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Communicating the modern entrepreneurial university in the 21st century: a case study of academic capitalism and media messaging in the pursuit of revenues and national prominence at Louisiana State University

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**COMMUNICATING THE MODERN
ENTREPRENEURIAL UNIVERSITY IN THE 21ST CENTURY:
A CASE STUDY OF ACADEMIC CAPITALISM AND MEDIA MESSAGING
IN THE PURSUIT OF REVENUES AND NATIONAL PROMINENCE AT
LOUISIANA STATE UNIVERSITY**

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Manship School of Mass Communication

By

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On August 29, 2005, New Orleans was shattered by the worst natural disaster in United States history. Muddy waters driven through protection levees by Hurricane Katrina flooded our home near the New Orleans lakefront. Almost everyone we know suffered some form of loss—houses, cars, clothing, and in some cases, family members, who perished in the flooding. Our loss, however, paled in comparison to legions of fellow New Orleanians.

As I researched and wrote this dissertation, our family recovered and rebuilt. Through all the chaos in our lives, it was my family, especially my wife, Gayle, who supported me in completing this study. They kept me going when I was tempted to second guess the wisdom of pushing onward.

My thanks go also to my committee members, especially Dr. Ralph Izard, who agreed to serve as my chair after Dr. David Perlmutter departed. Thanks also go to Dean Jack Hamilton, and Drs. Kirby Goidel, Richard Nelson, and Katie Benton-Cohen. I owe a special debt of gratitude to Dr. William Jenkins, the LSU System President, whose prodding kept me focused on finishing this work.

Finally, as I write these words, I am thinking about my brother, John, and my mother, Pearl. John was the true academic in our family. He followed my mother into teaching. Both of them dedicated their lives to educating young people. My mother taught high school business subjects—typing, shorthand, and accounting—for more than 30 years in St. John Parish, Louisiana. John was an elementary school principal and the “live wire” of our family. I often thought of them during this process. John came close but never lived completed his doctoral studies. I owe them both a debt beyond words.

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ABSTRACT

American public universities have passed through three stages of development: the religious, the philanthropic/land-grant, and the federal research university. Squeezed by government budget cuts and demands for more money to pay for research and faculty raises, U.S. higher education has entered a fourth phase, the entrepreneurial university. Public universities are increasingly capitalizing on the intellectual property of their faculty and students to sustain themselves and expand. Administrators spout free-market rhetoric as faculty attempt to commercialize research by creating spin-off companies. Using Louisiana State University as a case study, this dissertation, applies a combination of organizational knowledge creation and resource dependence theories to analyze the emergence of academic entrepreneurialism. This study also assesses LSU's capitalistic effectiveness against models of entrepreneurial development used by other U.S. colleges and frames entrepreneurial communication within the context of the state's political environment, state budget cuts, and tuition waivers awarded to academically superior undergraduates. LSU messaging is compared to other peer public universities and scrutinized within the framework of results from a national public opinion survey on LSU's image. Results suggest strong support for the concept of university entrepreneurialism, but indicate the American public, aside from athletics, doesn't know much about LSU academics or research. Testing of LSU-related messages, meanwhile, advances themes that resonate among respondents and provide potential communication paths for increasing LSU's national academic prominence and entrepreneurial success.

CHAPTER ONE: INTRODUCTION

September 1, 2005. Four days after Hurricane Katrina struck New Orleans, giant Charity Hospital was mostly silent except for the echoing drip of water. The emergency room, usually a blur of doctors and nurses rushing around amid an agonizing din of crying and pain, was still as well. Bodies lay shrouded in sheets on stairwell landings. The odor of human waste infused slick, tiled hallways smeared with bloody handprints and littered with Latex gloves, syringes, hospital gowns and water bottles. In treatment rooms, heart monitors, dialysis machines, and respirators were carelessly pushed aside. Outside, a banner made from a bed sheet, declaring “Stop the lying, get us the hell out of here,” hung from shattered windows in the crippled building where 300 sick and 1,200 staff were trapped by muddy floodwaters.

Operated by Louisiana State University’s Health Care Service Division (LSU HCSD),¹ the Charity basement, that housed electrical gear, was flooded and critical backup generators submerged by deepening floodwaters. Dr. Ben de Boisblanc, chief of the medical intensive care, took matters in hand, organizing a desperate effort to evacuate patients and staff. “We came to the conclusion that if we were going to get out, we were going to have to get ourselves out,” de Boisblanc said (personal interview, September 12,

¹ The LSU Health Sciences Center in Shreveport operates public hospitals in both Shreveport and Monroe independently from LSUHCSD. Control of public hospitals was turned over to LSU by the Louisiana Legislature in 1997. All ten institutions fall under the control of the LSU Board of Supervisors.

2005).² Relying more on instinct than training, doctors strapped patients to backboards, loaded them onto airboats, in many cases manually ventilating those too weak to breathe on their own, slowly moving them to the parking deck of the Tulane University Hospital across submerged Tulane Avenue from Charity.

Ninety miles away in Baton Rouge alarmed LSU officials watched TV reports of doctors and nurses wading through chest-deep water as they evacuated patients. “I was frantic,” said Dr. William L. Jenkins, LSU System president. Jenkins recalls anxiously working the phone to state emergency officials. “I kept saying, ‘My God, our people are dying, get them out’” (personal interview, January 28, 2006).

In the end, patients waited three days to be flown out because LSU HCSD had no airlift evacuation plans and had to depend on Louisiana National Guard and Louisiana Department of Wildlife and Fisheries evacuation teams. “Our people were trapped and no one would help,” said Don Smithburg, executive vice president of HCSD. “We just weren’t a priority” (personal interview, February 2, 2006).

“I cried when I left Charity,” recalled Dr. de Boisblanc. “Some were tears of triumph, some were tears of profound sadness. Triumph, for the miracle of human resolve that allowed a group of civilian doctors, nurses, and respiratory therapists to accomplish what the Federal government could not.”

Big Storm, Bigger Issues

Left unsaid by de Boisblanc was any criticism of the LSU System or the Louisiana Legislature, which repeatedly ignored requests for money to better prepare Charity for hurricanes (Jackson, 2005). State officials also ignored repeated warnings from medical accreditation panels. Only a month before Katrina hit, a team of trauma surgeons

² Unless otherwise noted, quotations in this dissertation are based on personal interviews.

described the hospital as a “crowded, cramped and antiquated disgrace” (American College of Surgeons Committee on Trauma, 2005, p. 11).

LSU hospital administrators had drawn up disaster plans. They stockpiled water, medications, bandages, and fuel for generators, enough supplies, they thought, for the hospital to be self-sufficient for three days. Emergency officials did not expect 80 percent of the City of New Orleans to be under water, a breakdown of civil order, and a collapse of state and federal emergency operations. They planned for a natural disaster, not a social disaster brought on by a catastrophe.

Looming larger in the aftermath of Katrina is whether the Charity evacuation crisis was a prime example of how LSU and dozens of other American universities may be overreaching in the name of graduate medical education and driven to be entrepreneurial by operating hospitals and biotechnology labs that attract lucrative research grants and licensing revenues.

Following Katrina, allegations of incompetence challenged the sincerity of the LSU System’s self-avowed mission of caring for the indigent sick. An LSU clinical faculty member was even arrested by the Louisiana Attorney General’s office and accused of second-degree murder for allegedly euthanizing four patients trapped at a private hospital. Political and media actors wondered openly whether the university was preoccupied with running hospitals, which account for two-thirds of the university system’s \$2.9 billion annual budget, at the expense of developing lucrative academic research.

“Was it a mistake for LSU to take control of Louisiana’s public hospitals?” LSU System President Dr. William L. Jenkins was asked. “Yes,” he replied. What about the

way LSU markets itself and its innovations? “We’ve done a lousy job of marketing,” he said. “When I wear LSU regalia, everyone speaks to me, but it’s about athletics.”

Jenkins draws support for his critiques from consultants hired to study the LSU System structure. “The presence within the system of the state’s health care delivery system—with all of its technical and legal complexity and its political ramifications and opportunities—has demanded so much time as to make many wonder whether the LSU System is a system of higher education or a system for health care” (Novak and Weary, 2006, p. 7). Evidence suggests the 11 institutions of the LSU System have a fractured image that lacks a unity of message.

Changing Core Mission?

Remarkable is not so much that LSU, or any university, is as much a big business as a school, but that life-and-death decisions like the Katrina evacuations are not commonplace in U.S. higher education where the toughest decisions until usually focus on granting tenure, battling budget cutbacks or eradicating drinking on campus.³ How did the LSU System get itself into this position? Why is any university system engaging in activities that are seemingly so far afield from higher education’s core mission of teaching and improving life?

The theme of this dissertation is that LSU is marketing itself as an entrepreneurial institution for three reasons: 1) to boost the university’s national reputation in collegiate ranking publications; 2) to grow the university system’s comparatively modest \$504 million endowment, and 3) to make up financial losses from persistent state budget cuts, tuition waivers, and the state’s Tuition Opportunity Program Scholarships (TOPS) that

³ According to the National Association of Public Hospitals and Health Systems, 120 universities or university systems operate public or private hospitals. In terms of physical size and patient visits, LSU HCSD operates the largest public hospital system in the United States.

collectively, university officials contend, limit LSU's ability to compete for higher quality faculty and students.

A corollary is that rising Medicaid spending may be exacerbating LSU's financial dilemma, forcing LSU and other public institutions to turn aggressively toward entrepreneurialism. For example, between 2002 and 2004 alone, state governments reduced higher education appropriations from \$63.3 billion to \$60.2 billion, a cut of 10 percent after inflation (Carnesale, 2006). As a result, American higher education institution depends more than ever on tuition and alternative revenues. The bottom line is this: Research universities with large endowments generate money by selling intellectual property, tuition increases, and fund raising. Universities with the financial wherewithal to recruit the best and brightest faculty members and students produce research that keeps their states at the forefront of science and technology. Entrepreneurialism, in effect, fuels and sustains revenue generation and the search for marketable innovations.

Effectively communicating saleable entrepreneurial ventures, however, is a multifaceted challenge for universities. Wound within the discussion of how best to accomplish that is an historic notion of academy-industry relations that is challenging the core values of academe. This study suggests that communicating capitalist universities is a blend of creative marketing in the service of economic necessity. A 1996 study of entrepreneurial universities crystallized the task confronting LSU and other public institutions:

As outside funding dries up, our only choices are to raise tuition, depriving many of the opportunities education makes possible, or, to find a way for the university to draw on its own resources—to take responsibility for its own future (Center for Geopolitical Studies, 1996, p. 2).

A Campus Defines a System

Academic entrepreneurialism in recent years has taken on a Darwinesque, survival-of-the-fittest tinge, as “every American public research university of significance, and especially every flagship institution, finds itself committed to the competition for the best faculty, the smartest students, and the most capable staff,” (Lombardi, 2003, p. 1), by relying on market forces to fill the persistent gap between state funding levels and rising expenses (Eckel, Couturier and Luu, 2006, p. 5). In the fall of 2006, ten schools accounted for a third of U.S. university-issued patents and half of university licensing income (DeVol et al., 2006, p. 38). Based on a 2003 analysis by the Association of University Technology Managers (AUTM), the gap between have and have-not universities is widening with royalty rates ranging from less than 1 percent for some process technologies to perhaps 8 percent for a patented compound with a significant market potential (Council on Governmental Relations, 1993).

Researchers concede most public colleges and universities cannot do without state funding because even if state appropriations are declining as a share of a university’s overall budget, they still represent millions of dollars. For instance, state funds for the 2005-2006 fiscal year constituted only 10 percent of the annual budget for the LSU System while restricted funds from grants and endowments made up almost 22 percent of the total budget.⁴

Crafting a national image that attracts faculty members who come up with innovations that generate revenues that grow the university endowment is the focus of the “Forever LSU” fundraising campaign launched in summer 2006. The campaign is attempting to raise \$600 million by 2010. If successful, the projected principal would

⁴ Source: The LSU System Office of Budget and Planning.

generate about \$30 million a year for university programs.⁵ The “Forever LSU” drive is focused on the main campus, a campus with an anemic record of producing licensing and royalty revenues compared to other System institutions, such as the Pennington Biomedical Research Center and the LSU AgCenter.⁶

Structure of the LSU System

Nearly 150 years old, LSU A&M is at a pivot point in its history, according to university leaders. The same can be said for the entire LSU System, which was formally established by the Louisiana Legislature in 1965 (see Appendix A for an organizational chart of the LSU System). In 1974, a new state constitution provided the LSU System with constitutional status.⁷ In 1967, additional campuses were founded at Eunice and Shreveport, joining LSU Alexandria, which opened in 1960, LSU New Orleans (now the University of New Orleans), and the main campus, LSU A&M, at Baton Rouge.

In 1972 and 1982 respectively, the Paul M. Hebert Law Center and the Center for Agriculture Sciences and Rural Development (now known as the LSU AgCenter) became autonomous units. The LSU School of Medicine at Shreveport opened in 1969 becoming the state’s second medical school in addition to New Orleans. The two health science centers reported to separate chancellors. The Pennington Biomedical Research Center, which specializes in preventative health and nutrition research, opened in 1988. In 1997, the Legislature gave operational control of the state’s public hospitals and outpatient clinics to the LSU system. The hospitals and clinics, which annually treat more than 1 million patients a year, are also used to train LSU undergraduate and graduate health care professional students.

⁵ Source: The LSU Foundation.

⁶ Source: The LSU System Office of Budget and Planning.

⁷ La. Const. of 1974, art. VIII, § 7.

It should be noted before proceeding that references to “LSU” in this dissertation, unless otherwise noted, refer to LSU Agricultural and Mechanical College (LSU A&M), also commonly known as the “main campus” in Baton Rouge. Although this study primarily concerns LSU A&M, the Baton Rouge campus’ relationship to the System is so interwoven and critical, the study includes periodic references to the LSU System. In many cases, especially in the eyes of the public, they are one in the same. As a result, Main Campus messaging tends to define the entire enterprise.

Overview of the Dissertation

This dissertation examines LSU’s entrepreneurial communication initiatives measured against efforts of public peer universities. Structuring the discussion is a theoretical overview of organizational and political communication and an examination of how LSU measures up against five models of university-based entrepreneurialism. This dissertation is neither a critique of the LSU A&M University Relations office, which employs more than 40 people with an annual budget of more than \$2.5 million⁸, nor a “how to” text on the mechanics of university public relations. It is a case study of one public university system’s attempt to communicate itself entrepreneurially while confronting potentially daunting financial, political, and academic challenges. Contextual analysis is all-important in this dissertation because LSU messaging does not occur in a vacuum. It is, in fact, the sum of the political, economic, and academic environments in which LSU exists.

In arguing that communication is a cultural product, theorist James Carey (1985) contended studying communication means examining the actual social process wherein significant symbolic forms are created and used. Attempts to construct, maintain, repair,

⁸ Source: Louisiana Board of Regents Form BOR-4A, pps.178 & 179, Budget for 2006-2007 Fiscal Year.

and transform reality, therefore, are publicly observable activities that occur in historical time.

Carey thought that we create, express, and convey our knowledge of reality through the construction of a variety of symbol systems: art, science, journalism, religion, common sense, and mythology. Therefore, what we know about LSU and the way the university communicates with its stakeholders and the wider world springs from the university's environment.

Research Questions:

In studying the communication of academic entrepreneurship and the commercialization of research at LSU, this dissertation incorporates the following objectives as research questions:

- R₁ How do LSU technology transfer processes compare with other public peer institutions in the United States?
- R₂ What does a survey of American public opinion reveal about how the nation views academic entrepreneurialism, research, and LSU academics?
- R₃ How does state funding relate to LSU's entrepreneurial initiatives?
- R₄ How does LSU messaging compare to a communication campaign conducted by a regional peer institution, including web pages, print ads and television commercials?
- R₅ Based on an analysis of LSU entrepreneurialism and results from the national public opinion poll, what messaging strategies hold promise for increasing the reputation of the university?
- R₆ What will an assessment of technology transfers reveal about the amount of royalties and licensing revenues produced by LSU versus public peer institutions?
- R₇ How will LSU's current communication campaign compare in terms of emphasizing entrepreneurialism with messaging used by regional peer institutions that are more successful in attracting research dollars and generating licensing and royalty income?

- R₈ Do survey responses suggest that LSU messages, stressing the university's value to the state and region, have a greater chance of improving the public's view of LSU as a top national institution and thus increasing the university's national reputation?

Structurally Speaking

Simply stated, the purpose of this study is to establish a baseline for measuring LSU's national image by assessing attempts to improve that image through entrepreneurial ventures used as tools to improve the university's national reputation.

Structurally, Chapter Two addresses scholarship on communicating entrepreneurial universities and supplies a theoretical framework for the dissertation rooted in organizational communication studies, public relations theory, and political communication research. Organizational knowledge creation theory, which examines what individuals come to know in their work lives and how it benefits their colleagues and organizations, provides the theoretical framework for the study. Also addressed is a key distinction between marketing and public relations in addition to the way in which political communication impacts LSU's messaging to internal and external stakeholders.

Chapter Three reviews the history and nature of capitalist universities in America, measuring how Louisiana State University compares to a number of peer national public institutions in applying five prevailing models of entrepreneurial universities. Also included is an assessment of LSU's Flagship Agenda designed to better the university's national aspirations while serving as an economic development tool for Louisiana.

Chapter Four establishes LSU's broad policy objectives of trying to increase technology transfers and research grants, looks at the rankings games universities play in pursuit of their national reputations. LSU academic reform efforts are studied as a key factor in the university's entrepreneurial endeavors. The chapter also examines LSU's

public relations outreach campaigns, comparing those efforts to those of other universities. The focus is on whether LSU's efforts are aimed more at recruiting and branding than in addressing its Flagship Agenda and by extension its capitalist goals.

In Chapter Five, LSU finances are examined along with the way economic realities in Louisiana impact the university's drive for entrepreneurial success and how LSU compares to a number of peer public institutions. The actions of political actors become important in this chapter in assessing the impact of legislative restrictions on tuition and fees that have forced LSU to seek alternative revenue sources. The chapter also examines the apparent nexus between rising state Medicaid expenditures and reduced spending on higher education. The possibility is raised that LSU academics are being hurt financially by providing indigent care in the state's public hospital system. Tuition waivers to out-of-state students and the Tuition Opportunity Program Scholarship (TOPS) also impact the bottom line.

Chapter Six details findings of a national image study conducted for this dissertation. Assessed are public perceptions of LSU academics and research. Also included are public views of entrepreneurial universities, how LSU compares to its national peers qualitatively, and what LSU-specific messages resonate with respondents and therefore might be helpful in building the university's global image as a "top university." Views of Louisiana higher education along with public perceptions about the cost of a college education also are explored. Results indicate broad misconceptions about the cost of a public versus private college education and disclose an apparent lack of savings among parents to pay for the post-secondary education of their children (Appendix A, Question 65). This is important because if the public believes that all colleges cost "about the same," as the survey indicates (Appendix A, Question 49), and

that the government should not base tuition assistance on the parental income (Appendix A, Question 54), then there may be little political urgency to impose higher tuition and fees. It is that public attitude that may be feeding the drive for increased entrepreneurialism among universities like LSU.

Chapter Seven provides an analysis of the LSU's entrepreneurial efforts based on personal interviews with LSU System President William L. Jenkins, and national education consultant Eva Klein. Does Jenkins believe LSU communication and marketing efforts are effective? To what does he attribute an apparent lack of resolve to deal with public calls for the restructuring of Louisiana's higher education system? What does Klein think of LSU's Flagship Agenda as an entrepreneurial tool? How would she recommend restructuring Louisiana higher education to better serve what she refers to as our knowledge-based economy?

Finally, Chapter Eight draws conclusions based on the analysis and suggests a potential path for the university's entrepreneurial communication efforts, a strategy that recommends stressing value messages that reverberate with the American public, communications that enhance the university's regional and national reputation in non-athletic activities.

Pursuing Greatness Amid Organized Chaos

Achieving national prominence for a public university saddled with a reputation as a "party school" is difficult, costly, and lengthy. LSU, for instance, is not a member of the prestigious American Association of Universities (AAU), an organization of sixty U.S. and two Canadian institutions dedicated to maintaining a strong system of academic research and education. Every Top Tier university in *U.S. News and World Report's* annual ranking of top colleges is a member of the AAU. Private Tulane University,

ranked 44th by *U.S. News*, is the only AAU member institution in Louisiana.

What, however, defines a great university? The core mission of the world's leading research universities is education, discovery research and the dissemination of knowledge (DeVol et al., 2006). A majority of the research at these institutions tends to be oriented toward basic research that addresses long-term, fundamental scientific discovery and knowledge (p. 8). University of California at Los Angeles Chancellor Albert Carnesale (2006), in a commentary for *The Chronicle of Higher Education*, tried to define greatness among 21st century universities. They "generate innovation, help drive the economies of their states and the nation, and provide opportunity and enhance the quality of life for the people they serve" he wrote. "Through research and study, they respond to pressing public needs in an enormous range of fields, including science, technology, public policy, and the arts" (Carnesale, 2006, p. B20). In effect, many universities have become innovation pipelines, converting research and creativity into commercially promising intellectual property. By that measure, this dissertation will suggest that based on American public opinion and an analysis of the university's entrepreneurial communications, LSU is a work in progress.

Communicating just about any change in higher education, such as becoming more capitalistic, is "an odious task," wrote organizational communication scholars Claudia and Tobias Scheytt (2005, p. 76). The two researchers observed that universities are inherently resistant to change, and tend to embrace innovation only "in periods of decreasing budgets and...unclear goals," adding:

Hierarchies are ambiguous and unreliable, and governance structures are weak. The members of the organization are idiosyncratic and often obstinate; on the other hand, they are experts when it comes to arguing (p 76).

In addition, defensive routines among administrators and faculty (Argyris, 1990) are widespread, because at its core, the university is a ‘knowing organization,’ which makes it hard to transform it into a learning organization, especially a learning organization with a chaotic heart.

Large public university systems such as LSU tend to function with an outward veneer of calm that masks what scholars and administrators concede is “organized anarchy” (Scheytt and Scheytt, 2005, p. 87). Substantial organizational change that leads an institution into areas previously foreign to academia can produce accidental and confused results. What this study asserts is that communicating entrepreneurialism as functionally transformative can be both haphazard and paradoxical (Scheytt and Scheytt, 2005), producing competing storylines that, on one hand, encourage universities to do new things, improve continually, and address a widening circle of state issues, yet on the other, confront administrators with inadequate state support (Eckel, Couturier and Luu, 2005) and competing political demands.

Association of Governing Boards (AGB) consultants Richard Novak and William Weary (2006) noted in their study that the LSU System faces a “very particular challenge” of serving numerous institutions with widely varied missions, ranging from a two-year institution to a flagship university, a “premier biomedical research center,” and a law center along with a statewide charity hospital network, a pair of health science centers and an agriculture center (p.4). “Many within and around the system struggle to answer these questions, convincingly and specifically,” the two advisors said, asking: “Is there indeed something besides the LSU name that ties them together?” It is a puzzle that lies at the heart of LSU’s quest to better define and improve its national image through entrepreneurialism.

CHAPTER TWO: ORGANIZATIONAL MESSAGING THEORY AND ENTREPRENEURIALISM

With LSU trailing Missouri 6-0 at halftime in a 1930 game at Tiger Stadium, Louisiana's legendary "Kingfish," Huey Long, strode into the LSU locker room to deliver a fist-pounding pep talk to a bedraggled Tiger squad. "If you win," the governor declared, "I'll give every slap damn one of you a job on the Highway Commission" (Jeansonne, 1995, p. 8). LSU came back to win but there was no indication whether Long delivered on his promise. The anecdote may represent one of the earliest, albeit low-level, technology transfer proposals in LSU history and crude but effective organizational communications. Long, who described himself to a magazine reporter as "the official thief" for LSU,⁹ also once told LSU President James Monroe Smith, who later went to prison for embezzling \$500,000 of university money:

You will find that you cannot do without politicians. They are a necessary evil in this day and time. You may not like getting money from one source and spending it for another. But the thing for the school people to do is that if the politicians are going to steal make them steal for the schools (Long in Rorty, p. 76).

The stories also typify the longstanding fusion of interests between LSU and political actors, a relationship that strongly influences the university's messaging. The communicative alchemy involved in transforming LSU into a 21st century entrepreneurial university is the subject of this dissertation. This chapter discusses organizational

⁹ American Progress, December 14, 1933.

communication scholarship, public relations theory, and political science research as pathways to better evaluate techniques used by LSU and other higher education institutions to capitalize knowledge.

