than public benefits; therefore the individual should pay the bills without any special favors of access. Remediation was rejected in favor of admitting those capable of higher-level study. Less experienced policymakers implementing this perspective in an age of term limits sought performance indicators that reflected efficiency rather than quality. This view was adopted mainly by a subset of the Republican Party, while some Republicans and most Democrats maintained the corporatist stance. This divergence of perspectives yielded confusion in public policy that gave higher

education an opportunity to control its own destiny while the democracy shuffled its feet for a time.

Writing in 1995 two months before his death, Boyer commented on the decrease in public approval for academic traditions, also noting that, for the first time in several decades, no compelling national need was driving the direction of academia. The article, titled "The Scholarship of Engagement," added a new item to higher education's lexicon: *engagement*, an encompassing term to substitute for *service*, *extension*, *outreach*, and other related words. Historically the third mission had been implemented as one-way communication in which academic experts transferred their wisdom to the masses. Boyer introduced a new twist for higher education: the two-way street of interactions or partnerships between the academy and the outside world.

Especially in the later 1990s, globalization and communication innovations, including the Internet, diminished the size of the world. New opportunities like distance learning threatened or enlivened the professoriate. The pace of the world, two-worker households, nontraditional family structures, and other forces converged to bring about less participation in civic, political, and volunteer organizations. At this juncture Campus Compact expanded its purpose from community service to service-learning. This new approach to the third mission integrated community activity with academic study (Hollander, Saltmarsh, and Zlotkowski 2001). A 1995 Campus Compact survey asked members of the public to apportion \$100 of tax money to teaching, research, and extension at a land-grant university. Respondents allocated \$45 to on-campus teaching, \$30 to extension, and \$25 to research (Warner et al. 1996).

Three Key Efforts Redefine the Third Mission for the Twenty-first Century

In this setting of the later 1990s, a national commission sponsored by the National Association of State Universities and Land-Grant Colleges (NASULGC) and funded by the Kellogg Foundation began a multiyear study of higher education that would encourage the new trilogy of *learning*, *discovery*, and *engagement* rather than the older teaching, research, and service. Under one of its chosen rubrics, the *engaged institution*, the commission would explore "going beyond extension to become more productively involved with our communities" (Richardson 1996, 5).

In the 1999 Kellogg Commission report *Third Working Paper: The Engaged Institution: Profiles and Data*, officials

from eleven of the participating universities wrote profiles outlining their engagement and other activities. While retaining older references to *outreach*, *extension*, *civic*, and *service* activities, they also described new directions, including *economic development*. These profiles emphasized a partnership model in which universities and other entities formed two-way interactions of mutual benefit, signaling a change from the university-as-ivory-tower or faculty-as-expert models.

Another significant study of the engagement concept was that by Tornatzky, Waugaman, and Gray (2002) for the Southern Growth Policies Board. The study was ongoing for several years, and a summary report, *Innovation U: New University Roles in a Knowledge Economy*, was released in 2002. The research began with a survey in 1998 of university, public service, and business leaders about where to focus the next round of studies. Strongest interest was in areas related to engagement and economic development.

In 2005, the Committee on Engagement of the Committee on Institutional Cooperation (CIC), in collaboration with NASULGC, issued the third key report, *Resource Guide and Recommendations for Defining and Benchmarking Engagement*. The CIC study included representatives from eighteen Big Ten and other public universities with considerable overlap with the institutions in the Kellogg and Southern Growth Policies Board studies. The report included the definition of *community engagement* proffered by the American Association of State Colleges and Universities:

The publicly engaged institution is fully committed to direct, two-way interaction with communities and other external constituencies through the development, exchange, and application of knowledge, information, and expertise for mutual benefit. (10)

The CIC went on to develop its own definition of the third mission and benchmarks for assessment to aid translation into objectives for faculty roles, student learning, and institutional achievements:

Engagement is the partnership of university knowledge and resources with those of the public and private sectors to enrich scholarship, research, and creative activity; enhance curriculum, teaching and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good. (2)

The CIC developed benchmarks aligned with Criterion 5: Engagement and Service accreditation standards of the North Central Association Higher Learning Commission, which CIC described as the accrediting body for the largest number of American higher education institutions (4). The CIC recommended the following benchmarks for the third mission:

1. Evidence of Institutional Commitment to Engagement
2. Evidence of Institutional Resource Commitments to Engagement
3. Evidence that Students Are Involved in Engagement and Outreach Activities
4. Evidence that Faculty and Staff Are Engaged with External Constituents
5. Evidence that Institutions Are Engaged with Their Communities
6. Evidence of Assessing the Impact and Outcomes of Engagement
7. Evidence of Resource/Revenue Opportunities Generated Through Engagement (5–6).

CIC planned to evaluate the benchmarks for three years, identify best practices, develop Web site resources, and pursue funding opportunities and support for engagement initiatives.

The Terminology for the Third Mission Summarizes Its Evolution from Service to Engagement

The concept of service, one-way altruistic giving of the university to the community in gratitude for public support of the institution, was the original intent of the third function of public higher education. Especially at the land-grant institutions, it took the forms of extension and outreach. Still one-way, the university expert to the community, these forms served the public good by disseminating information so the young republic could grow and prosper; it was application of knowledge. University extension or outreach was a vehicle for social change; lifelong learning was for the betterment of the citizen or civil society (*Lauzon 2000*). Extension was “the provision of learning opportunities to people who were unable, or unwilling, to attend and participate in the regular programs of universities . . . deliberate efforts to extend learning opportunities to people in the larger community” (*Thompson and Lamble 2000, 52*).