Pursuit of technology transfers among universities is a developing field barely 20 years old (Feller, 1997). What has been published about the phenomenon, however, is largely devoid of theoretical foundations. Researchers are still trying to describe and understand aspects of the practice (Powers, 2003). Consequently, no theory of university technology transfers appears to exist, but enough is known about the practice that elements of more developed theories in business strategy, communication, and organizational structure can be applied because each supplies a unique contribution to understanding what may explain entrepreneurial communications among U.S. research universities.

Specifically, this dissertation is grounded in an integrated theoretical framework that incorporates significant elements of organizational knowledge creation and resource dependence theories (Pfeffer and Salancik, 1978). Both theories provide key insights into a university's performance with technology transfer programs.

Resource-based View of Universities as Firms

Strategic management literature has focused in recent years on what is known as the resource-based view of the firm. One theory within the strategic management literature that has received considerable attention in recent years is the resource-based view of an organization (Barney, 1991). Concentrated on resources internal to an organization, the resource-based view suggests that particular idiosyncratic resources, those that are difficult or costly to copy, can provide a firm with a competitive gain in the marketplace when appropriately exploited (Barney, 1991; Grant, 1991). These resources

could be any number of assets, capabilities, organizational processes, organizational attributes, information, and knowledge an organization possesses.

Resources connected to entrepreneurial activity are of particular interest, such as expert knowledge (Deeds, DeCarolis, and Coombs, 1997; Finkle, 1998) along with access to important personnel, information, and support structures (Flynn, 1993; Mansfield, and Lee, 1996). Researchers also report a positive relationship between university research and the creation of new products and processes by high-technology industries (Mansfield and Lee, 1996) as well as birth rates of new organizations (Flynn, 1993). Hence, in a higher education context, such resources as faculty quality, the presence of particular programs and infrastructures, the amount of research and development support, and location-related factors might represent critical resources for entrepreneurial universities. They might even be predictors of technology performance (Powers, 2003). Overall, however, academics have paid relatively little attention to evaluating the impact of technology transfers and their ability to commercialize university technology (DeVol et al., 2006).

Resource-Dependence Theory

As has been discussed, the resource-based view of an organization focuses on internal resource factors that contribute to its ability to outperform other organizations in an industry. High levels of performance may also be attributable to factors in the external environment to which they have been able to effectively respond (Lawrence and Lorsch, 1967). For example, organizations confronting possible reductions or disruptions in the supply of raw materials may seek other sources as ways of ensuring long-term survival. Organizations that successfully extract these important new sources of supply may outperform those that remained dependent on the old source, particularly if the reductions

or disruptions in fact materialize. Resource dependence theory (Pfeffer and Salancik, 1978), therefore, provides a useful framework for conceptualizing the impact of external resource dependencies and its linkage to performance, issues of additional importance to this study. Resource dependence theory also suggests that causal explanations for organizational behavior are found through analyses of the social interactions of an organization with its external environment rather than relying on rational, economic theory approaches to organizational behavior that at times have been inadequate for explaining seemingly irrational action (Pfeffer, 1997). Considering this perspective, resource dependence theory argues that organizations seek to reduce their dependence on suppliers of critical resources in ways that better ensure the long-term survival of the organization (Pfeffer and Salancik, 1978).

Slaughter and Leslie (1997), in a study of higher education entrepreneurialism, found research universities, confronted with reductions in traditional sources of income such as state funding, are trying to reduce their dependence on government revenues by boosting commercial activity. Doing so effectively gives universities greater control over resources by enhancing their perception as engines of economic development, an issue of considerable interest to state and federal policymakers.

Organizational Knowledge Creation Theory

Organizational knowledge creation theory—the process of making available and amplifying knowledge created by individuals as well as crystallizing and connecting it to an organization’s knowledge system—also provides the theoretical underpinning for this dissertation. As Ikujiro Nonaka, Georg von Krogh and Sven Voelpel (2006) noted, organizational knowledge creation theory describes what individuals come to know in their work lives and how it benefits their colleagues and, eventually, the larger

organization. Research in this area understandably has been concentrated on the corporate world, but with universities increasingly behaving more like corporations, how organizations create knowledge and then disperse it internally and externally is useful in this shaping case study of LSU's attempts at making money by sharing knowledge.

Central elements of knowledge creation theory were developed in academic studies of management practices over the past 15 years. It has been used to explain phenomena in a wide variety of fields, including organization theory (Osterloh and Frey, 2000), organization behavior (Peterson, 2002), human resource management and leadership (Ranft and Lord, 2000), innovation and technology management (Nonaka et al., 1996), strategic management (Choo and Bontis, 2002), public administration (Larsen and Pedersen, 2001), and management information systems (Scott, 1998).

Epistemologically, organization and management studies have considered knowledge to be interchangeable with information, adopting the classic economics view of rational choice as the individual process of information gathering about alternative courses of action and then choosing an appropriate solution that maximizes utility. Or, as Herbert Simon concluded in 1955, such intended rational behavior is behavior with constraints. In the late 1980s, scholars such as Fredrick Taylor and others proposed that the organization should be viewed as processes of information creation (Nonaka, 1987, 1988). Later research proposed that knowledge is embodied in the individual, and is therefore history dependent, context sensitive, specific and aimed at problem definition rather than problem depiction and problem solving (Varela et al. 1991). In other words, if knowledge is embodied, a core problem of organizational theory is not an organization's design and adaptation under bounded rationality conditions, but how to overcome the

tenuous transmission of knowledge among individuals in the organization and beyond (von Krogh et al., 1994).

Knowledge creation theory sees knowledge as fundamental, meaning individuals align the truthfulness of their observations based on their views of the world. Justification therefore hinges on unique viewpoints, personal sensibility and experience (Nonaka and Takeuchi 1995). Knowledge then becomes the capacity to define a situation and act accordingly (Stehr 1992, 1994; von Krogh et al. 2000). Under this definition, knowledge is oriented toward encapsulating a situation so it can be acted upon rather than solving depicted or manipulated problems (Newell and Simon 1972).

In addition, knowledge is both explicit and tacit (Nonaka 1991). Knowledge that can be uttered, expressed in sentences, captured in drawings and writing, is explicit. Knowledge tied to the senses, movement skills, physical experiences, intuition or implicit rules of thumb, is tacit (Polanyi 1966). Consequently, knowledge is never free from human values and ideas.

Knowledge creation, therefore, is a continuous process in which one overcomes individual boundaries imposed by information and past learning by acquiring a new context, a new view of the world and new knowledge. As Ilya Prigogine (1980) wrote, knowledge creation is a journey from being to becoming (Prigogine in Nonaka et al. 2000).

By interacting and sharing tacit and explicit knowledge with others, the individual enhances the capacity to define a situation or problem, and apply his or her knowledge to act and specifically solve the problem. In an organization, knowledge “becomes” or “expands” by sharing knowledge with external audiences (Nonaka and Takeuchi, 1995). Knowledge is first integrated into the organization’s knowledge system and then

communicated. As a result, organizational knowledge creation theory identifies knowledge formation as a central element in improving innovation and learning (Nonaka, 1994; Nonaka and Takeuchi, 1995; von Krogh et al. 2000), a central tenet of higher education culture and entrepreneurial research.

There has been limited exploration, however, of the relationship between the origin of knowledge and the source of firms and organizations much less the relationship between universities and organizational knowledge creation. Entrepreneurship literature suggests entrepreneurs' prior knowledge of technologies, markets and customer needs shape their abilities to perceive and seize business opportunities (Shane, 2000, 2001; Shepherd and DeTienne, 2005). On the other hand, studies conducted in the software industry (Urwyler, 2005) concluded that entrepreneurs frequently do not possess much prior knowledge—either about markets or customer needs — before they establish their firms and try to sell their products and services.

As a body of study, organizational communication focuses on groups of individuals working together in a coordinated way in the pursuit of production-related goals (Morgan, 1997). Theorists contend communication then becomes “the central means by which individual activity is coordinated to devise, disseminate, and pursue organizational goals (Gardner, Paulsen, Gallois, Callan, and Monaghan, 2001, p. 561). Alternatively, Weick (1979) proposed that communication is the core process of organizing while Iedema and Wodak (1999, p. 7) suggested that organizations do not exist independently of their members, but are “created and recreated in the acts of a communication between members.”

Organizations typically involve highly differentiated social systems (Scott, 1998; Trice and Beyer, 1993), with formal and informal boundaries and negotiated identities.

Historically, organizational communication has lacked disciplinary coherence (Mumby and Stohl, 1996).

Theoretically, organizational communication scholars often have been viewed as the poor relations of the broader communication discipline, or, as one research put it, the “shame of speech communication” (Ellis, 1982). Innovation, however, as Nonaka (1994) states, is the key form of organizational knowledge in which the organization creates and defines problems and then actively develops new knowledge to solve them. Nonaka also observed that the nucleus of the theory centers on the idea of sharing knowledge in keeping with observations of Taylor, Flanagin, Cheney, and Seibold (2001) and many other researchers who noted that organizations are increasingly called upon to adapt to economic pressure by changing their internal structures, process, and relationships to their markets (Kanter, Stein, and Jick, 1992).

On a related note, organizational knowledge creation theory holds that any organization is in a constant state of becoming and that knowledge assets represent an organization’s past, present, and future. The theory can explain how the accumulated products of past efforts—databases, patents, brands or product designs—give rise to present activities (Probst and Raisch, 2005).

A Lack of Entrepreneurial Communication Literature

Much has been written about university-sponsored start-up companies, ranging from discussions of new research, institutional level concerns and the mechanics of academic business incubators. Little, however, has been written about how entrepreneurial universities communicate their knowledge internally and externally. While multiple studies defined characteristics of excellent entrepreneurial institutions,

few, if any, have dealt with entrepreneurial communication as an adjunct to achieving business success and academic distinction.

The nucleus of the way entrepreneurial universities communicate internally and externally is heavily influenced by the structure of organizational communication (Clegg and Hardy, 1996) that was shaped by mostly American business and industrial interests from the 1920s to the 1950s (Putnam, Phillips, and Chapman, 1996). Writings of self-improvement guru Dale Carnegie promoted the view that persuasive techniques, accuracy and readability of reports, and the effectiveness of different communication media determined the effectiveness of organizational communication (Putnam and Cheney, 1985).

Not surprisingly, the term *communication* permeates many organizational studies. Putnam, Phillips and Chapman (1996) observed, however, that the ubiquitous nature of the word contributes to its elusiveness. They stress that the difficulty in distinguishing it from such related terms as “*information*, *channel*, and *media* and from the myriad of organizational concepts that incorporate nuances of the term” (p. 375) and ultimately affect how organizations such as universities communicate with stakeholders and the general public. Channels of communication include written memos, e-mail, meetings, telephone calls, and informal face-to-face communication, otherwise known as the grapevine (Miller, 1995). Two dominant propositions dominated organizational communications: 1) the skills that made individuals more effective communicators on the job; and 2) the factors that characterized system-wide communication effectiveness (Redding and Tompkins, 1988). In the late 1980s, organizational communication was defined as “the study of messages, information, meaning, and symbolic activity” that constitutes organizations (Putnam and Cheney, 1985, p. 131).

Universities, like most organizations, still operate on a communication model premised on instruction and surveillance through personal, written or verbal messages. Traditional organizations rely on professional discretion to monitor the less routinizable areas of organization life. Hierarchies remain the norm although personal computers are challenging traditional notions of the “orthodox consensus” on the role of functionalism, meaning the assumptions concerning the unitary and orderly nature of organizations are in doubt (Atkinson, 1971).

The key concept, according to Clegg and Hardy (1996), is that of the organization as a “system” that is functionally effective if it “achieves explicit goals formally defined through rational decision-making” (p. 2). Leadership’s task is to define and achieve goals. While it may be a stretch to characterize the process as postmodernism (Laclau, 1988), the upheaval among entrepreneurial universities is marked by many of the rubrics that typify the postmodern approaches that topple classic notions of higher education as being non-commercial, dedicated to training and dispassionate inquiry. Certainty is gone. And while organizations are empirical objects, meaning that we see something when we see an organization, each of us may see something different.

Examinations of organizational communication dynamics among universities are rare, but important to understanding how entrepreneurial universities grew. Numerous case studies analyzed (Applebaum, 1998; Byers, 1998; Graves, 1999) business and industry techniques such as how to get along in the workplace. Few studies have examined how universities communicate themselves beyond routine assessments of public relations techniques that dispense advice in the handling of news releases about faculty and student achievements. Frank Schmidlein (1999), however, studied common

assumptions about the rationality or irrationality of organizational behavior and found that decision-making occurs in a complex context.

Layers of Change in Academia

Coupled with concepts of organizational communication are notions of change at multiple levels. Humans value different orders of change because they are purposeful systems and can choose both behaviors and goals (Ackoff and Emnery, 1972). First-order change involves evaluating the outcomes of behaviors and adjusting behaviors to maximize goals (Argyris, 1992). Second-order change, metanoia, occurs with changes in goals and the ways of making sense of behavior and outcomes (Argyris, 1992; Senge, 1990). Where second-order change is often accomplished through psychotherapy among family members, in organizations, second-order change is part of double feedback learning, learning that challenges the organizational culture (Argyris, 1992). Learning of this sort consists of activities designed to question tacit assumptions and values. In the same way family members examine the rules that define their behavior, organizational members look closely at the deep structures of the system.

The third characteristic of change is that it is normative. Living systems recognize change as a disruption of equilibrium. Miller (1978) noted that the organism seeks outcomes and pursues those outcomes within a range of behaviors and outcomes specified in the organism's genetic code and in the calibrations that are part of its decider mechanisms. Human higher mental processes include the ability to displace and decenter (Dance and Larson, 1976). Humans can anticipate, and they experience change as a violation of perceptual expectations or as being inconsistent behavior. In organizations, the perception of a performance gap may lead to innovation (Rogers, and Agarwala-Rogers, 1976).

Fourth, change alters structures of systems. Aiex (1988) concluded that when first-order change, simple learning, involves changes in the degree or manner of performing previously performed behaviors, change reinforces existing structures. As an example, when routines are refined to improve efficiency, these changes support the existing set of rules that called for those routines. All systems tend toward maximization (Katz and Kahn, 1978). When it has little environmental equivocality or pressure, the system tends to acquire more and more resources, and each cycle of behavior becomes more structured and more efficient at using those resources. The system centralizes as it reduces the equivocality in its processes, converting what seems novel to routine (Rogers, and Agarwala-Rogers, 1976). Researchers have found, however, that routinization means that systems stretch horizontally. Adoption means that the organization has added an additional behavior to its repertoire, and the new behavior poses a challenge to the old methods of control. Weick (1979) contended that continued processing of novel inputs challenges the rules for processing equivocality. Continued acquisition of behaviors into a system's repertoire will push the system to capacity and challenge methods of control. Turbulent environments require fewer processing rules to allow for greater innovation of behavior. Behavior cycles, rather than rules, become the dominant method of reducing uncertainty (Weick, 1979).

Finally, as Salem (1997) concluded, change is multi-level with the natural evolution of systems often involving different levels moving in opposite directions. Organizational members in different ranks or different functional roles often experience change differently (Argyris, 1962). As one level of the system moves toward novelty, the levels immediately above it and below it may be moving toward stability. As one level of the system moves toward stability, the levels immediately above and below may be

moving toward novelty. In a large organization, what may be a simple refinement of processes for a higher level may appear as a radical departure from the routine for those levels actually implementing the change. How do messages reach receivers in an organizational sense? A discussion of messaging theory, at this point, would be instructive.

Message Conduit Metaphors

Political scientist Harold Lasswell's communication model, first published in 1948, asked "who says what to whom and with what effect?" Lasswell saw communication as the transmission of messages, raising the issue of "effect" rather than meaning. "Effect" for Lasswell implied an observable and measurable change in the receiver that is caused by identifiable elements in the process. Changing one of these elements will change the effect. Changing the sender may alter the message; changing the channel may change the effect.

Surveys of communication within organizations, however, viewed communication mostly as a channel in which messages are transmitted throughout the organization (Axley, 1984; Reddy, 1979) in the same way something is conveyed through a tube, cable, or cylinder (Axley, 1984). This metaphor equated communication with *transmission* and organizations as *containers*, physical systems, or passageways.

Axley (1984) noted that words that trigger use of a conduit metaphor include *send*, *exchange*, *relay*, and *convey*. The conduit metaphor treats transmission as figure and message and sender/receiver as ground. Communication within this metaphor is primarily a one-way linear flow (Shannon and Weaver, 1949), even though amendments to this approach add feedback, two-way flow, and process (Rogers, 1994). The centrality of transmission remains constant, even with variations in directionality of information

flow, according to Eisenberg and Philips (1991), who pointed out that a manager who communicates effectively is transferring ideas to his or her subordinates with minimal spillage. Words contain information, language transfers thoughts and feelings, and listeners extract ideas from transmission (Axley, 1984). Consequently, the conduit metaphor suggests an image of communication as easy, effortless, and linear.

Miscommunication results when no information is received or when the information received is not what the sender intended (Eisenberg and Phillips, 1991). According to this view, receivers are typically passive and reactive (Putnam, Phillips, and Chapman, 2002).

Among organizations that see themselves as conduits, communication is an instrument, a tool for accomplishing a specific goal. In the case of entrepreneurial endeavors, communication diffuses organizational innovations and fosters organizational change. Studies of organizational communication (Applebaum, 1988; Byers, 1998, Graves, 1999) tend to center on case studies of business communication in attempts to understand issues relevant to corporate communication. Barclay (1997) assumed that diversity of change would affect how employees experience their organization and make sense of their work. Barclay suggested three theoretical models that framed her research, including a cultural frame that reflected the collective learning of shared assumptions by its members while illustrating the right way to act and think (Schein, 1992). The foundation for this learning rests in the communication of organizational members, and the development of a common language is the springboard for the subsequent acquisition of shared concepts. Thus, the culture of an organization is, in the end, communication. As organizational members communicate, they create the culture, which ultimately sustains and constrains them (Giddens, 1984), again reinforcing the notion that

communication is culture. If that is the case, entrepreneurial enterprises and how they're communicated spring from the society in which they're developed.

Organizational Culture and Universities

Universities are the very essence of complex organizations that are products of their environment. But what is organizational culture, and is it different for universities? Organizational culture has been defined as a “system of shared values (what is important) and beliefs (how things work) that interact with a company's people, organizational structures, and control systems to produce behavioral norms (the way things are done around here)” (Uttal in Leontiou, 1987). Analysts suggest this anthropological perspective owes its existence to the acceptance and wide dissemination of the ideas of the cultural anthropologist Clifford Geertz. Kendall (1986), however, traces the emergence of the organizational culture metaphor directly to the setbacks experienced by American industry in the face of Japanese competition, the so-called strong organizational culture found in Japanese industry.

Historically, Daniel Lerner (1958) proposed that contact with the media helped the transition from traditional to a modernized state. Lerner based his findings on extensive research of Middle Eastern countries, but his conclusions may be applied to modern-day organizations. For instance, Lerner suggested that mass media are “mobility multipliers” because they allow individuals to experience events and ideas in faraway places. Such an expanded psychological capacity for “empathy” with new ideas, behavior, and cultures would, in turn, he wrote, prompt them to reassess their traditional ways of life while aspiring to new and modern ways of living.

Extending Lerner's modernization theory of mass communication, scholar Wilbur Schramm, in *Mass Media and National Development* (1964), described the mass media

as a “bridge to a wider world.” The media, he argued, could help people in Third World nations to change from fatalism and a fear of change and acquire “a desire for better life than they have and to be willing to work for it” (p. 130). Communicating change is a central facet of entrepreneurial communications. Cascading information about change through public spheres is the essence of how large, complex institutions convey commercial innovations by acting like telephone switching systems, or Internet routers that flow information to organizational publics (Grunig, 1984).

Unity from Chaos?

The multi-faceted nature of universities, however, resists attempts at a cohesive communication theory to apply in messaging entrepreneurialism in the same way a unified theory among public relations practitioners has been consistently elusive. Einstein once wrote “measured objectively, what a man can wrest from Truth by passionate striving is utterly infinitesimal. But the striving frees us from the bonds of the self and makes us comrades of those who are the best and the greatest” (Einstein, 1979, p. 24). Communication professionals consistently turn to the scientific method as a way of striving in the manufacture of theoretical knowledge that brings order to an at-times chaotic field with at least 249 identifiable theories (Craig, 1999).

Researchers such as Grunig et al, (1992) note, however, that public relations professionals “seem to flounder without direction in their work,” that public relations “has no consistent definition,” and that it often is simplistically defined by its practitioners as “what public relations people do” (Grunig et al., 1992, p. 32). “To many critics, that work seems unprincipled, unethical, and theoretical” (p. 32.).

As a general proposition, theory brings order to chaos by exploring fundamental beliefs and assumptions people have not only about theory but also about the practical

problems they confront. Where scientists once believed the scientific method could leach subjectivity from all thinking, researchers in the social and behavioral sciences now recognize science is “a very human undertaking and that humans impose their fundamental beliefs about the world on their thinking and observing” (p. 33). Most people have theories about why they and others behave the way they do. What is irrational to some may seem rational to others. Consequently, as analysts point out, while it is easy for communication researchers to impose their beliefs about the world in framing and understanding behavior, it also is easy for those being observed to reject explanations that do not coincide with their fundamental beliefs.

Yin and Yang of Organizational PR

For more than 40 years, researchers have questioned whether public relations has an accepted body of knowledge built on empirical investigation (Lerbinger and Sullivan, 1965). From an organizational communications point of view, public relations research concentrated on the functional, pragmatic techniques and the production of strategic organizational messages with attention to journalistic methods and production skills in dealing with business-oriented topics, including advertising, marketing, and media relations, as practitioners focused on public relations as an instrument to accomplish specific organizational goals (Botan and Taylor, 2004).

Scans of literature indicate the partisan nature of most public relations activity as representing management, manipulatively promoting favorable images, engineering consent or increasing profits. It is a discipline that by the very nature of its work is accused of distortion simply by communicating only favorable information about clients or companies. “No one—least of all those who practice it—seems to be sure just what it is,” concluded one pair of authors (Lerbinger and Sullivan, 1965, p. 13). Although public

relations research journals have emerged over the past four decades, the nature of PR, particularly for organizations, is evolving.

Public relations scholar Mary Ann Ferguson, in the 1980s for instance, called for theory development in public relations that focused on public relationships. She recommended a paradigm shift in public relations—away from thinking of effective communication as merely achieving program effects among targeted audiences to assessing the state of an organization’s relationship with the publics whose support is needed to optimize the organization’s ability to achieve its mission (Ferguson, 1984). Ferguson’s argument asserted that even meaningful measures of communication effects, such as attitudinal and behavioral changes among a target group, fail to capture the full picture of the potential effectiveness of an organization’s public relations efforts.

In a thoughtful, quantitative analysis, Baker and Hall (2003), specifically examined public relations practices at research universities, comparing public relations in businesses and other organizations with PR efforts on campus. What they found was a dedication to public relations principles, but little professional experience among university practitioners that would translate enthusiasm into successful entrepreneurial communications performance. Applying professional expertise, however, doesn’t make the task easier. Big public universities like LSU are multi-layered institutions, but they are not monolithic with the possible exception of the fact that they seem uniformly slow to adjust to change.

PR and the Ivory Tower

In the same way that organizational communication dynamics rarely have been studied among universities, public relations studies in the past decade have seldom explored the roles and responsibilities of public relations professionals in academia,

especially the impact of universities' efforts to establish, maintain, or improve relationships with key publics. Studies have examined the relationship between universities and several key publics, including faculty (Campbell, 1999; Johnsrud, Heck, and Rosser, 2000; Tang and Chamberlain, 1997), students (Simpson, 2001; Grandy, 1998; Whitt, Edison, and Pascarella, 2001), legislators and regulators (Checkoway, 2001; Julius, Balderidge, and Pfeffer, 1999; Frost, Hearn, and Marine, 1997), and business (Anderson, 2001). However, only a few provide insights into the universities' primary relationship-building function with these publics—its public relations program (Bruning, 2002; Stewart, 2001; Wedgeworth, 2000).