Slowly, as the rural community changed to an industrial one, the emphasis began to shift from bettering the individual citizen

or farm to bettering businesses, organizations, and the government itself. *Technology transfer* became "the full array of stored know-how, expertise, hard and soft technologies, and problem-solving capacity that can be applied to and adopted by a range of private businesses, units of government, and nonprofit organizations in the regions" (Goldstein and Luger 1997, 535). Thus far, it was the gift of the university to the community, usually without strings attached in either direction and usually without cost or with minimal cost to the public.

As the research function rose in importance, fields of study diversified beyond agricultural and mechanical arts; service as the less important third party had to sit in the back seat.

Then, as the business model infused higher education and as funding became more scarce, a dichotomy developed. Extension practitioners were divided into those who worked for social change (older purpose) and those who believed that they were selling products in a marketplace (newer purpose) (Thompson and Lamble 2000). According to Slaughter and Leslie (1997), faculty did not view knowledge for profit as abrogating the public service role, but rather as a way of "distributing their discoveries to society" (183). This profit motive enabled universities to secure more funding and businesses to obtain the latest product, process, or service information to maintain their competitive positions in the marketplace.

In recent decades, another movement joined the parade from service to engagement: *economic development* emphasized *partnerships* between academic and business interests, promoting the business model for higher education and enhancing the two-way interaction trend. Partnerships matched university resources of students, faculty, staff, classrooms, libraries, technology, and research expertise to community needs (Bringle and Hatcher 1996). Walshok (1995) listed the versions of these partnerships: joint research projects, regular programs of technical continuing education, manufacturing and industrial extension services, and a wide array of technology transfer activities.

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Goldstein and Luger (1997) outlined three comparative advantages that universities have over other entities for fostering economic development: they have a concentration of up-to-date technical expertise in their general fields of knowledge; they have credibility, especially in areas that have been subjected to peer review; and they have a pool of talented and inexpensive labor in their students.

Etzkowitz and Webster (1998) recognized the shift to a business model. They referred to two revolutions in higher education: the emergence of research as a major function and the translation of research findings into a marketable commodity to be used for economic development. Goldstein and Luger (1997) used business terminology to describe universities as "multiproduct organizations" with a distinction: they do not act like businesses when they encounter decline: they do not downsize, close, or move. They look for new purposes, such as changing the programs they offer or turning to economic development. However, the authors do urge universities to specialize, like businesses, if they want to be excellent. Dill (1997) developed a university version of the business notion of "core competencies." In business, these are "corporate-wide technologies and production skills that permit the company to adapt existing businesses to the competitive markets and also use the competencies as a source of new products" (183). In higher education, core competencies are "a distinctive collection of disciplines or professional knowledge and skill within an institution" (183). Although there were differences, these authors used business language to describe higher education, a noticeable outcome of the economic development trend. And, "like never before, economic development has become a legitimate purpose of higher education" (Powers 2004, 2).

In a broad, summarizing statement of the importance of the third mission, Walshok (2004) validated the importance of strong missions in learning and discovery and went on to urge academic practitioners to take a more active role in "enabling citizens and communities to have access to diverse forms of knowledge in diverse formats and settings throughout their lives" (10).

The Current and Future State of the Third Mission

This article has traced the evolution of the third mission of higher education from serving the community, to extending and reaching out to it, to engaging it in bidirectional relationships and interactions. Many authors recognize these several shifts in

emphases and values for the third mission of higher education, all traceable to a desire for higher education to serve the needs of the democracy and to preserve its own financial well-being. The third mission has many meanings to different people (Woods 2001). This variety is its strength in meeting the changing needs of the democracy. At the same time, the changes in its meanings and the multiplicity of its directions detract from its clarity of purpose

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and slow (and perhaps prevent) the wide acceptance necessary for it to capture a legitimate place in the higher education rewards and recognitions system. Thus the journey of change in the third mission of higher education returns to its philosophical underpinnings: higher education, for intellectual, political, and other reasons, changes very slowly, sometimes not until an outside force impels it.

Several questions can be posed in predicting the future of the third mission of higher education. How strong is the democracy's current need for engaged partnerships and economic development ventures with public higher education institutions? Is it enduring enough to elevate the third mission in the higher education hierarchy? What impact will continued declines in the amount of state aid to public institutions have on the third mission? Given that engaged partnerships encourage entrepreneurship and economic development, it is likely that in the next few decades the third mission will be elevated in importance and perhaps become the primary scholarly focus at some public institutions. Hence the external force propelling the change in the status of the third mission may again, like the Morrill Land Grant Act, be economic and political. The only difference is that this time, the revenue generated benefits the institution rather than the federal government.

This investigation has summarized the historical evolution of the third mission of higher education as a part of a larger study. A logical next step is to develop a framework for organizing the activities of the third mission. Along those lines, the authors of this article are in the final stages of completing such a framework and using it to analyze official policy statements in university strategic plans as they relate to the third mission. The result will be a categorized snapshot of third mission activities as they existed

at the beginning of the twenty-first century. In future years, this analysis may serve as a benchmark in more objective measurement of the extent of future change in the ever-evolving third mission of higher education. It is our hope that this historical review and the subsequent analytical study will contribute to the understanding and appreciation of the third mission of higher education.

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About the Authors

- Dr. Carolyn Roper is assistant professor of organizational leadership and supervision at Purdue University North Central in Westville, Indiana. She teaches courses in change management, conflict management, labor/management relations, strategic planning, supervision, and training and development. Her research interests are managing change in organizations and strategic planning. Before joining the university, she held directing and managing positions in the public and private sectors for thirty years.

- Dr. Marilyn A. Hirth is an associate professor of educational studies at Purdue University, West Lafayette, Indiana. She teaches courses in education finance, business management, educational policy, and school leadership. Her research includes studies of school finance equity, K-12 and higher education policy issues, and standards-based school reform initiatives.