Other research has explored characteristics of interpersonal relationships and how they inform an understanding of the relationship between an organization and its publics (Thomlison, 2000; Broom, Casey, and Ritchey, 1997). Relationship-building studies (Bruning, 1999; Bruning and Ledingham, 2000) suggest that communicating entrepreneurial ambitions is reducible to understanding the conceptual difference between marketing and public relations.

Hall and Baker (2003) concluded that marketing is a management function that concentrates primarily on the product. Traditionally, that focus is relatively limited to the product itself, its pricing, place, and promotion. The product still plays a central role in the current marketing thinking that includes relationship marketing. The connection in relationship marketing exists between the customer and the product.

Public relations, on the other hand, is a management function that strategically and proactively builds relationships between the organization and its publics, seeking, if possible, to achieve mutual benefits. As Hall and Baker (2003) proposed, a more productive focus for universities trying simultaneously to boost their national image and

endowments is to concentrate not so much on the relationship between a specific university “product,” invention, department or research effort, but on the relationships among stakeholders—faculty, parents, students, and donors—and the university itself, including its leadership, mission, quality, values, and contributions to the community and society.

Faculty as Key Players

Unquestioned among academicians is the premise that the university is the key institution in information societies, that the growth of an information society rests fundamentally on the rise of knowledge industries that produce and distribute information rather than goods and services (Machlup, 1962). Universities manufacture information as the result of basic research in a role roughly analogous to that of the factory in industrial societies. It is the key institution around which growth occurs and which, in turn, determines the direction of that growth.

University-industry relationships represent a new force on university campuses. Although some decry the commercialization of knowledge, universities benefit in two ways: They receive research funds, and professors gain useful experience which they can then incorporate into their courses for the benefit of their students. Studying faculty involvement in entrepreneurship activities, Bird and Allen (1987) found that consulting represented the major way in which faculty members in all disciplines engage in entrepreneurialism. Eveland (1985) pointed out that entrepreneurship is important to faculty members because it provides a direct avenue for personal contacts between industry and academe, which helps prevent organizational rigidity for both parties. The larger benefit, however, came in the fact that personal contact led to more formal research arrangements between corporate partners and faculty (Fusfeld, 1983). Finally, faculty

consulting effectively eased faculty members into business ventures, spurring further development (Bullock, 1985). From a communication perspective, faculty consulting provided a two-way communication channel and was often the precursor to more intensive relationships (Etkowitz, 2002).

The Bird and Allen survey revealed that only 30 percent of faculty members are actually involved in entrepreneurial activities related to their research (p. 592), with many preferring instead to do nothing to alter their relationships with their universities by becoming more commercial. The authors found a profound division between academics devoted to teaching and publishing, and faculty, who welcomed the rapid change and considerable stress of entrepreneurship. Faculty at ease with working in the pressurized atmosphere of entrepreneurially-focused research, Bird and Allen observed, were more likely either to engage in spin-off company creation, or, leave the university for the business world.

Etkowitz (2002) taught that entrepreneurial universities are a continuation of the development of medieval institutions for the conservation and transmission of knowledge into multifaceted institutions that “create new knowledge and transform it into practical uses” (p. 9). Faculty participation in capital formation projects transforms the university, he wrote. The emerging consensus is that entrepreneurial activities provide funding for both applied and theoretical research, faculty salaries, graduate students, and physical infrastructure that has brought balance to the modern university (Gnuschke, 2001). Not all organizational communication considerations are financial, however; many go to the heart of political communications.

Pulled Politically in Two Directions

LSU, as a state institution with a governing board appointed by the governor, is a

political entity and, as such, is affected by political pressures that influence the university, and by extension, its entrepreneurial communications. For instance, the Pennington Biomedical Research Center, which is an LSU System institution, in the spring of 2006, attempted to recruit a team of Texas geneticists and epidemiologists. According to Pennington Executive Director Dr. Claude Bouchard, the researchers wanted to relocate at Pennington because of the facility's ongoing stem cell experiments, bringing with them 13 research scientists and 24 postdoctoral fellows and more than \$17 million a year in federal research grants. According to Bouchard, the team was hesitant to relocate to Louisiana because the Louisiana Legislature at the time was considering passage of a several bills that would have severely restricted stem cell research even though team members were engaged in no stem cell experiments. In the end, the Texas team remained in San Antonio where they got a better financial deal from the University of Texas (personal communication from Claude Bouchard, August 1, 2006). The incident, however, represents the effect of political communications tactics not only on LSU's entrepreneurial aims but also on the operation of the university itself.

Politics has another dimension for organizations that consider politics a social artifact. Some researchers assert that first-rate enterprises "stay close" to their customers, employees, and other "strategic constituencies" (Grunig, Dozier, Ehling, Grunig, Repper, and White, 1992, p. 231).

Writers on excellence in organizations almost never address the term public relations, but many of them describe two-way symmetrical systems of communications. Internally, that is simply dialogue, negotiation, listening, and conflict management rather than persuasion, manipulation, and the giving of orders. Externally, symmetrical communication involves listening to customers and stakeholders. Kanter (1983)

described symmetrical communication in entrepreneurial organizations as “open communication, interdependent responsibilities, and frequent team efforts” (p. 241).

What does symmetrical communication have to do with political communication, much less entrepreneurial communications by universities? Consider what Peters and Waterman (1982) wrote about businesses that pay attention: “If talking and giving orders was the administrative model of the last fifty years, listening (to lots of people near the action) is the model of the 1980s and beyond” (p. 434). They added that renewing organizations “get their passport to reality stamped regularly. Their leaders listen. They are open, curious, and inquisitive. They get ideas from customers, suppliers, front-line employees, competitors, politicians -- almost anyone outside the hierarchy” (p. 9). For universities steeped in hierarchy, the lesson is that to succeed entrepreneurially, they must develop mechanisms for collaboration internally among administrators, faculty and students, and then the general public, which ultimately pays the tab.

The classic definition of political communication is that it “flows out from the political sphere and must have a political purpose” (Lilleker, 2006, p. 1). Literature focuses on three actors, each of whom produces political communications: the state and its associated political actors who communicate their actions to society to gain legitimacy among and compliance from the people; non-state actors, including organizations and groups, communicate messages into the political sphere in hopes of having some level of influence; and, finally, media outlets communicate politics to the public as well as the political spheres. “In a free, open and pluralist society...each of these communicates independently but synergistically with one another. They say what they want when they want but are influenced by one another and may well be led by one particular group when formulating arguments, opinions, policies, perceptions or attitudes” (p. 1). Those

messages are heavily influenced by four factors: branding, framing, imaging, and messaging, all of which are common marketing tools frequently used to promote products, services, political candidates, and issues (Kapferer, 1997).

From a definitional standpoint, brands are symbolic entities—names or logos used to identify a manufacturer or service provider that are instantly recognizable within a marketplace (Lock and Harris, 1996). And just like any organization, LSU uses logos and symbols to define itself within the public and political sphere. Lilleker pointed out a central distinction of branding. “It is important to recognize,” he wrote, “that all communication must not contradict the kernel and codes of the brand.” What he meant by that is that a company, a product, a service, or even a university, should avoid violating the strong public links to its branding image, possibly smashing favorable public perceptions of the “frame” with which an institution or a product is viewed.

Competitive entrepreneurialism frames universities as both educational and economic enterprises. Yet wound within this frame are stereotypical schemas of individual institutions. Older public universities are known in various ways among the general public—liberal arts schools, tough engineering schools, hard-to-get-into Ivy colleges, “jock” schools, “party schools,” etc. Those perceptual monikers form the cultural frames used by publics to evaluate an institution. Accuracy, in this case, can be irrelevant but powerful. Walter Lippmann in 1922 classically observed that stereotypes or assumptions make up the worldviews of people and are rooted in the culture of organizations, communities, and societies. Kearney (1984) defined worldview as “a set of images and assumptions about the world” (p. 10). Those stereotypes regardless of accuracy have a powerful impact on institutions.

One aspect of framing in a political context is the crafting of image, which, for our purposes, is defined as the outward representation of a political leader, candidate or organization. For LSU or any politically sensitive institution, image is a mental construct that is based on the audience's power to decode the way that organization behaves, combined with what audience members take from the way the organization has been portrayed in the media and the manner and style in which it communicates (Street, 2004). Central to image creation is the concept of authenticity. A British study of politicians in 17 countries found that a nearly universal political ethic is that highly stylized candidates who set themselves up as self-made men or women who have overcome personal adversity are family-oriented and possess a range of authentic values (Stanyer and Wring, 2004, p. 3). We will learn later in Chapter Five that similar value messages that portray the university as authentic represent a potential pathway for LSU's entrepreneurial messaging.

The straightforward concept of message also is helpful in understanding the impact of political communication on entrepreneurialism. A message in its simplest form is an easily understood piece of communication, often no more than a few words that convey information from and about someone or some thing—a party, a candidate, organization, product or service. In a political context, messages are largely persuasive, mirroring, as Lilleker (2006) noted, promotional communication, which pervades modern consumerist society (p. 122).

Shifting Language of Entrepreneurialism

The largest part of the available entrepreneurial literature concerns public policy issues and seeks to explain spin-off activity in terms of the individuals who engage in entrepreneurial behavior: those who emphasize the organizational characteristics and

resource endowments of the university; those who argue that social norms and institutional behavior determine spin-off activity; and finally those who argue that the wider social and economic context enables spin-offs (O'Shea, Allen, and Morse, 2005).

A number of studies used a personal approach to explaining spin-off activities, contending that entrepreneurial behavior is an outgrowth of individual ability (Shane 2004). Roberts (1991) emphasized the role personality, motivation and disposition play in influencing academic entrepreneurship. Consequently, the literature characterizes spin-offs as a reflection of individual action and the willingness of individuals to successfully engage in entrepreneurial behavior.

Social scientists provide another angle. These researchers focus their attention on structural characteristics and resource endowments of the university, its level of research funding (Powers and McDougall, 2005), the quality of researchers, and the nature of research within the university (Digregoria and Shane, 2004); and the nature and structure of the commercial infrastructure of the university (Lockett and Wright, 2005). Yet another dimension comes from studies that contend university spin-off activity reflects social norms and institutional behavior. Louis et al. (1989) proposed that universities with cultures that support commercialization activity would have higher levels of commercialization and higher rates of spin-off activity than those who do not. A central theme among a number of scholars is that university entrepreneurial activity is as much a reflection of institutional behavior as the product of individuals within an institution.

A final perspective views spin-offs as a direct outgrowth of venture capital availability. Saxenian (1994) asserted that spin-off activity is more likely in high technology clusters because of easier access to critical expertise, networks, knowledge, and money. Structural analysis literature also is insightful in considering the

entrepreneurial nature of public universities, particularly flagship institutions like LSU. Elite designation alone can serve as an impetus for spin-off activity, according to O'Shea, Allen, and Morse (2005), but a structural functionalist perspective must be considered, one that imposes expectations on flagship universities, how they communicate with the public, and, conversely, how the public views the university.

Summary

In this chapter, it was observed that the literature about entrepreneurial universities varies widely, but mostly deals with mechanics and results. Few studies have examined how entrepreneurial universities communicate their capitalistic ambitions.

Organizational knowledge creation theory and resource dependence theory form the theoretical framework used by universities in communicating innovations. Also discussed was the fact that among flagship universities like LSU, a special rhetoric sets these institutions apart and encourages entrepreneurial activities as part of their expected research agendas on behalf of the states they represent. Among the benefits generated by industry-academe relations were access to expertise, accessibility to technologies, ready entrée to education, contact with students, and exposure to the cultural diversity present on a university campus.

In addition, political communication was highlighted as playing a significant role in institutional messaging because of the political nature of public universities, both in dealing with political actors and in socio-political communication with internal and external stakeholders of the university. In thinking aimed at corporate marketing but applicable to universities, also discussed was how organizations that engage in two-way symmetrical communications listen to customers and stakeholders as a way of reinforcing brand identification. A distinction was drawn, however, between marketing and public

relations. While marketing was defined as a management tool concerned with the product, public relations is a strategic function that proactively builds relationships between an organization and its publics for specific purposes.

Branding, framing, imaging, and messaging were considered as integral to entrepreneurial messaging, especially as heuristic shortcuts, linking LSU with academic quality and spin-off creation. In addition, varying concepts of organizational change and how those transformations define behavior and set goals that challenge the culture of universities were examined. Likewise, scholarship about organizational communication, which encompasses communications as a bridge to a wider world, was reviewed as well as literature analyzing the role university faculty members play in spurring entrepreneurial activity.

This study turns next to the importance of rankings as a component of LSU entrepreneurial communications and examines the university's current efforts to promote itself as an emerging elite institution.

CHAPTER THREE: IN SEARCH OF A MESSAGE AND MONEY

American public higher education has turned to aggressive fund raising and entrepreneurialism as solutions for the dwindling government revenues while bolstering the economic growth of communities just beyond campus gates. In many ways, modern higher education is an embodiment of the cliché about the rich getting richer where large endowments bankroll research, pay for new buildings, and fund the hiring of top-notch faculty who generate innovations that feed the entrepreneurial process.

For example, UCLA has a \$1.5 billion endowment. Assuming a 5 percent per year return, the payout would be slightly less than \$2,000 a year per student (Carnesale, 2006). Stanford, which has about half the number of undergraduate students as UCLA, has an endowment of \$10 billion. That translates to more than \$25,000 per student per year. And Harvard, with a \$22 billion endowment—the nation’s highest—provides about \$55,000 per year per student (Carnesale, 2006).

Using the same calculation, the 2006 LSU endowment of \$259,149,663 (Figure 3.1) produces a per student yield of only \$417.98 a year.¹⁰

¹⁰ Source: The Center, The Top American Research Universities, 2006, p. 199 and the LSU System Office of Budget and Planning. The calculation was based on \$259,149,663 (the LSU A&M endowment) X .05% (projected rate of return) = \$12,890,200 / 31,000 (students as of Fall 2005) = \$417.98 per student yield.

LSU A&M	\$	259,149,663.00
LSU Alexandria	\$	8,385,589.00
LSU Eunice	\$	1,128,464.00
LSU Shreveport	\$	9,497,474.00
LSU Law Center	\$	14,694,989.00
LSU AgCenter	\$	8,256,345.00
LSU Pennington Biomedical Center	\$	106,700,000.00
LSUHSC-New Orleans	\$	68,998,664.00
LSUHSC-Shreveport	\$	69,575,890.00
UNO	\$	46,816,487.00
TOTAL:	\$	593,203,565.00

Figure 3.1: Endowments of LSU System Campuses as of June 30, 2006.¹¹

Topology of Academic Entrepreneurialism

An evolutionary chain of events led to the commercialization of technology and expertise by public universities. U.S. colleges, even in the days when they trained religious clergy, concentrated on delivering useful knowledge. GIs returning from World War II transformed higher education, leading to an explosive growth in the number of students who sought a college education as a ticket to a good job and “the good life.” Financial pressures to provide bigger campuses that accommodated more students and more comprehensive curricula, laid the foundation for the fiscal demands that have today forced college administrators to be more entrepreneurial. This chapter explores the historic context of university entrepreneurialism and five dominant models of capitalist universities. The launching of LSU’s Flagship Agenda also is introduced as a major impetus for the university’s entrepreneurial efforts.

Until now, as Friedman and Hochberg (2003) noted, universities have looked outside themselves for more state money, bigger corporate grants and multi-million-dollar philanthropic bequests. Those goals remain priorities, but a new sense of urgency

¹¹ LSU System Office of Budget and Planning.

surrounds maximizing commercial potential. “There are no solutions to be found outside,” the authors observed, adding:

The solution is to access the vast wealth of information and knowledge that is embedded in the university, and use the sale of that wealth to fund the university’s traditional functions, and enhance the economic growth of the surrounding community and nation (pp. 2-3).

Universities as Unique Entities

Sustainability was a root value in academe as early as the 13th century (Hearnshaw, 1929). Throughout the 16th and 17th centuries, princes and royalty, who pushed for introduction of new branches of study as an outgrowth of state control, imposed higher education reform by fiat (Wilson, 1995). Reforms of the 18th century, reflecting the spirit of Enlightenment, embodied a desire for modernization through better adjustment of the requirements of professionalism fed by societal demands for access to new learning. The commodification of higher education these days is more noticeable, but is hardly new. Roots of academic commercialization in the United States, in fact, date to Colonial America.

As the Puritans built Harvard College, they had two liberal education traditions upon which to draw: an institutional one growing out of the medieval university that used liberal education to train the intellect, relying on Christian piety for moral training; and the Renaissance humanist tradition that developed personal traits as civility and sociability, and public virtues like integrity and wisdom (Rothblatt, 1976; Kimball, 1986).

Historian Richard Hofstadter (1955), discussing the reasons for founding early American colleges, noted that schools such as Harvard and Yale adapted English versions of medieval coursework based on a belief in classical literacy and philosophical studies.

College curriculums embodied what the educated community believed worthy of passing along and the kind of mind and character a college education was expected to produce. Instruction was grounded in the belief that education was for gentlemen and that knowledge is fixed and should be transferred to others with a particular theory in mind.

When he established the University of Dublin in the mid-nineteenth century, Cardinal John Henry Newman (1947) wrote: “A university is the high protecting power of all knowledge and science, of fact and principle, of inquiry and discovery, of experiment and speculation; it maps out the territory of the intellect, and sees that...there is neither encroachment nor surrender on any side” (p. 129). To education reformer Abraham Flexner (1930), the “idea of the modern university” was “an expression of the age, as well as an influence operating upon both present and future” (p. 4) with an emphasis on knowledge that is useful and comprehensive.

In that spirit, the charter that established Harvard proclaimed the training of ministers was the institution’s primary purpose, as did the charter of William and Mary 50 years later (Hofstadter, and Wilson, 1961). The Puritans saw little contradiction between institutional and humanist liberal education tradition and job training. The charter of Yale College, originally written in 1701, a generation after Harvard’s founding, declared the school’s course of study would emphasize “the Arts and Sciences,” which would be used to train students “for Public employment both in Church and Civil State” (Warch, 1973, p. 186).

By 1830, manufacturing and commerce that had been viewed by classical republicans as corrupting was instead acknowledged as essential to the republic’s economic wellbeing (Lane, 1987). As a result, the “old” college instructional system gave way to the study of science and technology. Rensselaer Polytechnic Institute was

founded in 1824; Harvard's Lawrence Scientific School (1847), and Yale's Sheffield Scientific School (1847) followed by Dartmouth's Chandler School of Science and Arts, the Polytechnic Institute of Brooklyn, and Cooper Union in the 1850s, and the Massachusetts Institute of Technology in 1861.

By the end of the nineteenth century, business executives and lawyers on many university boards supplanted the dominance of clergymen. Faculties became more secular and professional. Isaac Kramnick (1982) wrote that the public quest for the common good was replaced by economic productivity. "The moral and virtuous man was no longer defined by his civic activity, but by his economic activity. Self-centered economic productivity, not public citizenship, became the badge of the virtuous man" (Kramnick, 1982, p. 629).

Age of the University

The so-called "age of the university" in America was launched by a series of gifts from industry barons. Cornell, for instance, was founded in 1868 by a \$500,000 gift; Johns Hopkins in 1867 with a gift of \$3.4 million, Vanderbilt in 1875 with a gift of \$10 million, Stanford in 1891 with \$20 million, and the University of Chicago in 1891 with a gift of \$30 million from oil magnate John D. Rockefeller. Colleges rapidly evolved as agencies of social mobility.

As colleges adopted elective systems, the shackles of the classical curriculum were first loosened and then ridiculed. "The idealistic old college gave way to a new one with an excessive bias" (Hardy and Hofstadter, 1952, p. 56). The drive to be "scientific" spread into every sphere of intellectual life. Law schools tried to teach "scientific" law, historians to write "scientific" history, and even classicists, trying to be "scientific," turned to philology (Hofstadter, 1955, p.57).

“The rising university,” Hofstadter (1952) observed, “remedied many of the defects of the old college, only to create new ones of its own limitations . . .” (p. 36). While the American people had a profound faith in the civil uses of education, they did not share a deep understanding of education’s cultural content. Education was justified apologetically as useful to the attainment of other ends and rarely did Americans say that it was “good for man” (p. 104). Veblen in 1918, decried university presidents and academic bureaucrats as culprits intent on amassing money to expand the size and reputation of their institutions at the expense of reluctant scholars. “The academic executive and all his works are an anathema and should be discontinued by the simple expedient of wiping him off the slate,” Veblen wrote (p. 286). But that never happened, and by the middle of World War II, the government moved aggressively to solidify links between industry and the academy.

Vannevar Bush, President Franklin Roosevelt’s chief science adviser, declared that “new products and new processes do not appear full-grown, they are founded in new principles and new conceptions, which in turn are painstakingly developed by research in the purest realms of science” (Bush, 1945, p. 6). That thinking ushered in an era of public support for higher education that began with university scientists playing key roles in the Manhattan Project and other wartime initiatives such as the development of penicillin and streptomycin.

Wartime research effectively transformed academia from a secondary to a primary institution in the development of the modern knowledge society (Mills, 1958). Graham (1998) observed that “the knowledge industry was no longer a minor affair run by an intellectual elite, an activity that might be considered by pragmatic leaders as expendable; it was a mammoth enterprise on a par with heavy industry, and just as

necessary to the country in which it was situated” (P. 129). That awareness led Congress in 1980, with U.S. industry under increasing international pressure, particularly from Japan, to pass the Bayh-Dole Act, which transformed the academic-industrial complex. The measure gave ownership of intellectual property, arising from federally funded research, to universities. Innovators were guaranteed at least 15 percent of the returns on their inventions. Under the law, however, universities were obligated to make an effort to commercialize these rights.¹² As a result, university technology transfer offices were soon established, and universities set up incubators to assist in the formation of firms with the help of government programs (Etzkowitz et al., 2000).

In the 26 years since it was enacted, Bayh-Dole has encouraged universities to commercialize knowledge. The Association of University Technology Managers (AUTM) monitors technology transfers among U.S. universities. According to AUTM’s 2004 report (the latest figures available), the U.S. Patent and Trademark Office issued more than 3,800 U.S. patents in fiscal year 2004 to universities responding to the AUTM Licensing Survey; fewer than 250 were issued to universities in 1980, the year The Bayh-Dole Act became law.

Much of that entrepreneurial behavior was driven, according to Bok (2003), by reductions in government support for higher education. State legislatures, weighed down by escalating costs for prisons, welfare, and health care for the poor, cut appropriations for higher education, forcing university officials to look for new sources of funding. They found that funding by marketing the specialized knowledge of faculty members.

¹² The Bayh-Dole Act relaxed U.S. antitrust laws to promote cooperative research, the expansion of public funding to support technology partnerships, and the adoption of initiatives to promote swift diffusion of technologies from universities to private firms by placing an emphasis on intellectual property and knowledge as capital, as opposed to physical capital.

Within public research universities, bureaucracy and professional competence have made room for managerial authority and entrepreneurial initiatives to move to the forefront as suitable solutions to changing political and economic conditions (Brint, 2002). On the force of demands from political stakeholders for accountability, Brint noted “an industry logic has taken hold in higher education, supplanting the logic of universities as social institutions (Brint, 2002, p. 56).

That reasoning actually took hold in the closing days of World War II with the 1944 passage of the G.I. Bill, which made it possible for millions of veterans to go to college virtually free of charge. LSU enrollment figures paint a picture repeated throughout the country in post-war years. For instance, Figure 3.2 illustrates a dramatic rise in students from 8,301 in the fall of 1940 to a total of 18,887 undergraduate and graduate students in the fall of 1968. State funding for Louisiana colleges tracked rises in enrollments, but funding-per-student levels remained relatively static over a 50-year period, meaning that while there was a rising demand for services and bigger annual appropriations for higher education, the rising number of students outstripped the effectiveness of those bigger budgets.

Figure 3.2 visually displays a six-fold growth in LSU enrollments in the post-War years, increases largely fueled in the 1950s and 1960s by the GI Bill. As the former president of the University of California at Berkeley, Clark Kerr, declared in the early ‘60s, “We witnessed everywhere the demise of two long-held notions, that higher education ought to be restricted to a small elite minority, and that only a small percentage of the country’s population is capable of benefiting from some kind of higher education” (Kerr, 1966, p. 24). That egalitarian trend emerged as students were admitted based on grades and standardized test scores. More importantly, big public universities embraced

the concept that a modern university should be comprehensive, providing coursework and degrees in a wide variety of disciplines.

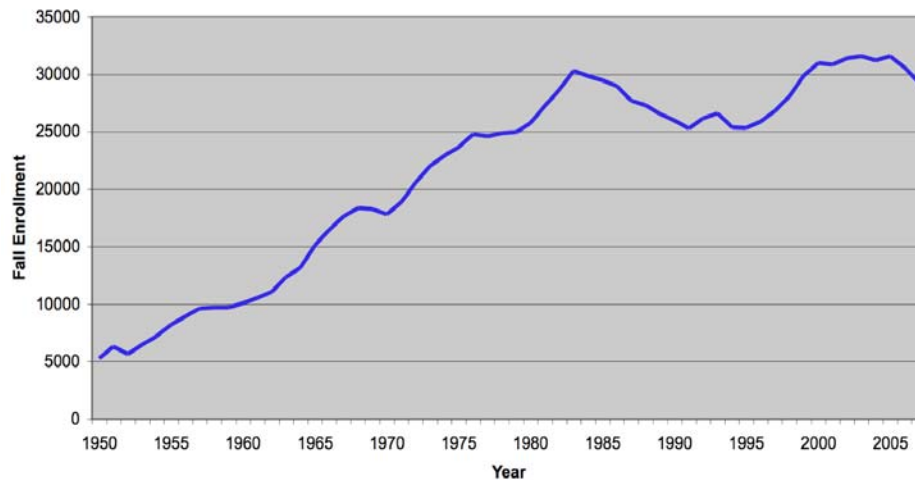


Figure 3.2: LSU A&M Enrollment 1940-2005.¹³

As a result, higher education became an adjunct to the immense and changing labor market. Where higher education originally trained men to enter the ministry, teaching or the practices of law and medicine, by the 1970s, colleges were being accused of “overeducating” Americans. By the 1980s, as Kerr (2001) noted, students were turning to college for “job training, and not a philosophy of life” (p. 203).

Campus Tug of War

Universities today are in a turbulent tug of war, pitting traditionally powerful professors against a new generation of business-savvy presidents hired to control costs, boost research and make classes more relevant in a global economy (Hopkins, 2006). While they’re being cautioned about watching the bottom line, college chief executives are being pushed by governing boards to add “world class” faculty, boost research grants

¹³ Source: LSU A&M Office of Budget and Planning.

and grow endowments. University of Kentucky President Lee Todd, a former IBM executive, observed that in business, communication is vitally important, but can be focused on three constituent groups: investors, customers and employees. In academia, however, Todd said he juggles donors, faculty, staff, students, parents, alumni, athletics fans, community leaders, and lawmakers (Todd in Hopkins, 2006).

Much of the pressure for higher education institutions to behave like corporations is coming from corporate CEOs who serve on governing boards and are trying to run colleges in the same way they run their companies (Bok, 2003). The Association of Governing Boards of Universities and Colleges reported that 48 percent of public school trustees had business ties compared to 52 percent among private universities (AGB, 2004).

Critics contend a revolution is afoot in higher education, that those who pay the piper (corporations and governments) are calling the tune, and that the relevance of universities is on the line. The central question is whether the academy, the institution intended to do society's purest, most serious thinking, is corrupted and whether, as Eyal Press and Jennifer Washburn (2006) wrote, the rush toward entrepreneurial universities is putting at risk the paramount value of higher education—objective, balanced inquiry.

Some major public institutions like the University of Virginia and the University of Colorado receive less than 10 percent of their support from taxpayers (Lyll and Sell, 2006, p. 2). As a practical matter, that means public universities are surviving by diversifying stakeholders to depend increasingly on student tuition, research grants and contracts. Figure 3.3 lays out LSU System operating budget for the 2006-2007 fiscal year, which shows state funds account for less than half of LSU System costs.

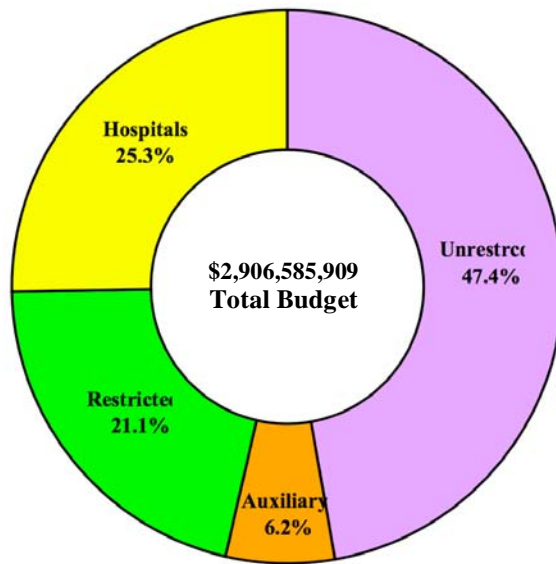


Figure 3.3: LSU System 2006-2007 Operating Budget. Total Enterprise.¹⁴

To be exact, unrestricted¹⁵ state dollars account for about 47.4 percent of the system budget. When funds from other sources such as athletics, bookstores, student fees, contracts, earned revenues, and business ventures are included, the share of state dollars drops to slightly more than 20 percent of the total operating budget (Figure 3.4, Column 3). Much of that extra revenue is being generated by commercial activities as the share of state appropriations is reduced.

Figure 3.5, meanwhile, displays the LSU system revenue column, which shows self-generated revenues, including licensing and royalties, account for more than \$351 million dollars in the 2006-2007 operating budget. Although entrepreneurialism may be easing the burden on taxpayers, suspicious faculty members point out that the promise of academic capitalism, which is difficult to apply among the liberal arts, can be misleading.

¹⁴ Source: LSU System Office of Budget and Planning.

¹⁵ Unrestricted dollars can be spent for any purpose. This budget category usually covers all academic related expenses such as salaries and other operational costs for the university system.

If, for example, a professor raises research grants by 20 percent, they ask, will the university keep funding for the department getting the grants at current levels, or, reduce funding to match the 20 percent increase.

Institution	State Funds	Total Unrestricted	% State Funds Only	Grand Total w/Other Rev.	% State w/Other Revenues
LSU A&M	170,621,649	367,144,137	46.47	679,508,350	25.11
LSU-A	7,293,689	15,254,615	47.81	22,117,829	32.98
LSU-E	7,054,527	12,763,681	55.27	19,596,729	36.00
LSU-S	12,473,469	26,550,012	46.98	45,726,327	27.28
Law Center	7,531,190	17,673,167	42.61	18,873,167	39.90
UNO	48,182,514	122,608,491	39.30	201,882,724	23.87
LSU AgCenter	70,955,364	93,096,095	76.22	118,646,095	59.80
HSC-N.O.	104,466,738	185,423,607	56.34	443,456,844	23.56
HSC-S	53,108,219	412,097,832	12.89	526,522,392	10.09
PBRC	10,559,943	11,452,610	92.21	45,652,610	23.13
Bd. Supervisors	5,900,988	5,900,988	100.00	7,002,226	84.27
HCSD	74,258,0561	74,258,061	100.00	723,533,958	10.26
TOTAL:	572,406,351	1,344,223,296	47.4	2,906,585,909	20.07

Figure 3.4: Influence of State Funding on LSU System 2006-2007 Budget.

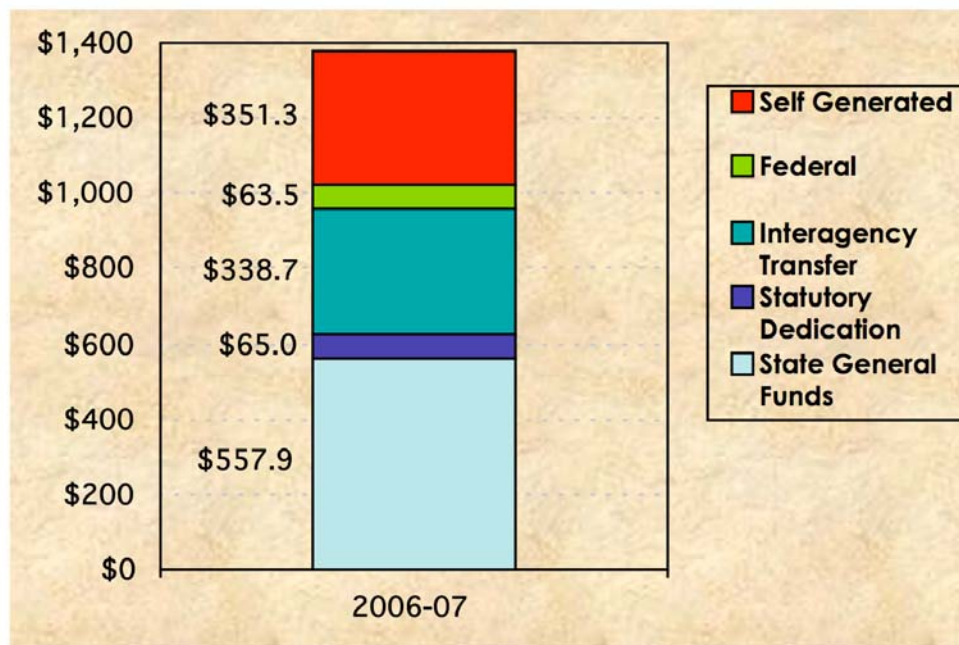


Figure 3.5: LSU System 2006-2007 Operating Budget.¹⁶

¹⁶ Source: LSU System Office of Budget and Planning.

Growing independence from state coffers may be a matter of survival for some departments and programs, especially among the humanities that do not readily have the ability to generate revenues such as more popular programs like business, engineering, and law.

Five Models of University Entrepreneurialism

Before further discussing higher education commercialization, it is important to lay out five successful models of entrepreneurialism used by many Tier One universities. These may be used to assess LSU's entrepreneurial efforts. Together, the models represent a transition from the conventional form for university technology transfers—research contracts from the government or large corporations—to the modern notion of corporations buying research from the university, absorbing the risks of failure and sharing in the rewards. As will be discussed later, LSU's approach has been a mix of several models.

The traditional pattern of technology transfers placed corporations and government agencies in the active role, such as developing the Manhattan Project during the war. The university avoided risks and rewards. Individual faculty members or research staffers benefited from research only in that they continued to be employed to do research. Licenses and patents were owned either by the funding entity or the university itself. Under some circumstances, as some analysts pointed out (Center for Geopolitical Studies, 1996), researchers could benefit beyond wages, but in most cases, particularly outside those disciplines in which products could be patented, opportunities to benefit were strictly limited. The researcher did not own the technology, but that began to change with the development by the University of Wisconsin of a then novel way of dealing with industry.

The University of Wisconsin Model

Known as The University of Wisconsin Alumni Research Fund (WARF), the Wisconsin model has been generating entrepreneurial activity at the state university campus in Madison since 1925 as one of the first university-based entrepreneurial ventures in the U.S. WARF officials report the fund regularly generates more than \$500 million a year in federally supported research.¹⁷ Key to success of the model are ownership rights. Instead of a government agency or a corporation owning the technology, the faculty researcher retains the rights to the technology and any capabilities it produces even though the innovation was developed using university resources. The researcher may choose to start up a new company to market the finished product, absorbing the risks and rewards, or the university may partner with the faculty innovator to help develop and license the technology.

Researchers may also sign over the technology to the Alumni Research fund, which assumes all responsibility for licensing and marketing the invention. The researcher receives 15 percent of royalties, his or her department gets 20 percent, and the WARF gets the remainder. The WARF pays for development, including the cost of marketing the product, protecting the patent, and funding any further development. The researcher, meanwhile, still gets substantial rewards, but limits exposure to risk.

The Wisconsin model continues to draw major donations. The chairman of the board of the computer hardware manufacturer, Cisco Systems, and his wife in April 2006, donated \$50 million to build a proposed Wisconsin Institutes for Discovery, which will include two new science centers constructed near the university's Madison campus, a complex that will bring together in one complex scientists from various disciplines

¹⁷ Source: University of Wisconsin, Alumni Research Fund at <http://www.warf.org/news>.

(Strout, 2006). The gift, from John P. and Tashia F. Morgridge, was matched, dollar for dollar, by the WARF's pool of capital construction and development money.

Efforts are under way to develop such a program at LSU with the construction of so-called "wet labs" in Baton Rouge, Shreveport and New Orleans, but the university does not yet have a pool of money that approaches the WARF's \$600 million in available capital for technology development. The Louisiana Fund, created with 25 percent of the \$160-\$180 million annually that comes to the state as a result of the national 1999 Tobacco Settlement, pays for new and existing projects in healthcare, education, medical research and disease management. So far, however, LSU has received only \$64.5 million from the fund, a comparative fraction of the WARF available pool.¹⁸

The University of Maryland Model

Another model being utilized by LSU is the business incubator model first developed by the University of Maryland. The university's Technology Advancement Program (TAP) at Maryland's College Park campus put the effort together. More than 230 companies have been formed with the assistance of the incubator over the past 22 years as part of the process that requires an extensive review of business plans. Close scrutiny, the center contends, virtually insures startup companies will succeed. Included in the TAP process is a "Venture Accelerator" program for University of Maryland faculty and students in which innovators receive intense, hands-on assistance with a range of new business processes, including market validation, business planning, staffing and initial funding through grants or equity investment.¹⁹ From its inception in 1984

¹⁸ Source: Louisiana Board of Regents Louisiana Fund history as of August 15, 2005.

¹⁹ Source: University of Maryland Technology Advancement Program, April 2006. <http://www.va.umd.edu/>

though the end of 2005, TAP claims it handled \$744.8 million in federal, state and corporate investments that created more than 1,700 jobs.²⁰

LSU's business incubator is the Louisiana Business and Technology Center (LBTC), which is part of the E. J. Ourso College of Business and is located on the LSU South Campus in a 48,000 square foot building. LBTC reported that as of May 2006, it had worked with more than 1,850 businesses and entrepreneurs, developing more than 375 business plans, starting 108 businesses, and creating more than 2,250 jobs since its inception in 1988.²¹

The incubator's outreach efforts, that include a 30-seat mobile classroom, have been broad. Working with the LSU Small Business Development Center and the Louisiana Technology Transfer Office, LBTC claims since 2000 it assisted in starting more than 460 businesses statewide, creating or saving more than 8,900 jobs, and facilitating more than \$92 million in equity grants and loans.

The Research Triangle Park Model

In a variation on the post-war approach to corporate access to university expertise, developers created the Research Triangle Park on 6,800 acres in North Carolina within easy reach of Duke University, North Carolina State University, and the University of North Carolina at Chapel Hill. Primarily a land development, the research park was designed as a way of inducing both established and startup companies to locate in close proximity to the universities. Another incentive was the concentration of resources, bringing together a number of corporations with a common research focus, utilizing each

²⁰ Source: University of Maryland Technology Advancement Program, April, 2006, <http://www.mtech.umd.edu/news/reports/impact/2005/#TAP>

²¹ Source: Louisiana Business and Technology Center, May, 2006, <http://www.bus.lsu.edu/centers/lbtc/incubator.asp>

other's services as well as a joint labor pool. Universities benefit from the model by providing opportunities for the sale of research and joint ventures for academic researchers. Within years of establishment, the Research Triangle was home to 136 companies, of which 98 were involved in research and development, including microelectronics and software design. Analysts point out that the growth of the park was spurred by tax incentives, which allowed firms that located in the park to avoid certain taxes.

Typically, university-related research parks involve land development by public and private sector organizations that seek to attract high-technology, science-intensive, or research-and-development industries. No such facilities are located on the LSU main campus, but the University of New Orleans, an LSU system institution, operates a small research and technology park across from its New Orleans lakefront campus.

In Baton Rouge, meanwhile, three miles from the main campus, the state operates the Louisiana Technology Park incubator that has 16 tenant companies with a total payroll of \$5.2 million and 127 employees (Randolph, 2006). Among those companies is International Mezzo Systems, which graduated in 2004 from the LSU Business and Technology Center.

The Iowa State University Model

Based on the agricultural extension services of land-grant institutions, the Iowa State model was extended to include non-agricultural users, applying the small business development model to business incubators with one significant difference. Business incubators nurture a small number of businesses on site, but the Iowa State model supports a large number of businesses around the state. The model has been particularly significant in the operation of the LSU AgCenter's extension service, which, like Iowa

State, was a major force in transferring agricultural and mechanical know-how from the college to the state for its economic development. Although Iowa State has diversified into pooling university resources to help with industrial and manufacturing needs, the LSU AgCenter's research technology efforts remain strongly linked to agriculture. Nonetheless, the AgCenter leads the university in the rate of research disclosures. Analysts are quick to point out, however, that while LSU extension services have been a great deal for agriculture, extension services traditionally have delivered expertise without expecting anything in return (Center for Geopolitical Studies, 1996, p. 11). It is a classic, one-way transfer model in which state services are provided to citizens at taxpayer expense.

The Akron Model

The University of Akron model provided a pragmatic approach to the problem of linking universities to economic development as a means of sustaining the university. Basically, the Akron model incorporates a number of strategies simultaneously that were used in rescuing northern Ohio from an economic crisis in the rubber industry.

Instead of trying to enhance the rubber industry, the University of Akron and Case Western University created a boom in polymer research start-up companies that turned the Akron area into a hotbed for polymer research centered on the Edison Polymer Innovation Corporation (EPIC). The company created a focused institution of 60 faculty members and more than 350 graduate students who concentrated on a single, core subject central to the needs and concerns of the region. As part of the project, companies paid royalties to the EPIC, and the consortium universities then used the money to expand their capabilities for research in polymers.

Backers contend the EPIC since its launch in 1984 has created hundreds of start-up companies, companies that have created more than 55 research projects and dozens of patents. More importantly, the Akron regional economy surged. The goal of the model was intensely pragmatic—the revival of the community through use of university resources. Only one research effort that mimics the Akron model is under way in the Louisiana State University system—The J. Bennett Johnston, Sr. Center for Advanced Microstructures and Devices (CAMD), which fabricates microscopic devices for use in biotechnology and micro-guidance applications. Revenues generated by the center have been growing over the past five years, but remain small, bringing in more than \$106,000 in 2005.²²

Greater optimism prevails over the new \$13 million, 60,000 square foot Louisiana Emerging Technologies Center, located on the LSU main campus. University officials contend it has the potential for being the university’s major center that duplicates the Akron Model. The so-called “wet lab” is designed to incubate companies specializing in biotechnology, healthcare, environmental sciences, life sciences, and agriculture. Among researchers operating in the building as of spring 2006, however, only one company was conducting basic life science research, using a robotic research lab.

In trying to become more entrepreneurial, LSU, instead of sticking to one model as the University of Wisconsin has done, is pursuing a multi-faceted approach that combines some elements of the Wisconsin, Research Park, and Akron models.

Focusing on Image and Rankings

Selling the public on LSU’s growing academic and entrepreneurial stature, however, has been tough, especially to editors of national publications that annually rank

²² Source: LSU System Office of Finance and Administration.

universities. Why are rankings important? Top students, choosing a university, first concentrate on specific academic programs that will further their careers, but also consider where a university ranks (Lipman Hearne, 2006). The process is cyclical: high-quality students attract high-quality faculty, who draw government and corporate research grants that attract more high-quality students, faculty, and grants; rankings climb, again setting off the student-faculty-grant cycle.

The problem for LSU's image is that the university's overall rank seems stuck in the Third Tier of the *U.S. News and World Report* rankings. Despite questions about the subjective methodology used in devising the myriad lists, LSU remains well back in the pack among rankings of quality and service.

In the fall of 2006, LSU was ranked 130th in the *U.S. News and World Report* ranking of *America's Best Colleges*. Tulane University ranked 44th, making it a Top Tier institution. In addition, *The Washington Monthly's* rankings of top U.S. colleges gave LSU a low ranking for spending only .066 percent of the federal funds it receives on community service. In rankings by the 2007 edition of *The Princeton Review*, LSU was:

- 1st on Princeton Review's list of college students that use hard liquor.
- 8th on Princeton Review's list of Top Party Schools.
- 16th on the Princeton list of Best College Newspapers.
- 12th on Princeton's "Their Students Almost Never Study List."

Here's how the *Review*, for instance, described the LSU student body:

Undergraduates tell us "most students on the LSU campus look alike and are from similar backgrounds: white, upper-middle class, blond hair (girls), shaggy haircuts (boys), brand-name clothes, and generally conservative in their religious, political, and social values." (*Princeton Review*, 2006).

The picture painted was of a large, but insular party school that rotates socially around the football team's home schedule. Not one word was included about academics or research in the Princeton capsule.

Launching the Flagship Agenda

In the fall of 2003, LSU launched its National Flagship Agenda campaign, following a five-year development process. The plan focused on how LSU could improve both its research and educational enterprises, and more importantly, its national reputation. Three years into the Flagship Agenda, signs are available, on some counts, that the effort is succeeding. Using different criteria, however, the program appears to be faltering. "The Flagship Agenda has ground to a halt," said LSU System President Dr. William L. Jenkins.

Although the university has yet to break through minimal levels of national public recognition outside athletics, optimistic signs do exist. For instance, after increasing entrance requirements for incoming freshmen over a ten-year period, six-year graduation and retention rates—key educational assessments—are up incrementally for the LSU main campus, according to 2006 statistics compiled by the Louisiana Board of Regents, but LSU is drawing fierce competition from non-traditional schools that are siphoning students away from traditional universities in a rapidly developing national trend.

In the 1990s, management expert Peter Drucker predicted that higher education would soon be rationalized through the utilization of the Internet for basic undergraduate and professional courses. Many colleges and universities, he predicted, would fail in the wake of the new forces of production as both universities and private firms were forced to move forcefully into the market for online courses. "Long distance learning ... may well make obsolete in 25 years that unique American institution, the free-standing ...

college,” he wrote (Drucker, 1998).

Today, the global demand for higher education has increased dramatically, but the cost and time required to obtain that education have put it out of the reach of the majority of the population (Daniel, 1997). This backdrop forms the dialogic frame for a discussion about technology, knowledge, and the future of higher education itself.

Entrepreneurial Communication Perspectives

From a communications point of view, the nature of entrepreneurial universities shares two perspectives. The first emphasizes the information exchange and relationships among participants in the process of technology transfer from universities to businesses and industries. The second looks outward to communicating the benefits of technology transfers to stakeholders both within the university community and a larger audience of political policy makers and the general public. Successful transfers depend not just on single agents, but rather on the efficacy of information flows between sets of individuals or organizations within a complex network of communications paths (Rothwell and Robertson, 1973). It is both a communication and innovation process in which “...the designers and managers of such programs concern themselves with questions of how to transfer technology after it is already developed, rather than how to develop or adopt technology so that it is transferable” (Robbins and Milleken, 1976).

Cashing in, however, can involve application of multiple entrepreneurial models, as discussed earlier, and marketing approaches. Clothing firms such as Nike and Reebok pay colleges to place corporate logos on athletic uniforms, or, to put the university’s name on caps, sweatshirts, and gym shorts sold to the public. Faculty members bear titles at some universities such as the Yahoo Professor of Computer Science at Stanford University or the K-Mart Professor of Marketing at West Virginia University. Home

Depot sells “Tennessee Orange” to University of Tennessee fans who want to coat their homes in Volunteer colors. Freeport McMoRan, a New Orleans-based mining company that has been entangled with allegations of environmental misbehavior in Indonesia, created a chair in environmental studies at Tulane. At LSU, chaired professorships include the Belo Corporation Professorship at the Manship School of Mass Communication and the Pulte Homes Endowed Professorship in Construction Management in the College of Engineering.

Former Harvard President Derek Bok (2003) observed in *Universities in the Marketplace* that the modern American institution of higher education could easily take advantage of “abundant new opportunities to make money.” Commercialization of the academy, however, is scarcely a new phenomenon. As Bok points out, universities operated sophisticated fund-raising enterprises, curiously labeled the “Bureau of Publicity” at the University of Pennsylvania to increase its visibility in the 1800s. “What is new about today’s commercial practices,” writes Bok, “is not their existence but their unprecedented size and scope” (p. 2).

Flagship Universities as Special Cases

Flagship universities are public universities organized into systems and then legally designated by their states as the largest and most competitive research institutions that compete with other premier universities on behalf of the state. Most states have one flagship university. Texas has two: the University of Texas at Austin and Texas A&M University, College Station. Regardless of number, all “flagships” share a common expectation, as John Lombardi (2003) noted, that they improve academic quality relative to “the national competition” (p. 1). As a result, the business model driving the university enterprise is a synthesis of the university’s organizational structure, its collection of

instructional guilds that transfer knowledge and certify students, and the mandate to service the bottom line.

Lombardi's insightful analysis paints research universities as having connected but separate organizational structures, resembling a shell. Viewed from the outside, a shell of administrators and service personnel manages the relationship between the outside external world and the productive university within. That shell, as Lombardi wrote, deals with legislators and trustees, with federal and state agencies, with donors and foundations, with corporations and accrediting associations. "The shell gets the money and handles the formal accountability that the providers of funds require," he wrote (p. 3). The shell, however, does no academic work. It doesn't teach or do research. It is also not responsible for the quality or the improvement of the academic enterprise.

Within the shell is a collection of academic guilds that represent the university in the same essential way that medieval guilds taught history, chemistry, business or medicine, operating with a set of specific principles that apply to the guilds nationally. In other words, the history guild has a method for determining the quality of the historical work of teaching and research done under its auspices, wrote Lombardi. Quality, therefore, originates in the guilds. If society wants more research and more teaching, "it is the guild that must organize and deliver this enhanced performance" (p. 3). Among entrepreneurial universities, structural and guild considerations give way to money.

"The most important ingredient for a great research university is money," Lombardi wrote. "Not genius, not leadership, not ivy-covered halls, not tradition, but money. There are no examples of poor great research universities. Not all rich universities are great, but there are no poor ones with superb academic programs. Quality and performance cost money. Universities do not exist to make money; they exist to

spend money” (p. 4). Among research universities, the bottom line is not money, but the quality money can buy, Lomabardi pointed out, adding, “the fundamental business model of the research university is very simple: “Accumulate money; spend it to acquire quality students and faculty” (p. 4).

Stretching and Embedding

Universities today are being asked to stretch far beyond their traditional roles of educating students and conducting research. Politicians and the public demand that universities tackle urban revitalization, pioneer innovation, and foster entrepreneurship. Arizona State University President Michael Crow, for instance, is an advocate for universities “embedding” themselves in communities in the same way that journalists were embedded with American military units in the Iraq War. Crow has dubbed his concept the “New American University,” arguing that just as the fates of soldiers and journalists were intertwined, universities must shed their traditional roles, viewing themselves as being integral stakeholders in the communities where they’re located. Under this model, university researchers pursue their scholarly interests with a strong notion of public good, becoming professor-entrepreneurs in addition to training the community’s work force.

Why the demand for a change? Crow and others point out that states, corporations and foundations, which invested millions of dollars in university economic initiatives, are now demanding a return on their investments. At the same time the stakeholders are asking about outputs—new businesses, improved educational attainment, and stronger leadership—academe continues to emphasize inputs—new students, teaching hours, or faculty publications—as performance measures.

In an incident that now seems quaint and outdated, a 21-year-old Berkeley

philosophy undergraduate named Mario Savio, a former civil rights worker in Mississippi and leader of the Berkeley Free Speech Movement, climbed the steps of Sproul Hall in December 1964 during a sit-in. He denounced the university for bending over backwards “to serve the need of American industry; it is a factory that turns out a certain product needed by industry or government” (Press and Washburn, 2000). Savio had no way of knowing how prophetic his words would turn out to be.

Forty-two years later, high technology enterprises have settled next to leading universities to shorten the intervals among discovery, application, and marketing. Novartis, the Swiss pharmaceutical giant and producer of genetically engineered crops, went so far as to give Berkeley \$25 million to fund basic research in the Department of Plant and Microbial Biology. In return, Berkeley granted Novartis first right to negotiate licenses on roughly a third of the department’s discoveries. This included the results of research funded by state and federal sources as well as by Novartis, along with getting two of five seats on the department’s research committee, which determines how the money is spent (Press and Washburn, 2006). Despite such trends, universities remain organized according to notions of curriculum that are structurally similar to the days when Alphonso the Wise presided at the University of Salamanca.

“In higher education, we are still doing things the way we did them a thousand years ago,” said Eva Klein, a national higher education consultant, who has studied the trend toward entrepreneurialism among universities and considers the way most universities are run based on an “antique model.” “We should not be burdened with the mythologies about the way things ought to be,” she said. “Our institutions need to be reinvented for the new world we face.” Klein is a proponent of universities concentrating in the future on information and telematics, bio and life sciences, and advanced

manufacturing to the detriment of the humanities. “We have to rethink who the customer is,” she added. “It’s the whole world.” In the short term, however, “the customers” are the government and industry.

Industry Picks Up the Tab

According to statistics compiled by the National Science Foundation, American research universities are obtaining more of their research and development funds from industry. Research and development expenditures in universities and colleges rose from \$18.8 billion in 1992 to \$27.5 billion in 1999, a 46 percent change. In that same period, industry contributions to the research and development budgets of academic institutions rose 60 percent from \$1.3 billion to \$2.1 billion. Those contributions to college and universities’ annual budgets amounted to 4.1 percent in 1980, 6.8 percent in 1992, and about 8 percent in 2001 (Stein, 2004, p. 134) of total spending.

Over a seven-year period, industry funding at Duke University increased 280 percent while total research and development rose 85 percent. The University of Texas in Austin had a 725 percent increase in industry research and development funding while total research and development increased by 13 percent. Also, a review of industry funding as a proportion of total research and development for the top ten industry-funded universities reveals that Duke University heads the list at 35 percent, followed by the Georgia Institute of Technology at 24 percent, the Massachusetts Institute of Technology at 18 percent, Pennsylvania State University at 17 percent, and the University of Texas at 15 percent (Stein, 2004).

A decade ago, 15 percent of university research and development coming from industry was considered an upper limit (Duderstadt, 2004). Now, as universities have become more aggressive in seeking private funding sources, it is no longer unusual to see

industry-funded research and development exceed 15 percent of total research and development budgets (Stein, 2004).

At the Massachusetts Institute of Technology, founded in 1861 with the motto, “*mens et manus*” (literally, “mind and hand”) the philosophy of the university’s Entrepreneurship Center at the Sloan School of Business embraces the symbiosis that marks research universities these days. The school expansively proclaims, in explaining its goals, that the center embraces the altruistic belief that it can transform “visionary ideas into concrete realizations that benefit humanity” (MIT, 2006). But not everyone is dazzled by the trend toward commercialization. Commingling academic and commercial spheres has led to bias in scientific findings, undermined public trust in medical research, and tilted universities toward profit-making projects rather than fundamental discoveries, said Sheldon Krinsky, a Tufts University professor and author of *Science in the Private Interest* (2003). “It has resulted in egregious conflicts of interest, especially in the biomedical sciences, and has contributed to the near-extinction of the norm of disinterestedness,” he wrote. Nonetheless, figures show universities adding research labs at a dizzying pace and, increasingly, turning to industry. The National Science Board (2006) reported that universities built more research space on their campuses in 2002 and 2003 than at any time since 1988, but the federal government paid a smaller share of the cost. Overall, however, the federal government still pays for the lion’s share of research and development costs on academic campuses (Figure 3.6). At the same time, Figure 3.7 illustrates that dollars being spent on research are increasingly coming from industry and not from government sources. Physical growth in academic laboratories, the total research space, increased by 11 percent, to 173 million square feet, from 2001 to 2003.

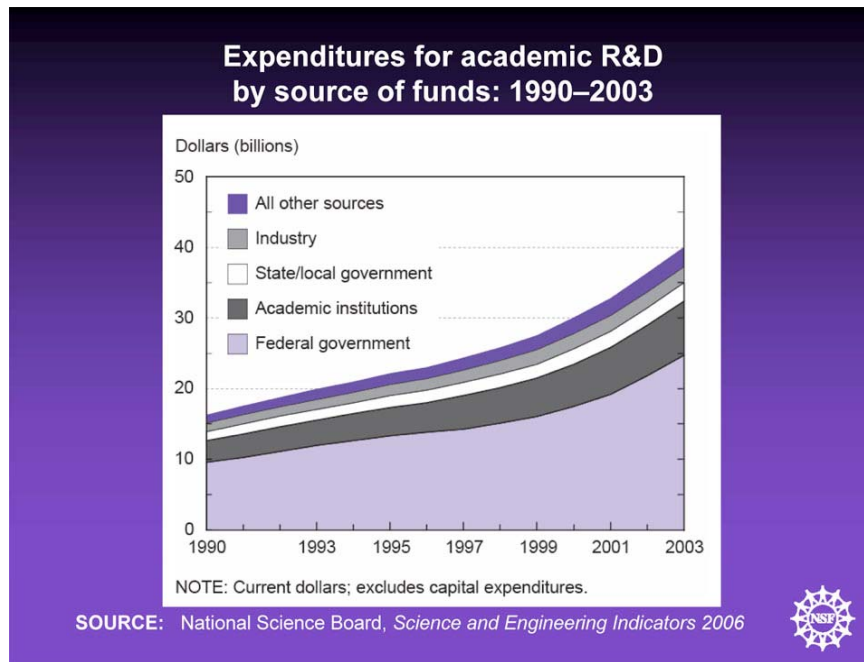


Figure 3.6: Academic Spending for Research and Development.

Overall, colleges spent \$7.6 billion to construct 16 million square feet in that two-year period. That spurt came while Congress was completing a five-year drive to double spending by the National Institutes of Health. As a result, a majority of space under construction, 56 percent, was designated for research in the medical and biological sciences (National Science Board, 2006).

Theoretical Constructs in Higher Education

Universities are often described as “institutions of learning.” Who, however, learns what in universities? Most universities operate on the so-called first level of learning, creating new knowledge by transferring new and traditional knowledge to students. Intellectual capital, in fact, flourishes around great universities, feeding entrepreneurial development (Shane, 2004). As an example, Zucker et al. (1998), in demonstrating the connection between the intellectual human capital created by pioneering research and the founding of businesses, pointed to the development of the American biotechnology industry, which was essentially nonexistent in 1975 but grew to

more than 700 active firms over the next 15 years. Zucker contends academic discoveries are not sufficient in and of themselves, but are dependent on individuals with the ability to both “invent and commercialize breakthroughs” (p. 302). That individual at

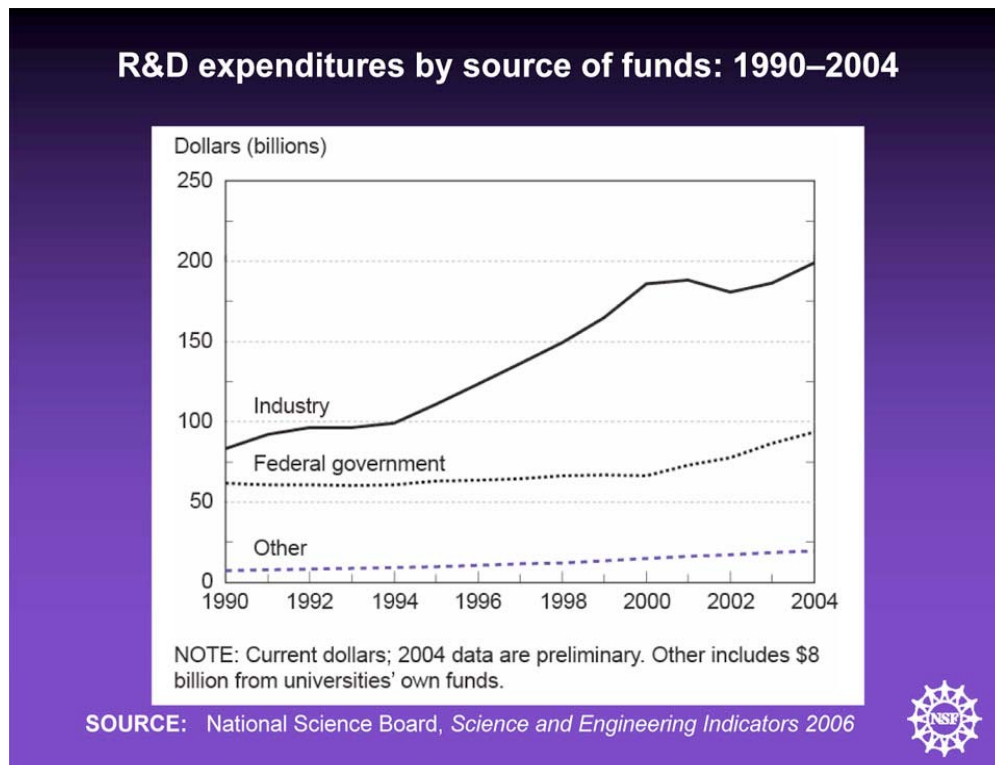


Figure 3.7: U.S. Research and Development Source of Funds.

the university is often the professor, who takes a financial stake in a business started by former students. At the University of Texas, for instance, the former dean of the McCombs Graduate School of Business, the late George Kozmetsky, co-financed Michael Dell in starting Dell Computer. Kozmetsky had become the second largest shareholder in the company (behind Dell), owning a stake valued at about \$50 million when he died in 2003 (Beck, 1998).

Entrepreneurship is paying great dividends for U.T. In the Texas host regions where U.T. campuses are located, the university system added \$4 billion in personal

income with a total impact of \$12.8 billion. The combined employment impact of all 15 U.T. System institutions on their host regions was 216,000 jobs (University of Texas System Board of Regents, 2006, p. 8).

Summary

In this chapter, we learned that the origins of entrepreneurialism among U.S. universities are rooted in the establishment of America's oldest colleges that were dedicated to training ministers with "useful knowledge" they could use in the pulpit. Universities, in fact, have gone through religious, philanthropic/land-grant, federal research, and entrepreneurial eras, all laced with a pragmatic bent that not only capitalized knowledge but also served societal needs for job training and service, especially in the explosive growth years for higher education enrollment, following World War II. Universities, as institutions, however, remain unique and continue to serve two central purposes: creating new knowledge and transferring that knowledge to students. Many universities today are seeking to increase the propensity to engage in commercialization of research activity by creating spin-off companies to develop innovations that generate royalties and licensing revenues for the university.

Also discussed were issues shaping LSU entrepreneurial goals embodied in the university's National Flagship Agenda, which are similar to aspirations among administrators on hundreds of college campuses. LSU's objectives, however, are tempered by relentless reductions in state funding that may be hindering LSU's attempts to become nationally prominent.

As the university has turned toward capitalizing intellectual property, it has adopted a mixed approach to capitalizing knowledge, actively employing three of the five dominant models of university entrepreneurialism: Iowa State (agriculture extension),

Maryland (business incubators), and Research Triangle (corporate access via research parks). Much of LSU's focus, however, has been on improving its reputation in various national rankings, which consistently place the university in the Third Tier of American colleges.

The drive for prominence is pushing the university to turn increasingly toward outside sources of funding. The process is cyclical: high-quality students attract high-quality faculty, who draw government and corporate research grants that attract more high-quality students, faculty, and funding. According to the theory that has become virtual dicta on college campuses, as rankings climb revenues follow.

From a communications perspective, the nature of entrepreneurial universities shares two approaches: (1) an emphasis on information exchanges between the academy and industry and (2) the communication of the benefits of technology to stakeholders both within the university community and a larger audience of political policy makers who control the university purse strings.

The culture of the academy also is an important factor, a factor that becomes important to LSU's entrepreneurial ambitions, a theme further developed in Chapter Three. As Burton Clark (1998) pointed out, academics dominate collegial structures and slow the gears of innovative institutions trying to be entrepreneurial in their larger communities. The "new entrepreneurial university," Clark and others contend, will have to train cadres of knowledge workers whose principal skills and creativity may be associated less with producing new knowledge than with configuring knowledge gathered by others. Why is that relevant to LSU's entrepreneurial efforts? Because a tension between secrecy and science colors this discussion and, some university officials believe, has slowed LSU's attempts to be more entrepreneurially assertive.

In a now classic paper published in 1942, sociologist Robert Merton compared the culture of science to the ideals of communism because, as he wrote, intellectual property was commonly shared and discoveries freely exchanged. “The scientist’s claim to his intellectual property,” Merton wrote, was “limited to that of recognition and esteem,” and scientific knowledge was assumed to be a public good (Merton, 1973, p. 181). What is the public good today?

Historian Richard Hofstadter (1952) wrote that while America’s universities fostered the nation’s technological and economic development, they also are judged solely on pragmatic grounds. “Education,” he wrote, “is justified apologetically as a useful instrument in attaining other ends: it is good for business or professional careers. Rarely, however, does anyone presume to say that it is good for man” (p. 217). What is good for LSU, and how is that message of 21st century utility being communicated in the face of chronic under-funding?

CHAPTER FOUR: LSU'S RESPONSE TO THE TEMPTATION AND CURSE OF RANKING SCHEMES

"I fear that if education be left entirely to the patronage of the inhabitants, it will continue to be neglected; for they are not sufficiently informed to appreciate its value."

*—William C. C. Claiborne, governor of the
New Orleans Territory, in a letter to
President Thomas Jefferson.*

On November 14, 1803, a little more than a month before the formal transfer of the Louisiana Purchase to the United States, Louisiana's first governor, William C. C. Claiborne, wrote to Thomas Jefferson about education and the intellectual capacities among residents of the new territory, decrying the fact that "they are not sufficiently informed to appreciate its value" (Rowland, 1918, pp. 326-327). Two months later, Claiborne, who is credited with establishing public schools in Louisiana, including the College of New Orleans, wrote a second letter to then Secretary of State James Madison:

The merchants as well as the planters in this country appear to be wealthy, their habits of living are luxurious and expensive, but by far the greater part of the people are deplorably uninformed. The wretched policy of the late Government having discouraged the education of the youth, the attainments of some of the first people consist only of a few exterior accomplishments. Frivolous diversions seem to be among their primary pleasures, and the display of wealth and the parade of power constitute their highest objects of admiration" (Rowland, 1918, p. 327).

Eighty-eight years later, travel journalist Martha Field visited LSU, which at the time was located in the Pentagon Barracks on the grounds of the current state capitol. In

a dispatch to *The Daily Picayune* she said the university was teaching 109 cadets, and operating on \$14,000 in bond income and \$10,000 in state appropriations. She wrote:

It is possible that there is not another state university in the country so miserably and stingily endowed. Our average lawmaker knows little or nothing of this university, and is far from realizing its value to the state or the vital necessity for maintaining it and forcing it to become one of the first institutions of its kind in the South (Field, 1888).

Based on observations of Claiborne and Field, it's not an experiential leap to conclude education has been a tough sell in Louisiana for more than two centuries. Yet LSU's modern-day entrepreneurialism is the latest in a long line of efforts designed to lift the university, or, as Field wrote, "to uphold and advance the State University and not pull it down" (Field, 1888).

The theme of this chapter is that to succeed in a higher education marketplace characterized by intense competition, LSU is attempting to improve its national ranking as part of its Flagship Agenda, a major part of which centers on increasing entrepreneurial ventures. Methodologically the rankings may be flawed. Some educators believe they tell little, if anything, about the quality of learning taking place at an institution. As this study will examine in detail, U.S. News rankings for LSU are heavily influenced by perceptual factors not easily changed. This dissertation turns next to an analysis of LSU's current marketing campaign and compares it to a communications campaign by a regional public peer institution, the University of Houston (UH). Thematic differences between the LSU and UH promotional messages are noted, particularly that the Houston messages stress the economic value of the university to the community as opposed to LSU messaging, which emphasizes movement, sports, and non-entrepreneurial themes. Integral to becoming an entrepreneurial university are

technology transfers. This chapter also looks at how LSU compares to other peer institutions as evidence that LSU entrepreneurial efforts trail top U.S. research universities and may complicate delineating a unified messaging strategy.

The Ratings Game

Laying claim to being an entrepreneurial university can be a complex and exasperating process measured in millions of dollars spent on promotional campaigns that still don't improve the university's position in annual rankings by *U.S. News & World Report*, *Peterson's*, *Kiplinger's*, *Newsweek*, and others. It is nearly axiomatic that officials at highly ranked schools rarely complain while administrators, particularly at schools such as LSU, stuck for years in *U.S. News*' Third Tier, vehemently claim the ratings are defective.

Ratings critics, including Newman, Couturier and Scurry (2004), assert that prestige and quality are not necessarily equal. Other authorities contend, "a school's academic reputation as judged by others says very little about how active learning, student-faculty interaction and a supportive environment characterize a campus" (Indiana University Center for Postsecondary Research and Planning, 2001, p. 1).

Ernest Pascarella and Patrick Terenzini (1998) demonstrated through a review of educational research on teaching and learning that "there is little consistent evidence to indicate that college selectivity, prestige, or educational resources have any important net impact on students in such areas as learning, cognitive and intellectual development" (p. 592). Are college rankings by for-profit media companies junk science or thoughtful analysis, accurate portrayals or newsstand hype? Moreover, why are ratings so important to university entrepreneurial communication? Aside from the promotional advantage of being highly ranked, experts suggest two clear advantages to going to an elite college or

university, and both directly relate to an institution's ability to become more entrepreneurial. First, students learn as much from each other as from faculty, so it is helpful to associate with bright, well-connected students who themselves expect to succeed and whom the institution expects to succeed. Second, elite institutions have extensive facilities for learning—libraries, technology, and labs—and alumni networks that help career development (Newman, Couturier, and Scurry, 2004, p. 144). For universities intent on growing entrepreneurial enterprises, the two factors represent an academic pump-priming effect discussed earlier: Quality attracts better quality students and faculty, who attract research dollars, triggering spin-off companies that generate more money for universities to use in attracting even higher quality students and faculty, etc.

Data Gathering on Quality

Colleges routinely collect and report various types of actuarial data, such as graduation rates, endowment levels, student/faculty ratios, average admission test scores, and the racial-ethnic composition of the student body. The advantages of such indicators are that the data for them are straightforward to collect and the resulting statistics may be compared across institutions. Analyzing the data typically assumes that a better quality educational institution is associated with more and better resources, including better funding, better faculty (defined by a higher percentage holding Ph.Ds), and a higher quality of students reflected by higher admissions standards (Astin, 1968, 1977, 1991, 1993).

Actuarial data also have been used in some cases to measure institutional effectiveness (Gates et al., 2001). In addition, the National Center for Education Statistics (NCES) and the Integrated Postsecondary Education Data System (IPEDS)

include data on student enrollment, faculty ranks, and institutional expenditures.

Reviews of national data systems, however, indicate that they yield little information about a college or university's effectiveness in promoting student cognitive outcomes (Dey et al., 1997; National Postsecondary Education Cooperative, 2000a, 2000b).

The most frequent direct indicators, however, are scores on the SAT, Graduate Record Examination (GRE), LSAT, licensing examination pass rates, along with indirect indicators such as graduation rates, degrees awarded, self-reports of learning, and employer surveys. Despite popular assumptions, however, high scores are no guarantee of a student's ability to learn. Further, as educators stress, test scores do not predict future success in the students' chosen careers, which is, after all, the basis on which the admissions office is purportedly attempting to make selections (Perez, 2002).

Recently, the educational policy debate has focused on direct assessment of student learning (Callen and Finney, 2002; Klein et al., 2002; Shavelson and Huang, 2003). Although a consensus has not been reached on what measure to use, talk increases about instituting a national assessment test for higher education similar to the National Assessment of Educational Progress (the "Nation's Report Card" for K-12 education). Implementation of such an assessment would allow state-by-state comparisons that would then be reported in "Measuring Up," a biennial higher education report card.

Critics of this approach contend it is not particularly useful for institutional improvement. In contrast, some researchers (Benjamin and Hersh, 2002; Klein, 2001; Klein et al., 2003) have proposed a multi-level assessment adapted to local institutions' concerns for the improvement of teaching and learning. Such a system would permit comparison sets of cooperating institutions to benchmark their progress and compare

results. Until a system is adopted, however, national level assessments of colleges and universities have been left largely to national news magazines and guidebooks.

Hossler (2000) observed that attempts to rank colleges and universities on the basis of educational quality are a new phenomenon, springing from public interest in greater accountability and assessment. The rankings, however, have become big business. More than 100 guidebooks and rankings are published annually either in print or online (Hunter, 1995), and more than 6.7 million copies are sold each year (McDonough, Antonio, Walpole, and Perez, 1998). *U. S. News and World Report* annually sells about 2.2 million copies of its rankings, reaching nearly 11 million people (Dichev, 2001). The importance of the rankings, however, reaches beyond the number of copies sold or online “hits” on websites that feature the guides. The material frequently is used by students and their parents in selecting a college (Hossler and Foley, 1995). McDonough, Antonio, Walpole, and Perez (1998) estimated that 400,000 prospective students and their parents annually use the guidebooks and rankings to pick a college, accepting the information at face value (Hunter, 1995). In addition, some middle- and upper class students use guidebooks and rankings to eliminate or include colleges in the process (Hossler and Foley, 1995).

The Problem with Guidebooks

Communicating entrepreneurial institutions in the face of a Third Tier reputation is tough. Guidebooks and rankings are problematic for schools like LSU. The LSU Office of Budget and Planning reported in a September 2001, analysis that LSU’s ranking in the *U.S. News* guidebook is largely biased by reputation ratings that account for as much as 25 percent of the rankings (Hearne, 2002, p. 4). As a result, rankings are likely

to carry more weight with out-of-state students than with in-state students, “challenging LSU’s claim to a position among the nation’s very best” (p. 4).

In an interview with the Baton Rouge Advocate, Robert Morse, director of data research for U.S. News, said LSU’s 130th-place finish on its 2007 list was largely attributable to three factors:

1. Faculty resources, which in the ratings trigger credit for classes with fewer than 20 students compared with classes with 50 more or more; faculty pay and benefits; faculty training; student-faculty ratio and the proportion of full-time faculty members. That accounts for 20 percent of the ranking.
2. Spending per student, which paves the way for how much a school spends on instruction, research and student services. That makes up 10 percent of the grade.
3. A low level of alumni giving money to their alma mater, which is viewed as a measure of student satisfaction. It accounts for 5 percent (Sentell, 2006, p.1).

Morse also said other factors that make up the rankings are assessments by peers, 25 percent; the percentage of students who return each year and the percentage who graduate within six years, 20 percent; student selectivity in admissions, 15 percent; and how well the school meets a predicted graduation rate, 5 percent (Sentell, 2006).

A closer look at the *U.S. News* rankings for LSU lends perspective to the predicament the university confronts in changing its national image. For its 2007 rankings, the magazine rated 248 schools in three tiers, although the tiers are numbered one through four. Tier One schools encompass institutions ranked 1 to 124. Those ranked 126 to 182 are considered Tier Three schools and Tier Four schools are ranked 183 to 248 (Figure 4.1). LSU’s 2007 rank was 130 out of 248 schools, an improvement of seven places over in two years. The university’s overall score was 37 out of 100 compared to a 75 for the University of Virginia, 59 out of 100 for the University of Texas, and 45 for the University of Alabama (Figure 4.1).

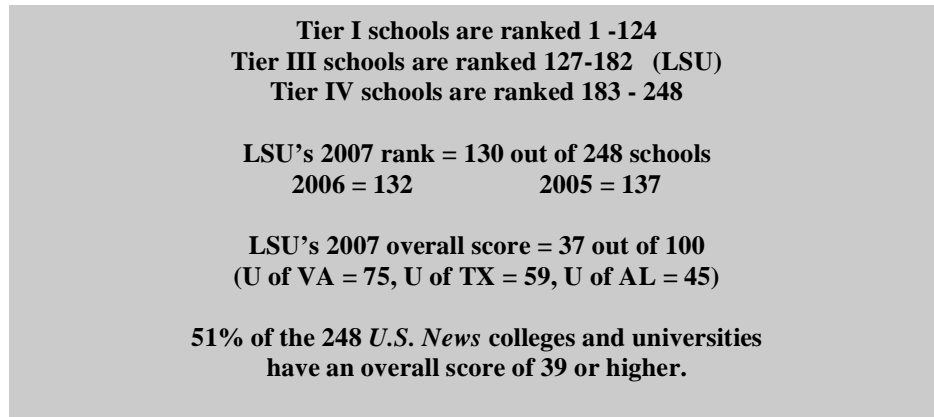


Figure 4.1: *U.S. News & World Report* 2007 Collegiate Rankings for LSU.

Figure 4.2 compares LSU's *U.S. News* rankings to those of 49 peer institutions compiled by the LSU Office of Budget and Planning. The chart shows that in areas of faculty resources, alumni giving, and spending per student, LSU rankings are substantially lower than peer institutions with faculty resources rated near the bottom of Tier Three schools nationally.

Figure 4.3, meanwhile, is a graphic representation of the rankings predicament LSU confronts. While the chart shows that LSU is apparently just outside a so-called Top Tier ranking, the reality is that many of the individual ranks for such areas as faculty resources, financial resources, graduation and retention, and alumni giving have worsened over the last two years. Although university officials contend the university will achieve Top Tier status within a few years, a close look at LSU's overall score suggests the university's reputation has dropped slightly.

In fact, an improvement from a rank of 113 in 2005 to 97 in 2007 out of 248 schools for student selectivity may be the single factor driving a small climb in the U.S. News rankings. The larger implication of this observation is that increasing admission standards is feeding that incremental rise.

Indicator	% of Total	% of Indicator Score	True Indicator %	07 LSU Ranking (out of 248)	Against flagship peers
1) Peer Assessment	25%		25.00%	2.9 out of 5 111	35/49
2) Graduation & Retention Rate	20%			128	
Average Graduation Rate		80%	16.00%		31/50
Average Freshman Retention Rate		20%	4.00%		22/50
3) Faculty Resources	20%			178	
Faculty Compensation		35%	7.00%		39/50*
Class Size, 1-19 Students		30%	6.00%		47/50
Class Size, 50+ Students		10%	2.00%		47/50
% of Faculty w/ Top Terminal Degree		15%	3.00%		32/49
Student Faculty Ratio		5%	1.00%		48/48
Percent of Fulltime Faculty		5%	1.00%		19/50
4) Student Selectivity-Fall 2004 Entering Class	15%			97	
Test Scores (SAT/ACT 25th-75th percentile)		50%	7.50%		NA
Freshmen Graduating in Top 10% of H.S. Class		40%	6.00%		29/48
Acceptance Rate		10%	1.50%		22/50
5) Financial Resources- Expenditure/Student	10%		10.00%	\$9371** 150	
6) Graduation Rate Performance	5%		5.00%	120	
2005 Graduation Rate				1	31/50
2005 Predicted Graduation Rate					26/50
7) Average Alumni Giving Rate	5%		5.00%	150	39/48
TOTAL	100%		100.00%		

Figure 4.2: Rankings and Indicators for LSU in *U.S. News & World Report* 2007 Collegiate listings.²³

Fun with Numbers?

Many college ranking publications provide little, if any, information on how data are obtained and the ratings calculated (Hossler and Litten, 1993). Also, indications persist that some colleges and universities have provided inaccurate data to improve their rankings (Hossler, 2000; Pollock, 1992; Stecklow, 1995).

Even when the data are accurate, results may be suspect. Dichev (2001), for instance, found as little as 10 percent of the variation in an institution's *U. S. News* scores over time because of changes in the quality of the institution. The more significant impact comes from changes in peer ratings.

²³ Source: *U.S. News & World Report*, and American Association of University Professors. **Data for per-student expenditures was prepared by the SREB State Data Exchange.

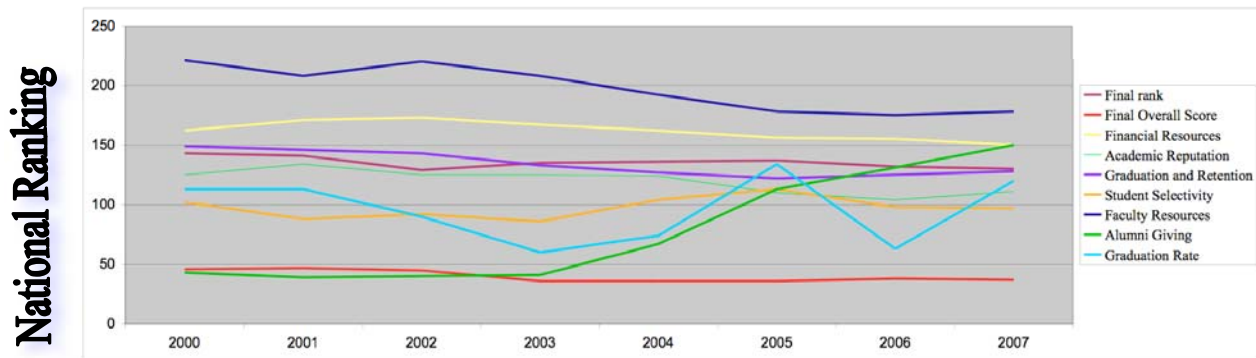


Figure 4.3: *U.S. News & World Report* Rankings for LSU: 2000-2007.²⁴

Critics assert that colleges with good reputations automatically benefit, and their academics play a small role in classifications (Pascarella, 2001).

The key question is, do ratings have an impact? In a study of high-achieving high school seniors, analysts reported that “the reputation or quality of specific programs at a college or university is as important as, if not more important than, the reputation of the institution as a whole” (Lipman Hearne, 2006, p. 3). Specific programs and high-quality programs were two of the most noted factors in the study. Where *U.S. News and World Report* ranks a university came in 12th as a factor among students choosing a college. This finding suggests that while ratings are arbitrary and are not the key factor in college selection, reputation carries weight.

²⁴ Source: LSU A&M Budget and Planning Office.

Raising and Lowering the Flag(ship)

LSU was named Louisiana's "flagship" university by an Act of the Louisiana Legislature in 1999 (La. RS 3215). The designation "flagship" implies status among a family of colleges and universities nationally. It also is generally understood that an institution's designation as a "flagship" university implies specific responsibilities to compete as a research institution for the state. As a Louisiana Board of Regents white paper (2004) pointed out, "A flagship university's competition is not with other non-flagship state institutions; rather a flagship should compete on behalf of the state in the national marketplace of premier public research universities. Stated another way, simply outperforming the other public universities in the state is not sufficient for a flagship university. It is expected to compete with its national peers" (p. 3). This change of mission, however, represents a shift in LSU's historic land-grant mission of teaching the citizens of Louisiana.

Founded in 1860 as a military academy, LSU was among the first land-grant colleges created by the Morrill Acts of 1862 and 1890 to train students in the agricultural and mechanical arts. Ostensibly, land-grant universities were set up to meet the needs of industry and agricultural technology during that period (Jones, Oberst, and Lewis, 1990). The obligations of the national grants even emphasized service. "On the whole," the grants read, "the land-grant institutions were conscious of the great debt they owed to the public largess" (Anderson, 1976, p. 1). Since their inception, the institutions have played central roles in state and national economic development, which opportunely dovetailed with their political purpose.

The land-grant idea represents a political ideal. The diminishing of their uniqueness is due to the adoption by other institutions of the basic concepts of the land-grant idea: democratization of

education; applied or mission-oriented research conducted to the benefit of the people of the states; and service rendered directly to these people (pp. 1,2).

Land-grant universities today make up half of the 214 members of the National Association of State Universities and Land-Grant Colleges (NASULGC). Across the United States, 80 percent of students enrolled in two and four-year public colleges and universities attend institutions that are part of multi-campus systems (Gaither, 1999).

LSU's National Flagship Agenda was focused on advancing the A&M campus alone and had as a leading objective to "increase research productivity in support of long-term economic development" (Emmert, 2003).

Half way into the seven-year plan, however, an analysis by The Louisiana Board of Regents acknowledged that in freshmen retention, faculty awards, research expenditures, doctorates awarded and annual giving, LSU is becoming competitive nationally, but that the university was failing as a nationally-competitive research university in terms of acceptance rates, graduate rates, student-to-faculty ratios and test scores (Louisiana Board of Regents, 2004, p. 37). While the Regents report conceded that for LSU to become truly competitive, it must seek additional resources (Louisiana Board of Regents, 2004, p. 21), it also recognized that quality and performance cost money and that "universities do not exist to make money, they exist to spend money" (p. 21). Despite that, state appropriations to LSU over the past five years have been relatively flat in the face of university estimates that the A&M campus alone needs an additional \$80 million a year above current budget allocations to become nationally competitive (LSU Response to the Board of Regents White Paper, 2005). Entrepreneurialism is being used to bridge that gap.

PR on a Shoestring

Officially, the public relations arm of the LSU main campus is the Office of Communications and University Relations, which, according to its mission statement, provides a “full service communications organization that pro-actively fashions, manages and delivers consistent messages promoting LSU’s National Flagship Agenda” parents, students, faculty, lawmakers, donors, the media, and business leaders across Louisiana and the nation.²⁵

In practical terms, the office includes 40 personnel and a budget of approximately \$2.5 million a year. Extending the reach of the unit are more than 100 campus communicators, staff members in each main campus entity such as academic departments and research units who are responsible for relaying potential news and feature story topics to the main campus public affairs office. The office generates a steady flow of information releases and attracts a healthy interest in its website. During September 2006, for instance, there were more than 2.6 million “hits” on the LSU homepage.²⁶ The office issued 45 news releases were posted to the LSU homepage. The office also maintains and updates 96 web pages.

At other system campuses, institutions, and hospitals around Louisiana, public relations functions are assigned to a small staff (in some cases one or two people). There is no centralized message control.

Aside from a uniform graphics policy, including typefaces and logos, adopted by the main campus, other system institutions impose few, if any, guidelines. Similarly, there is no coordination among system units on newspaper, radio, TV, or Web

²⁵ Source: http://www.lsu.edu/university_relations/

²⁶ Source: LSU Office of Public Affairs.

messaging, which is left to the discretion of individual chancellors, who have no obligation to clear messages with the LSU System office.

Virtually the only control on advertising content comes from Louisiana Revised Statute 43:111, which bans spending of taxpayer dollars on advertising in any newspaper, book, pamphlet, periodical, or radio/television station with the exception of a limited number of instances. As a result, individual campus advertising designed to promote enrollment, announce an individual program, or shape LSU's image is generally paid for by one of the 40 separate foundations that support system institutions such as the LSU Foundation or by groups of donors that pool donations for a specific purpose. The main campus also solicits free message placements in local, state, and national publications. The main campus public affairs office allocates virtually no money to advertising and depends instead on low-cost or free public service announcements such as the 30-second promotional spots aired during network broadcasts of athletic events.

“Welcome to the Now” Campaign

Increasingly, universities are finding that as competition for students and grant dollars grows, they must aggressively promote themselves if they expect to snag new recruits and attract industry investments in research. Despite severe budget limitations, LSU in the spring of 2006 launched a year-long national marketing campaign as an upbeat recruiting tool designed not only to boost the university's branding but also to drive public awareness of LSU's research and academics. The marketing effort included billboards, TV, cable spots, and print ads. A key feature of the campaign was a “grass-roots” outreach meant to enhance the university's national visibility, especially in markets closer to home: Houston, Dallas, Atlanta, New York, with top faculty and students contacting other top students and faculty around the U.S., inviting them to come

to LSU (Clark, 2006). The “Welcome to the Now” slogan was printed on t-shirts and included in promotional videos that featured a theme song, “Evo Devo,” shorthand for a field of biology called evolutionary development.

“We didn’t want to do anything hokey, so we started saying right now is when you need to be here at this university,” said graphic arts designer Jennifer Pickard, who put together the graphic look of the campaign and discussed the rationale behind the pitch (Pickard in Clark, 2006). “Right now is when we have a cutting edge. Right now it’s energized. Be here right at this moment. It didn’t matter if you were an alumni, a current student, a prospective student or even just members of the community, you need to be on this campus right now.”

A marketing overview prepared by the LSU Office of University Relations laid out the justification for the “Now” campaign:

Now, more than ever, LSU is achieving unprecedented national and international prominence. This attention stems from the accomplishments of LSU’s students, faculty, academics, research, and athletics. This is truly an exciting time to be part of LSU, and it’s the right time to introduce others to our progress (LSU University Relations, 2006).

The materials spelled out that “The NOW is LSU faculty making fast progress in cutting-edge research; The NOW is LSU students jumping at the chance to learn, invent, and create; The NOW is LSU programs rising above the competition; The NOW is LSU initiatives partnering with local, state, and national efforts to better our communities; and The NOW is moving forward full-throttle.” It was a marketing campaign long on overstatement and run on a shoestring budget that depended on getting out the word to internal audiences like the LSU Alumni Association, on “free” media such as placement of news stories, and donated advertising space on billboards and in magazines.

LSU, in fact, reportedly spent only about \$86,000 on the “Welcome to the Now” campaign launch (Clark, 2006), but other universities have spent far more in recent years on their communication efforts.

University of Houston Targets Community Influencers

The University of Houston (UH), for example, hired an outside advertising agency and spent \$5 million over five years in a marketing effort that university officials claim increased the UH endowment and boosted respect among “community influencers” (Clark, 2006).

The collection of UH campaign materials on the following pages—billboards, print ads, screen shots from TV commercials, and web pages—were part of the UH image makeover. All are simple, straightforward pitches that highlight researchers and their discoveries, UH’s successes at training graduates for business leadership roles (Figure 4.4), and pioneering engineering breakthroughs. All of the print ads feature “Shasta,” the UH mascot.



Figure 4.4: Billboard from the University of Houston Multi-media Image Campaign.

The University of Houston's image campaign, launched in February 2000, was designed by the advertising agency Temerlin McClain. The theme was reduced to two words: Learning. Leading. The mission statement prepared for the campaign was a straightforward embrace of entrepreneurialism in the service of the community development:

The vision of the University of Houston is to be the nation's preeminent public urban research institution. While we are well on our way, to complete our journey we need to attract more and better resources. We need to be a school of choice. We need a reputation of excellence (University of Houston, 2006).

Internet ads (Figure 4.5) focused on nationally ranked programs at UH, while print ads (Figure 4.6) demonstrated connections to the community by featuring prominent alumni and faculty researchers. Specifically targeted were key executives, community leaders, human resources professionals, alumni, faculty, staff and students. Note the visual messages embedded in the webpage that connect with UH's concentration on energy research: power-generating windmills, oil derricks, a solar house, and hyperlinks to more information about "breakthroughs." Cast against a scene of green fields at sunrise, the message says clearly it's a new day for the university.



Figure 4.5: University of Houston Webpage, Featuring Engineering Advances.

Television commercials emphasized UH faculty contributions. Screenshots in Figure 4.7 were taken from a TV commercial about the work of two university bio-scientists who formed a bio-nano technology company that claims to radically alter DNA sequencing in a way that will one day allow doctors to screen for thousands of diseases in an hour. The spot tagline: “Great universities are identified with great research.”



Figure 4.6: University of Houston Image Campaign Print Ad, Highlighting Faculty.



Figure 4.7: Screenshots from University of Houston TV Commercial.

The UH media relations office claims its surveys show the image campaign has driven up brand awareness by only eight percent overall, but 29 percent among key executives in the state, trailing only the University of Texas in brand awareness among community leaders.

Energetic, Progressive, Unique?

LSU's media effort was aimed at influencers too. Michael Ruffner, LSU Vice Chancellor for Communications and University Relations, said LSU was going after young people in the 15-to-25 age group—college-aged people—along with the 25-54 demographic—parents and friends who influence college choices. The message: LSU is an energetic, progressive and unique university worth considering. The University of Houston, on the other hand, is clearly communicating its entrepreneurial ambitions by establishing ties to the economy of Houston. Where LSU concentrated on a quick-moving visual approach to attract young people, UH positioned itself as an economic force tied closely to research and business development.

“The whole strategy here is to get everyone to come onto the LSU Web site and check it out,” said Ruffner. “The message is now is a good time to be at LSU. You can develop your career. You can have fun” (Ruffner in Clark, 2006).

Figure 4.8 is a series of screenshots from a “Welcome to the Now” TV spots. All use the “Evo Devo” track and are made up of a series of rapid shots of campus life, cascading one upon another. These include quick shots of computer labs, chemistry labs, and football, the band and campus scenes.

The Houston campaign was aimed directly at establishing the university's entrepreneurial ties to the Houston economy, but the LSU campaign appears to be more of a marketing tool aimed at recruitment. LSU print ads (Figure 4.9), for instance, make only passing references to the university's economic impact, dwelling instead on the arts, the LSU Hurricane Center, and the factious claim that LSU students are “more than just another pretty face.”



Figure 4.8: Screenshots from LSU “Welcome to the Now” Campaign TV.



Figure 4.9: Sample of Print Ads from LSU “Welcome to the Now” Campaign.

Visual imagery underscored the point that a frenetic amount of activity surrounds LSU, but the ads also returned to familiar themes of athletics, pretty campus, and entertainment. An ad slugged “Team Players” was run in the Game Day program for the 2006 LSU Homecoming football game. It touts LSU as one of the nation’s top research universities in making an appeal for alumni donations to the fund raising campaign. Again, messaging utilized themes tied directly to athletics. LSU web pages struck similar themes. Figure 4.10 is a screensaver (left) and the “Welcome to the Now” webpage.



Figure 4.10: LSU “Welcome to the Now” Webpage (right); Screensaver shot (left).

Both web pages communicate hyper-movement, random thoughts and jagged statements in a dramatic counterpoint to the Houston ads, which represented the prevailing frame among marketing campaigns for a number of entrepreneurial universities. Scribbled near the upper left corner of the screensaver was graffiti that declared, “Brains conquers beauty.” The overall look is dark, disjointed and edgy.

Pushing Enrollment

The “Now” campaign, as Ruffner said, is designed to attract high quality students to LSU. Boosting enrollment, however, has been a primary focus of university marketing efforts since 2001 as evidenced in the preamble to the October 2001, LSU Planning Document, which read:

As Louisiana’s flagship research institution, Louisiana State University and A&M College must be a leader in the intellectual, cultural, social and economic advancement off the state. LSU must attract the brightest students from Louisiana and around the nation in order to develop talented, productive, responsible citizens (cited in Hearne, 2002, p. 1).

No mention was made of entrepreneurialism, spin-off companies or economic development. In fact, the main campus Admissions staff launched an out-of-state

recruiting drive in 2001 designed to boost the student body by at least 500 out-of-state students a year, primarily from regional cities such as Dallas, Houston, Jackson, Mobile, Birmingham, and Orlando. Although the marketing plan boasted “there can be no question that LSU is a world-class university” (Hearne, 2002, p. 3), the thrust of the document centered on selling LSU’s location as being “truly unique;” that the main campus is “well-tended, beautifully landscaped with Italian Renaissance-style architecture” and that “small campus touches offer students the best of both worlds” (p. 3). Again, no no discussion was provided to promote LSU entrepreneurialism.

The marketing plan, citing verbatim comments from in-person interviews, also reported that “outside Louisiana, people think of us as backward or as ‘poor white trash’” (p. 4) and that there is skepticism among staff and faculty who “struggle with LSU’s association with football, thinking that the football powerhouse image cannot co-exist with academic quality” (p. 4).

Reaching Millions; Remembered by Few

Sports seems inexorably fused to the image of the university. The LSU System Office commissioned an audit of the university’s national print and broadcast coverage, covering the period from December 2, 2005, to January 31, 2006.²⁷ The audit was conducted by the Video Monitoring Service (VMS), a national “clipping” service that specializes in supplying copies of media material to clients on a daily, weekly or monthly basis. The analysis was conducted by the LSU System Office in an effort to determine whether news coverage of damage to LSU institutions was reaching the American public.

²⁷ The VMS audit conducted an unscientific survey based on a manual scanning of print, radio, and TV broadcasts during the survey period. The audit was not comprehensive.

VMS found that of 796 total LSU-related stories monitored in print, radio and TV during the period, 38 percent (n=301) were sports related, followed by stories on hurricane recovery efforts at damaged LSU academic campuses, health care professional schools, and hospitals.

Geographically, the VMS study found most coverage of LSU to be concentrated in Louisiana, Texas, Mississippi and Arkansas. With the exception of four-dozen stories carried by Northeastern newspapers, concerning hurricane-related events that involved LSU institutions (most notably Charity Hospital), little interest was demonstrated in LSU stories in most of the rest of the United States. Figure 4.11 illustrates VMS estimates that LSU media coverage reached a potentially massive total audience of 326,555,973 U.S. viewers, readers and Internet users.²⁸

Findings of the survey conducted for this dissertation, and a separate study conducted by the LSU Public Policy Research Lab (Procopio, 2005), suggest that the American public was aware that LSU institutions suffered some damage from the 2005 hurricanes. That vague sense of awareness, however, was the sum of what the public knew about LSU, outside of athletics. The point is that messages about LSU are reaching the American public, but they may not be the messages that advance LSU's entrepreneurial and academic goals. Since 1980, in an attempt to remain competitive in world markets, local, state, and national governments have vigorously pursued policies aimed at increasing technology transfers between research universities and private industry. Technology transfers are considered important because the exchange of new

²⁸ VMS audience estimates are based primarily on calculations supplied by media companies. For print publications, VMS uses a newspaper's circulation figures for the edition. For TV viewership, VMS bases estimates on TV ratings both locally and nationally. A TV newscast that has a ratings estimate of 140,000 equals 140,000 impressions. Internet coverage, meanwhile, is based on the number of "hits" or clicks to a website that contained a specific story. The number of "hits" does not necessarily indicate someone read the stories or "clicked through" to stories via hyperlinks embedded on a webpage. It is generally not possible for firms like VMS to precisely measure audiences in the same way media research companies such as A. C. Nielsen conduct audience research.

knowledge among academic, industrial, and government scientists can have a multiplier effect on technological innovation, which is the wellspring of new products and services that provide an economy with increased competitiveness (Newman, Couturier and Scurry, 2004).

Total Impressions: 326,555,973	
Medium	Estimated Potential Audience
Print Publications	62,853,029
TV News Reports	5,111,673
Views of Internet Websites containing LSU-related stories	258,139,256

Figure 4.11: Audit of LSU-related Stories. December 2, 2005-January 31, 2006.

The term technology transfer is simply a matter of communication of information among people that reduces uncertainty in reaching a decision or in achieving a goal. Because the term embraces knowledge in the form of hardware or software, it represents any extension of human capabilities. People transfer technology. For purposes of definition, commercialization is the production, manufacturing, packaging, marketing, and distribution of a new product that embodies an innovation (Rogers, 1983, p. 143). Universities conduct basic research, and private companies commercialize results of the research that are considered to have commercial potential.

“Basic research” usually is defined as original investigations conducted for the advancement of scientific knowledge that does not have the specific objective of applying that knowledge to practical problems. In contrast, “applied research” consists of scientific investigations that are intended to solve practical problems. Applied researchers are the main users of basic research. Development of an innovation based on that research is the process of putting a new idea into a form that is expected to meet the

needs of potential buyers. For example, the U.S. computer industry was developed in the virtual shadow of a number of major research universities such as Stanford University. Three computer engineers who attended the university founded one of the country's largest computer companies, Sun Microsystems. The "Sun" in the company's name stands for Stanford University Network. Stanford also played a key role in developing Google, the online search giant, which was launched in 1998 by Sergey Brin and Larry Page, two Stanford graduate students. As part of the financing deal that put the company together, Stanford received Google shares that it sold in 2005 for a \$336 million profit, boosting the school's endowment by 23 percent in one year (Hopkins, 2006).

LSU Enters the Field

At LSU, technology transfer efforts got under way in earnest in 1988, eight years after Bayh-Dole, with the establishment of the E. J. Ourso College of Business Louisiana Business and Technology Center (LBTC), which was set up to promote the formation of new businesses and provide assistance to entrepreneurs. In addition to operating a business incubator, the LBTC connects entrepreneurs with capital through Small Business Innovation Research and Small Business Technology Transfer grants.

Federal figures indicate that LSU, as a system, is trying to accomplish that by becoming more entrepreneurial. University institutions, however, still lag substantially behind regional and national peers in technology transfers and spin-off creations. Based on data compiled by the National Academy of Sciences, industry contributions to academic research rose from \$236 million annually in 1980 to slightly more than \$2.2 billion annually in 2004. Total sponsored research at LSU System campuses for 2004 alone totaled \$279 million, resulting in 111 invention disclosures, 22 U.S. patents, and more than \$4.8 million in licensing income. Compared to other universities, however,

the LSU System trails peer national universities in attracting federal and corporate research dollars. For instance, for 2003, LSU system researchers on 10 campuses brought in a total of \$315 million in sponsored research. The University of North Carolina at Chapel Hill alone was awarded \$392 million during the same year.

In federal research dollars for 2003, LSU attracted \$99 million in federally funded research and development expenditures, about one third of the system's \$315 million total. Tulane University, during the same year, won \$82 million in federal awards or about 70 percent of the university's \$118 million spent on research. Based on these figures, Tulane is apparently doing a much better job of getting the federal government to pay for the majority of its research (70 percent for Tulane versus 30 percent for LSU).

The LSU AgCenter also had a big impact as a resource for the agricultural community in Louisiana, mirroring another entrepreneurial model, the Iowa extension service model. Ag Center researchers have developed new plant varieties and are concentrating on combating crop disease by making plants more resistant to disease by increasing plant yields. Much of that work is centered on transferring genes into species in which they do not normally occur. Working with catfish, one researcher inserted lytic peptide genes into a channel catfish that, in turn, helped the fish defend itself against viral or bacterial infections without using antibiotics that would prevent the fish from being consumed by humans. Another researcher inserted foreign genes into a new rice variety, altering the plant so that it could better resist insects.

On a research base of \$51 million in 2003, the Ag Center had 34 invention disclosures, surpassing the national average for research disclosures per dollar of investment. Patents were filed on slightly more than half of the disclosures, and 12 technologies generated more than \$1 million in revenues. In 2004, research expenditures

increased to almost \$58 million, and licensing revenues climbed to \$1.75 million. At LSU's Pennington Biomedical Research Center, invention disclosures have increased considerably over the past three years (Fishmann, p. 9) with 14 disclosures on a research base of approximately \$29 million. Overall, however, LSU System campuses lag far behind their peers, accounting for just over \$5 million a year in licensing and royalty fees (Figure 4.12).

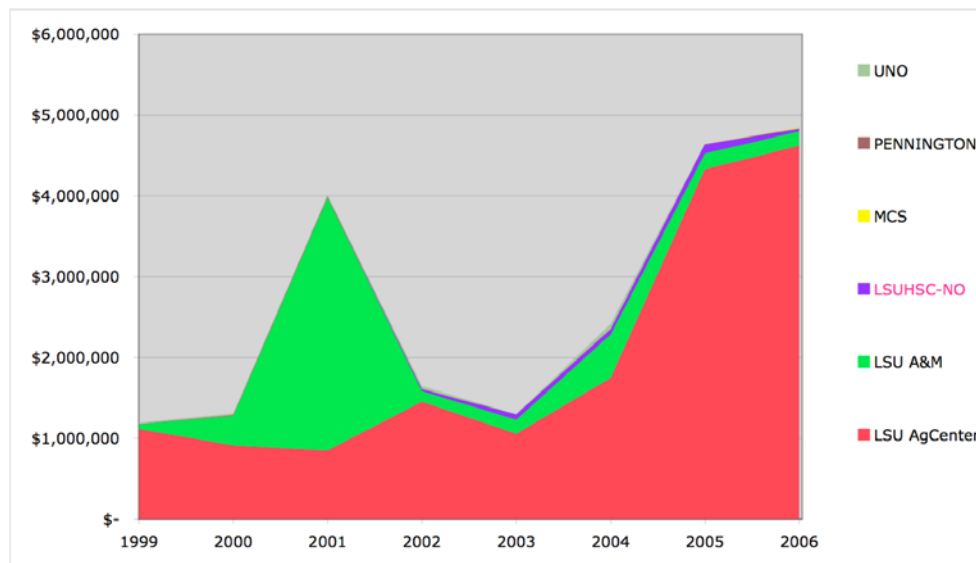


Figure 4.12: LSU System Technology Transfer Receipts, Royalty and Licensing Income. 1999-2006.

In September 2000, Louisiana launched a \$200 million effort to construct a series of wet lab incubators to promote biotechnology initiatives that emerge from academic centers. An internal analysis prepared for the LSU System by consultant Carla Fishmann (2005) noted that Louisiana and LSU had been “severely disadvantaged by a lack of money for early stage investment” (p. 3) in technology transfers. The Louisiana Fund I

was set up to attract investment capital and raised \$25.4 million by the spring of 2006.²⁹

Although Louisiana's collective efforts seem to be going largely unnoticed by the American public and investors, they have experienced a number of small successes. FiRST Responder Systems and Technology, which produces software used to detect airborne chemicals from 100 yards away, announced in March 2006 that it had received a modest \$5 million in venture capital to develop the devices (Randolph, 2006). The startup company, a tenant at the Louisiana Business and Technology Center at LSU, is among a series of small high-tech firms that the university is trying to attract in hopes they are the wave of the future.

Overall, as Fishman (2005) found, while "policy makers and government officials understand that economic growth is fueled by the creation of small businesses and are supportive of entrepreneurial activities" (p. 1), LSU System schools still lag national peer institutions and have no clear plan for marketing technologies.

Figures 4.13, 4.14, and 4.15 demonstrate the point. Figure 4.13 shows that the LSU System, in Fiscal Year 2003, had \$254.7 million in sponsored research that generated 106 invention disclosures for a rate of disclosure per \$1 million of investment of 0.43.³⁰ The national average among research universities is 0.39. Figure 4.14, meanwhile, compares LSU System research disclosures among system institutions. The figures show total sponsored research at the LSU AgCenter of \$51.1 million, representing a disclosure rate of 0.67 per \$1 million of research funding, the LSU A&M campus a disclosure rate of 0.51 per \$1 million, and the LSU Health Sciences Center in New Orleans a 0.57 rate of disclosure. While these figures seem to be noteworthy, when

²⁹ Source: The LSU System Research and Technology Foundation.

³⁰ Rate of disclosure per \$1 million of investment is the traditional benchmark used to measure effectiveness among research institutions.

compared to other institutions, context lends perspective to just how anemic LSU technology has been in recent years. Figure 4.15, for example, shows an adjusted gross income of \$1,307,528 on 33 licenses and options. Four companies were formed based on LSU innovations. For the same year, however, the Texas A & M University System generated more than \$7 million on 220 licenses that triggered the formation of five companies

FY 2003	Total sponsored research expenditures	Invention disclosures received	Sponsored research per invention disclosure	Disclosures per \$1 Million of research funding
LSU System	\$245,754,000	106	\$2,318,434	0.43
Texas A&M System	\$456,235,000	117	\$3,899,444	0.26
University of North Carolina, Chapel Hill	\$302,917,717	86	\$3,522,299	0.28
Rutgers	\$250,991,000	174	\$1,442,478	0.69
Mississippi State University	\$165,922,000	39	\$4,254,410	0.24
All U.S. AUTM Respondents	\$37,175,077,087	14,828	\$2,507,086	0.39

Figure 4.13: LSU Licensing Income, Options, and Start-up Companies, FY 2003.³¹

Fishman (2005) pointed to several communication failures within the LSU System in promoting the system’s technology transfer efforts. “There is no consensus as to what role the System Office does or should play among the LSU campuses,” she wrote (p. 3), adding that while “no one is out of sync on the goal of commercializing technology for the benefit of Louisiana’s citizens” (p. 4), the university does not have a comprehensive plan to make the most of its intellectual property.

³¹ Source: Report By Carla Fishman (2005) to the Louisiana State University System on Technology Transfer Initiatives, Appendix 1. AUTM refers to statistics voluntarily reported to the Association of University Technology Managers, which annually gathers data on American university technology transfer endeavors.

FY 2003	Total sponsored research expenditures	Invention disclosures received	Sponsored research per invention disclosure	Disclosures per \$1 Million of research funding
LSU AgCenter	\$51,100,000	34	\$1,502,941	0.67
LSU A&M	\$59,000,000	30	\$1,966,667	0.51
Pennington Biomedical Research Center	\$23,700,00	6	\$3,950,000	0.25
LSUHSC-NO	\$44,000,000	25	\$1,760,000	0.57
LSUHSC-S	\$33,900,000	4	\$8,475,000	0.12
UNO	\$34,054,000	7	\$4,864,857	0.21
Total	\$245,754,000	106	\$2,318,434	0.43

Figure 4.14: LSU System Sponsored Research and Invention Disclosures, FY 2003.

FY 2003	Adjusted Gross Licensing Income	Licenses & Options Yielding License Income	Start-up Companies formed
LSU System	\$1,307,528	33	4
Texas A&M University System	\$7,105,867	220	5
University of North Carolina Chapel Hill	\$3,808,043	87	2
Rutgers	\$5,347,943	80	1
Mississippi State University	\$347,827	14	1

Figure 4.15: LSU System Licensing Income, Licenses and Options for 2003.

In addition, she said, “statements emanating from the Baton Rouge business community have called into question LSU’s role as an engine of economic development” and that LSU “is reluctant to partner with business” (p. 4). As higher education consultant Eva Klein points out in Chapter Six, LSU “has a lot of people who can ‘talk the talk,’ but not many who are ready to ‘walk the walk’ where economic development is concerned” by communicating publicly the crucial importance of not only technology transfer efforts but also the university’s importance as an economic development engine for Louisiana. One

LSU tech transfer official, who requested anonymity, claims that university leaders mouth their support but don't allocate sufficient financial resources to entrepreneurial efforts. "The rhetoric at the top is that this is important," the tech transfer officer said, "but the chancellors really don't embrace this. They expect something is going to happen naturally; that it's going to fall into their laps."

For instance, the LSU System has no centralized marketing office for innovations, no uniform valuation guidelines for intellectual property (IP), no metrics for measuring effectiveness, no IP promotional website, and a technology transfer workforce trained mostly on the job at various LSU institutions.

A potential larger issue is the fact, according to university technology transfer officers, that startup companies and venture capitalists have attempted to take advantage of LSU. "They see the university as easy pickings," said one senior administrator. Case in point: negotiations to license technology developed by scientists at the Pennington Biomedical Center, an innovation researchers claim might one day lead to a potential cure for breast and prostate cancer.

Esperance Pharma scientists working at Pennington developed nanoparticles that may kill breast, prostate, ovarian and testicular cancer by attaching to hormone receptors on the cancer cells and destroying the cell membranes. Themelios Venture Partners LP, a venture capital fund wanted in the fall of 2006 to commercialize the cure, but negotiation over terms got bogged down for months over the university's equity stake in the potential company that would develop the technology. At issue was Esperance's right to transfer its license to a new company created to conduct further research without LSU approval, thus diluting LSU's estimated \$9 million equity stake in the technology, leaving the

university with a 5 percent ownership of a “shell company.”³² It is a scenario, technology transfer officers contend, that hampers LSU’s ability to be more entrepreneurial by attempting to demands rights to technology and giving the university comparatively little in return financially.

Summary

In this chapter, it was suggested that LSU, in attempting to improve its national image while promoting the Flagship Agenda, has increased its entrepreneurial activities, but it is facing a significant obstacle to national prominence in national collegiate rankings that consistently place LSU among Third Tier institutions.

Despite criticism over methodology and assertions that prestige doesn’t equal quality, college-aged high school seniors and other university administrators still look to the rankings as validation.

Analysis of LSU’s current marketing campaign and a comparison with an imaging campaign conducted by the University of Houston indicates LSU highlighted colorful movement, quick edits and rock music while the University of Houston emphasized faculty accomplishments and the jobs their graduates landed after graduation. Where one university emphasized style, the other pitched value. Deciding what works best for any university depends on the goals of the university. LSU messaging seems geared toward driving enrollment while UH messages appear to concentrate on connecting value to university research efforts. What is effective, in the end, depends on purpose. At LSU, that purpose appears to be enrollment rather than entrepreneurial development.

³² E-mail from Carolyn Hargrave, LSU System Vice President for Academic Affairs to Brooks Keel, LSU Vice Chancellor for Research, August 24, 2006.

Finally, in looking at LSU technology transfer activity, it was observed that the main campus and other LSU institutions are making only incremental advances in generating technology transfer-generated licensing and royalties. Other national and regional peers are more successful financially in generating revenue streams from research and innovations. The justification for producing more money through technology transfers and spin-off companies becomes clearer in Chapter Five that deals with university finances. These provide both an impetus and a roadblock for entrepreneurial development.

CHAPTER FIVE: ECONOMIC REALITIES IN THE HUNT FOR NATIONAL RECOGNITION

Higher education is expensive, very expensive. In 2005 the National Center for Education Statistics (NCES) reported that the total revenues for public higher education in the United States exceeded \$170.3 billion. These revenues supported programs that educated more than 16.6 million students in undergraduate, graduate, and professional programs (NCES, 2005, Chapter 3).

Before any consideration is given to the potential effectiveness of entrepreneurial messaging, it is helpful to place this discussion within the context of Louisiana higher education finance and social demographics by detailing the economic realities that serve as the impetus for increased university entrepreneurialism. This chapter lays the groundwork for the financial dilemma that confronts LSU and impacts its messaging. It is suggested that current Louisiana law, restricting tuition increases while imposing mandated scholarships and tuition waivers, places LSU in a financial vise that puts the university in the ironic position of trying to attract higher quality students, who end up costing the university more money. When combined with increases in state and federal Medicaid spending and persistent under-funding of colleges and universities, Louisiana is

substantially retarding higher education development, leaving institutions like LSU no choice but to aggressively pursue entrepreneurial ventures. Finally, a status report on the Flagship Agenda makes the point that budget cuts brought on by the impact of Hurricane Katrina have essentially erased four years of progress, further intensifying the need for entrepreneurial endeavors.

Understanding LSU's financial position among its regional and national peers is a key part of this discussion because money, or the lack of it, indirectly shapes the university's attempts to boost its national reputation. Therefore, this chapter uses both regional and national statistics to fashion a picture of the funding environment in which LSU System institutions operate.

Economic Face of a Poor State

Roughly one-third of Louisiana residents are under 19, according to the U.S. Census Bureau; 6.3 percent of residents are unemployed; the median family income is \$39,774 per year; and 17.8 percent of the population lives in poverty (Davis, Noland, and Kelly, 2005). Just as significantly, only 20 percent of the population aged 25 to 64 has a Bachelor's Degree or higher.³³ In addition, Louisiana is the only southern state projecting a decline in population over the next decade. Between 2001 and 2011, the number of Louisiana high school graduates is projected to fall by 13.3 percent (U.S. Department of Education, National Center for Educational Statistics, NCES, 2002). While Louisiana has increased state spending for higher education by

³³ A detailed discussion of Louisiana's education achievement is available from the Educational Needs Index: <http://www.educationalneedsindex.com>.

100 percent during the past ten years, it still provides the lowest per-student funding among LSU's peer institutions in the region.³⁴ Consider the following:³⁵

- ◆ Between 2001 and 2004, funding from state appropriations and tuition and fees increased 21 percent among the state's public four-year colleges and universities.
- ◆ Funding per fulltime enrolled student (FTE) went up 10 percent.
- ◆ For the state's public four-year colleges and universities, tuition and fees revenue went up 70¢ for every dollar increase in state appropriations but among Southern Region Education Board (SREB) peers, an additional \$23 was collected for every \$1 in state funding.
- ◆ Medicaid expenses in Louisiana grew from \$900 million in 1988 to \$4.6 billion in 1994, a seven-fold increase.
- ◆ In 2006, Medicaid expenditures were down but more than 944,000 Louisiana citizens (20 percent of the state's population) were eligible for Medicaid care at a cost to the state of more than \$5.3 billion per year.³⁶

The Effect on LSU

The Public Affairs Research Council (PAR), in a 2003 report, explained the impact on LSU from under-funding:

LSU is not a national leader and trails well behind the leading institutions in the South by most quality measures. Quality is strongly linked with funding, and LSU is only appropriated around 65 percent of its current funding target, which itself is set far below what would be necessary to propel the University to a nationally competitive level. (PAR, 2003, p.2).

State appropriations to LSU were reduced nine times between 1981 and 1995, but have grown over the last past years, which gets the university back only to its previous funding levels, not to LSU's national peer average. The persistent financial dilemma confronting LSU, however, reverberates across public and private university campuses

³⁴ Data contained in this chapter was drawn from an internal analysis prepared by the LSU A&M Office of Budget and Planning. The region is considered institutions included in the SREB list of schools, encompassing the Southeastern United States.

³⁵ SREB Louisiana Featured Facts, June 2005. Southern Regional Education Board (SREB), Atlanta, GA., p 30.

³⁶ Source: Louisiana Department of Health and Hospitals.

throughout the U.S. The Futures Project (2005), a five-year effort to examine the impact of market forces in higher education, reported that increased competition among universities and trends toward privatization are threatening the public mission of state universities.

“Colleges and universities,” the report observed, “are under growing pressure to cut costs, measure and report on performance, and compete ever more strenuously for students, grants, funding, and prestige. In order to survive in this changing environment, many institutions have been forced to risk their long-standing dedication to core functions—from providing students of all kinds with real opportunities for social and economic mobility, to conducting high-quality research and offering valuable services that advance the well-being of individuals, communities, states, and the nation” (The Futures Project, 2005, p. 3)

The reality, however, is that universities in 2006 are measured by the cold truths of their endowment assets. Figure 5.1 lists U.S. higher education institutions by the 2005 market value of their endowment assets in addition to the percent change between 2004 and 2005. Harvard, with an endowment of \$25.4 billion ranked first, followed by Yale, (\$15.2 billion) and Stanford University (\$12.2 billion). LSU, with a system endowment of \$593 million, ranked 110th (NACUBO, 2006).

Rank	Institution	2006 Endowment	2004 Endowment	Percent Change from 04-05
1	Harvard University	25,473,721,000	22,143,649,000	15%
2	Yale University	15,224,900,000	12,747,150,000	19.4%
3	Stanford University	12,205,000,000	9,922,000,000	23%
4	University of Texas System	11,610,997,000	10,336,687,000	12.3%
5	Princeton University	11,206,500,000	9,928,200,000	12.9%
110	LSU System	593,203,565	460,365,000	9.7%

Figure 5.1: Ranking of U.S. Higher Education Institutions by Market Value of³⁷

³⁷ Source: National Association of college and University Business Officers, 2006.

Squeezed on Two Ends

LSU's state appropriations have grown significantly over the past five years, outpacing some of the university's regional peers, but average only 66 percent of projected formula targets for Louisiana higher education.³⁸ Fulltime student funding (FTE) levels, however, remain low compared to regional and national public peers. Combining low state funding with low tuition rates compounds the university's financial challenge, exacerbating recruitment of professional research scholars.

Analysts contend no single factor is more important in driving a university's ability to contribute to economic development than the quality of its faculty (PAR, 2003). Top research faculty members, however, are expensive, accounting for 70 percent to 80 percent of university budgets, including associated costs for lab space and startup funding (PAR, 2003). LSU officials contend a nationally competitive funding target for LSU would be approximately \$14,000 per full-time enrolled student (FTE). Current spending is approximately \$5,500 per FTE.³⁹

Figure 5.2 displays LSU's state support on a per-student basis and its relative rank. The chart indicates that state funding has made noteworthy progress, but has not achieved the kind of funding levels of LSU's national peers. LSU receives approximately half the state appropriations of other flagship institutions such as the University of Georgia and the University of Texas. Tuition represents another source of unrestricted revenues. LSU's in-state, undergraduate tuition is \$3,536 compared to the Southern Regional Education Board (SREB) average of \$4,058 (Figure 5.3). LSU student tuition ranks 16th among 20 universities surveyed by the SREB.

³⁸ Source: Louisiana Board of Regents.

³⁹ Source: LSU Office of Budget and Planning.

Institution	1999-2000	2000-2001	2001-2002	2002-2003
U. of Maryland–College Park	\$9,360	\$10,700	\$11,375	\$10,114
U. of Georgia	\$10,326	\$10,594	\$10,537	\$10,047
North Carolina State	\$9,927	\$10,152	\$9,741	\$9,617
U. of North Carolina–Chapel Hill	\$9,703	\$10,315	\$10,175	\$9,279
U. of Texas – Austin	\$8,601	\$9,221	\$9,279	\$9,253
U. of Florida	\$7,851	\$8,106	\$7,403	\$8,137
Texas A&M	\$6,848	\$7,346	\$7,819	\$7,882
Southern Regional Peer Average	\$7,069	\$7,486	\$7,539	\$6,999
U. of Tennessee	\$6,499	\$6,738	\$6,906	\$6,922
U. of Alabama	\$6,323	\$6,216	\$6,476	\$6,074
U. of South Carolina	\$6,790	\$7,434	\$7,019	\$6,074
Auburn	\$5,202	\$4,599	\$5,474	\$5,562
LSU	\$4,394	\$4,194	\$4,953	\$5,460
Mississippi State	\$6,280	\$5,650	\$5,224	\$5,332
U. of Oklahoma	\$5,749	\$5,761	\$6,034	\$5,175
Virginia Tech	\$6,092	\$6,494	\$6,555	\$5,115
U. of Virginia	\$6,332	\$6,445	\$6,459	\$4,655

Figure 5.2: State appropriations per student to U.S. flagship universities, 1999-2000 to 2002-2003.⁴⁰

	1999-2000	2000-2001	2001-2002	2002-2003
U. of Maryland–College Park	\$4,939	\$5,136	\$5,341	\$5,898
Clemson	\$3,470	\$3,590	\$5,090	\$5,834
U. of South Carolina	\$3,740	\$3,868	\$4,064	\$4,984
U. of Virginia	\$4,130	\$4,160	\$4,236	\$4,980
Texas A&M	\$3,160	\$3,166	\$3,722	\$4,796
Virginia Tech	\$3,620	\$3,640	\$3,664	\$4,336
Southern Regional Peer Average	\$3,119	\$3,308	\$3,619	\$4,058
U. of Tennessee	\$3,104	\$3,662	\$3,784	\$4,056
U. of Kentucky	\$3,296	\$3,446	\$3,734	\$3,975
U. of Texas – Austin	\$3,134	\$3,575	\$3,766	\$3,950
Mississippi State	\$3,017	\$3,117	\$3,586	\$3,873
U. of North Carolina–Chapel Hill	\$2,314	\$2,710	\$3,219	\$3,856
North Carolina State	\$2,414	\$2,814	\$3,302	\$3,827
Auburn	\$2,895	\$3,050	\$3,380	\$3,784
U. of Georgia	\$3,034	\$3,276	\$3,418	\$3,616
U. of Alabama	\$2,872	\$3,014	\$3,292	\$3,556
LSU	\$2,851	\$3,395	\$3,420	\$3,536
West Virginia University	\$2,748	\$2,836	\$2,948	\$3,240
Oklahoma State	\$2,548	\$2,668	\$2,811	\$3,025
U. of Oklahoma	\$2,686	\$2,861	\$2,963	\$2,929
U. of Florida	\$2,141	\$2,256	\$2,444	\$2,581

Figure 5.3: Tuition Rates at Southern Regional Peer Universities, 1999 to 2003.⁴¹

⁴⁰ Source: Southern Regional Education Board (SREB).

⁴¹ Source: SREB.

Although Louisiana's support for higher education has increased in terms of gross dollars, funding has lagged behind other states with the university continuing to depend on tuition revenues for a significant portion of its budget.

Examining per-student funding from state government, plus tuition, LSU ranks near the bottom among its peer institutions in total unrestricted funding. The National Association of State Universities & Land Grant Colleges reports that over a two-year period, 19 of LSU's peer universities increased tuition by 28.7 percent, while LSU increased its tuition by only 5.7 percent. Part of that is explained by Louisiana's legal restriction on raising tuition at public universities. A two-thirds vote of both houses of the Legislature is required for any tuition hike, which is capped at three percent per year.

	1999-2000	2000-2001	2001-2002	2002-2003
U. of Maryland-College Park	\$14,299	\$15,836	\$16,716	\$16,012
U. of Georgia	\$13,360	\$13,870	\$13,955	\$13,663
North Carolina State	\$12,341	\$12,966	\$13,043	\$13,444
U. of Texas-Austin	\$11,735	\$12,796	\$13,045	\$13,203
U. of North Carolina-Chapel Hill	\$12,017	\$13,025	\$13,394	\$13,135
Texas A&M	\$10,008	\$10,512	\$11,541	\$12,678
U. of Kentucky	\$8,565	\$11,959	\$12,871	\$12,252
Clemson	\$9,705	\$10,159	\$11,495	\$11,485
U. of South Carolina	\$10,530	\$11,302	\$11,083	\$11,058
Southern Regional Peer Average	\$10,188	\$10,793	\$11,158	\$11,057
U. of Tennessee	\$9,603	\$10,400	\$10,690	\$10,978
U. of Florida	\$9,992	\$10,362	\$9,847	\$10,718
U. of Virginia	\$10,462	\$10,605	\$10,695	\$9,635
U. of Alabama	\$9,195	\$9,230	\$9,768	\$9,630
Virginia Tech	\$9,712	\$10,134	\$10,219	\$9,451
Auburn	\$8,097	\$7,649	\$8,854	\$9,346
Mississippi State	\$9,297	\$8,767	\$8,810	\$9,205
LSU	\$7,245	\$7,589	\$8,373	\$8,996
Oklahoma State	\$9,020	\$9,222	\$9,294	\$8,507
U. of Oklahoma	\$8,435	\$8,622	\$8,997	\$8,104
West Virginia University	\$7,196	\$7,656	\$7,688	\$7,575

Figure 5.4: Tuition Per Student by SREB Peers 1999-2003.⁴²

The real message in Figure 5.3 is that while LSU's SREB competitors are dramatically increasing tuition rates, LSU tuition remains among the lowest in the South.

Figure 5.4, meanwhile, indicates that while state funding and tuition account for \$8,996

⁴² Source: SREB.

per LSU student, the southern regional average is \$11,057. At the University of Maryland, which has roughly the same student enrolment as LSU, state funding and tuition totals \$16,012 per student.

The Impact of TOPS

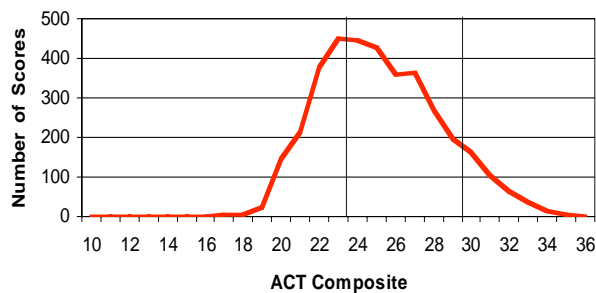
When states have difficulty meeting the needs of public higher education, universities typically turn to student tuition and fees to cover a larger share of instructional costs. However, in Louisiana, the state's highly popular, merit-based scholarship program has created another problem for LSU and added pressure for the university to seek alternative revenues.

Students receiving Tuition Opportunity Program for Students (TOPS) scholarships for the 2004-2005 academic year on average paid only \$1,030 in fees and little or no tuition for the entire year.⁴³ Among students on TOPS, who also qualified for hardship waivers, LSU fees totalled only \$380 per year, excluding any federal grants or other student aid. As a practical matter, however, keeping tuition rates low and awarding TOPS scholarships is keeping many of Louisiana's best students at home to attend college. At the same time, TOPS has produced budgetary inflexibility for LSU as the university finds itself in the ironic position of providing high-quality programs to attract students, programs that cost the university more money than it recovers from tuition and fees.

LSU A&M Chancellor Sean O'Keefe told the LSU Board of Supervisors at the board's April 2006 meeting that the TOPS program, fellowships, scholarships and graduate assistantships had created a situation for the university in which the larger number of high caliber students seeking admission to LSU actually are driving down

⁴³ Source: LSU A&M Office of Budget and Planning.

university revenues. For example, Figure 5.5 (on the left) represents ACT composite scores for incoming freshman in Fall 2005, showing a mean of approximately 24.5. The figure on the right also shows that as ACT scores rise, the net tuition (out of pocket expenses) paid by high-achieving students falls. For example, a student who scores less than 24 on the ACT and is a Louisiana resident pays approximately \$490 per semester in fees. A resident student who scores a 36 is actually paid \$415 per semester by the university.



Net Tuition Paid by ACT Composite Range	Resident	Nonresident
Less than 24	\$490	\$5,181
24-29	\$269	\$3,915
30-36	-\$415	\$320

Figure 5.5: ACT Scores & Tuition Paid for Fall 2005 by Degree-Seeking New Freshmen at LSU A&M

As a result of TOPS and legislative controls on tuition increases, LSU in-state tuition is cheaper than all universities in Canada and all public universities in the U.S. with the exception of New Hampshire and Oklahoma. Figure 5.6 outlines LSU expenditures for 2004-2005. What the pie chart does not show, however, is that LSU collects only 85 cents for every dollar in tuition charged, forcing the university to make up the difference with alternative revenues. The irony for LSU is that as it strives for national prominence by making itself more appealing to higher quality students, Louisiana's restrictive higher education financing structure appears to be penalizing the university for doing better.

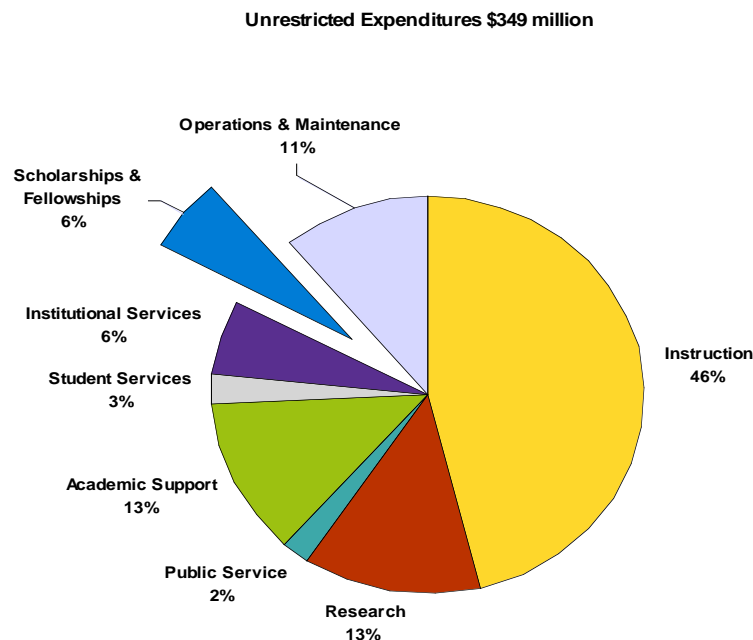


Figure 5.6: LSU A&M Expenditures by Function. 2004-2005.

As a matter of law, the Louisiana Legislature (Act 1105 of 2003, La.R.S. 17:3129.5) requires the Board of Regents is required to submit a tuition policy proposal to lawmakers that would resolve LSU's spending gap. The regents set an FTE (Full Time Enrolled student) target for LSU of \$7,500 per FTE, but no action has been taken to implement the plan. The 2007-2008 FTE for LSU stood at \$6,849, well short of the target, according to Board of Regents figures.⁴⁴ That translates to \$182.6 million in state funding or 87.9 percent of the formula target.⁴⁵ To reach 100 percent would require an addition \$25.1 million in appropriations for the main campus alone, according to LSU System budget analysts. Meanwhile, the LSU Board of Supervisors approved a tuition policy that recognized the budgetary balancing act of state appropriations, tuition, and

⁴⁴ Source: FY 2007-2008 Louisiana Postsecondary Education Funding Formula Budget Request prepared by the Louisiana Board of Regents Finance and Administration Office.

⁴⁵ Source: Louisiana Board of Regents Finance and Administration Office.

fees. The policy set the goal for state appropriations plus tuition and fees per-student at the SREB average. The problem is a proposal to do that was quickly killed by a state House committee during the 2005 Regular Session of the Legislature. During the 2006 legislative session, lawmakers also turned down an initiative by O’Keefe to increase student operational fees.

The Medicaid Bind

The American Association of Universities and the Brookings Institution (Kane and Orszag, 2003), in a joint report, estimated that declines in state appropriations for higher education nationally are caused by increases in state obligations under the Medicaid program, which provides medical assistance to the low-income elderly and disabled, as well as to low-income families and pregnant women. The report indicates that Medicaid costs rose rapidly in the late 1980s and early 1990s, reflecting both expanded eligibility and increases in costs per enrollee. The number of disabled Medicaid beneficiaries, for instance, went from 2.4 million in 1984 to 4.7 million in 1994 (Kane and Orszag, 2003, para. 6). In the early 1990s, states were required to expand their Medicaid programs to cover low-income children and pregnant women. And in 1988 and 1993, Congress required states to increase their Medicaid programs to cover certain low-income beneficiaries of Medicare, the federal health insurance program.

In Louisiana, the rise in Medicaid spending between 1994 and 2004 also has been dramatic. Figure 5.7 tracks the state’s Medicaid budget per eligible recipient, showing that with more than 1 million people eligible, Louisiana in the 2005-2006 Fiscal Year alone spent \$5.3 billion on Medicaid services, care delivered mostly by the LSU Health Care Services Division at its eight public hospitals and dozens of clinics around the state.

Spending on Louisiana higher education, meanwhile, was also up over the same period (Figure 5.8) to \$6,559 per student in 2004-2005, according to the Louisiana Board of Regents, but Medicaid spending was still more than four times larger. The disparity becomes a significant factor in educational spending because when state policy makers cut budgets they have historically cut from only two categories: healthcare and education.

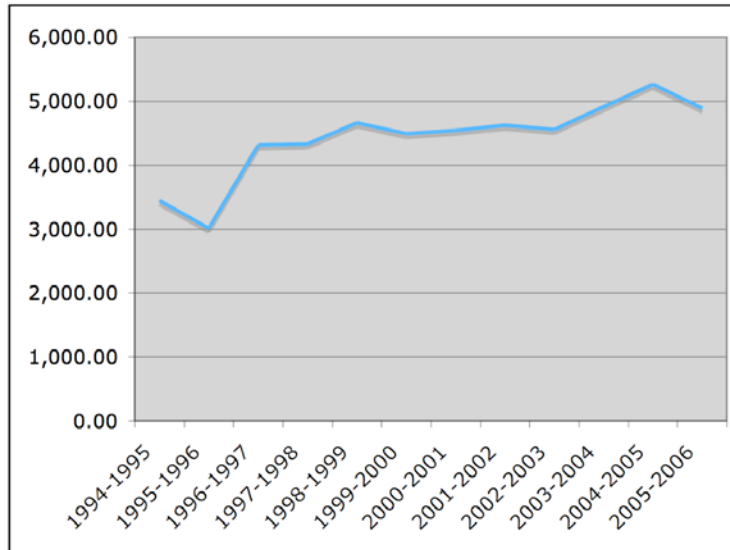


Figure 5.7: Louisiana Medicaid Spending Per Eligible Recipient 1994-2004⁴⁶

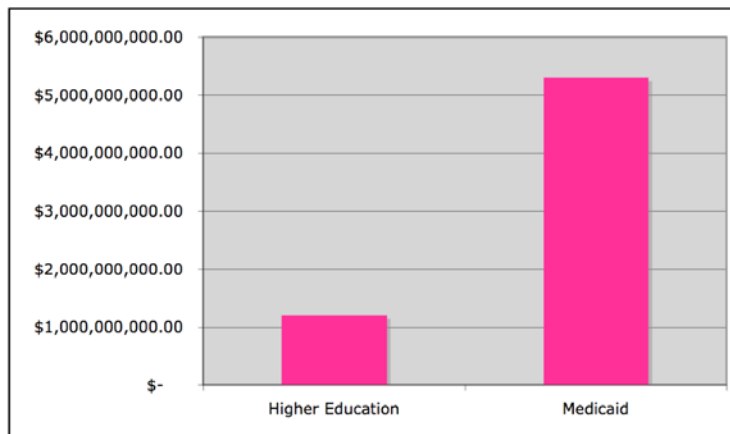


Figure 5.8: Louisiana Higher Education Appropriations per FTE⁴⁷ Compared to Louisiana Medicaid Spending for the 2005-2006 Fiscal Year.

⁴⁶ Source: LSU Health Care Services Division Office of Medical Economics.

⁴⁷ Source: Louisiana Board of Regents.

Capping Enrolment and Trimming Costs

As a way to solve LSU's continuing financial predicament, an unpublished staff report by the Louisiana Board of Regents (2005) proposed capping enrollment at LSU A&M at 26,000 students.⁴⁸ Responding to the proposal, the LSU Office of Budget and Planning disputed the financial premise underpinning the suggestion. The argument is important because financial pressures to do more with less are at the heart of motivations fueling the drive to make LSU more entrepreneurial, more dependent on self-generated revenues and less on state funding.

"In reality, implementation of this proposal (the plan to cap the number of students) would yield much less money to use in meeting its flagship goals, primarily because fixed costs will not change," LSU officials wrote in response (LSU System Office, 2005). "Moreover, reducing the size of the student body would effectively disconnect Louisiana's leading land-grant university from its historic educational mission to serve a student body that is broadly representative of the state's population, and drain its energy as a catalyst for economic development" (LSU System Office, 2005).

The regents' staff report inferred a one-to-one relationship between numbers of students and the cost of providing a high level of educational services. Education finance, however, operates on an economic model that more closely resembles a set of steps than the smooth linear regression of a corporate model. Faculty, facilities, and academic support staff are fixed costs that can serve large numbers of students equally well.

As such, the marginal costs are modest. But marginal changes to enrollment totals can significantly impact resource income levels. A decline of one student or 100

⁴⁸ LSU student enrollment at the main campus for the 2005-2006 academic year was 31,500 students, according to the LSU A&M Registrar's Office.

students does not change the amount of fixed cost expenditures and could seriously hurt LSU financially. For instance, cutting 8,000 students, or 25 percent of the 31,500-member student body, would amount to a loss of \$3,500 for each student lost. Balancing lost revenues against savings gained, LSU's Office of Budget and Planning estimated the university would lose at least \$12 million in tuition revenues while saving only \$2 million in operational costs. The underlying principle is simple. Whether five or 50 students are in the classroom, there still has to be a professor and the lights still have to be on.

The Board of Regents report attempted to apply the business principles of variable costs (fewer students require fewer services) to explain how LSU could overcome its current lack of state appropriations. While the concept sounds basic, its application could lead to a flawed and misleading assertion, LSU budget analysts claimed. They explained that the loss of large numbers of students would incrementally increase the state appropriations per student statistic but drive down actual tuition revenues. The University, consequently, would have fewer resources to cover existing fixed costs. Total support likely would not change very much, just the proportions of dollars coming from the state and the students. Significant resources would be lost to LSU while the level of state support per student would appear to suggest improvement. All of this impacts the Flagship Agenda, which some university officials believe is foundering (See Chapter Seven).

The Flagship Agenda's Mixed Bag

Despite the promotional hype that accompanied its announcement, it is difficult to prove that the Flagship Agenda can improve any specific portion of the university. Although the university has been set back in comparison to its regional and national

peers, LSU officials claim progress is being made in meeting the agenda's 2010 deadline.

An analysis of major targets for enhancement show mixed results. For example:

- The quality of incoming freshmen is increasing. The 2004 entering class had a 24.5 Mean Composite ACT Score and a 3.27 mean high school academic grade point average. Half of those students were in the Top 25 percent of their graduating classes.⁴⁹
- Graduation rates increased from 38 percent in 1987 to 57 percent in 2003 and 61.5 percent in 2004.⁵⁰
- The number of tenure-track faculty is up by nine percent over the past three years.
- The University provided six consecutive annual pay raises to recruit and retain top faculty members.
- Research funding increased by more than 10 percent for the 2003-2004 fiscal year, and is up 66 percent over the past four years.
- More than 120 endowed chairs and professorships were funded by state matching funds in 2006.
- The E. J. Ourso School of Business MBA program in September 2006 was named as one of the Top Ten MBA programs in the U.S. by the *Wall Street Journal*.
- A new Laser Interferometer Gravity Observatory (LIGO) facility in Livingston Parish was opened because of \$100 million dollar research funding.
- LSU is helping Louisiana is conducting \$40 million in Homeland Security training for first responders, developing new cyber-security, infectious disease, and weapons of mass destruction counter measures.

Disappointments are evident, however, particularly in attracting graduate students to the LSU A&M campus. Although the Flagship Agenda called for increasing the number of graduate students to 20 percent of the main campus' enrollment, the number has dropped to 15.8 percent. In fact, since 1996, the percentage of graduate students in

⁴⁹ Source: LSU A&M Office of Budget and Planning.

⁵⁰ Source: Louisiana Board of Regents estimate of LSU's six-year graduation rate.

LSU's student body has steadily declined.⁵¹ The southern average percentage of graduate students enrolled in SREB four-year institutions is 19 percent, and the nationally competitive flagship average is around 25 percent. While university officials attribute the smaller numbers to a general decline in graduate enrollments applying to U.S. schools after the September 11, 2001, attack (Sternberg, 2006), higher education critics point out that LSU's practice of increasing its undergraduate enrollment levels and decreasing its graduate enrollment levels is contrary to the mission of a flagship university. However, "given that the University receives what it considers to be insufficient funding year after year and that its funding is based on the number rather than the type of its enrollments, the state's higher education funding policies also work against its flagship mission," analysts for the Public Affairs Research Council concluded (PAR, 2003).

Also troubling are undergraduate retention rates. Freshmen-to-sophomore retention rates, which the Flagship Agenda targeted at 88 to 90 percent by 2010, stood at 83.1 percent for 2004,⁵² a decline of two percent in one year. And in the critical matter of new faculty, the university has hired 58 new professors, but that is only 38 percent of the 2010 goal, according to the LSU Office of Budget and Planning.

State budget cuts have been devastating for LSU. Consider, for instance, LSU's funding level compared to a set of regional peers. Figures 5.8, 5.9, and 5.10 demonstrate the impact of budget cuts on the university in achieving funding levels that, officials contend, will make it easier to attract faculty and students (Figure 5.8). Funding increases by the Legislature moved LSU to the middle of

⁵¹ Source: LSU A&M Office of Budget and Planning.

⁵² Source: LSU A&M University Planning Committee.

the group (Figure 5.9). An analysis prepared by the LSU System Office, following \$27.6 million dollars in state budget cuts in the winter of 2006 triggered by Hurricane Katrina, dropped LSU to near the bottom of the SREB group once again (Figure 5.10).

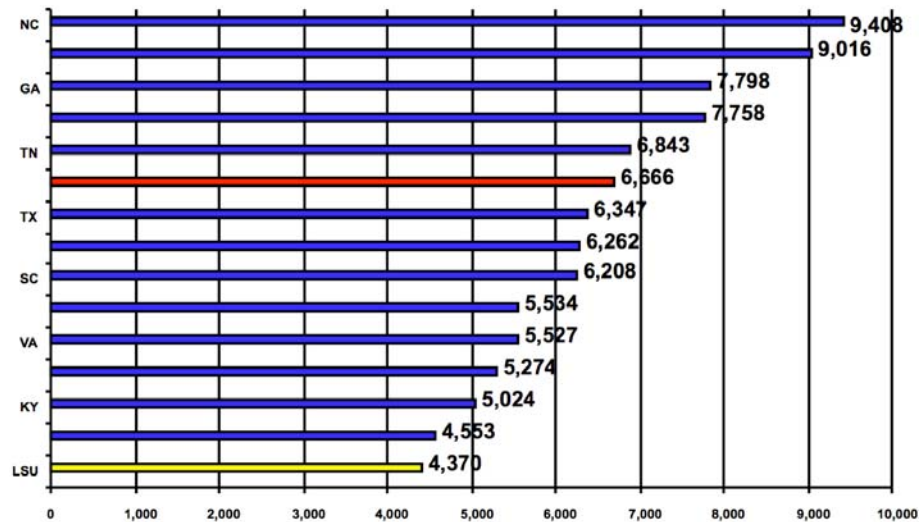


Figure 5.9: State & local appropriations per FTE student at public institutions in SREB States, 1998-99⁵³

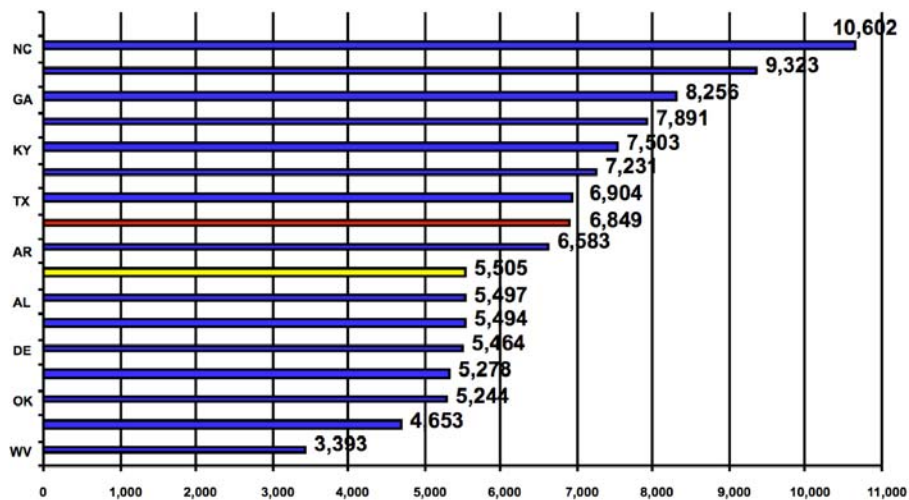


Figure 5.10: State & local appropriations per FTE student at public four year institutions in SREB States, 2004-2005.

⁵³ Source: LSU System Office of Budget and Planning.

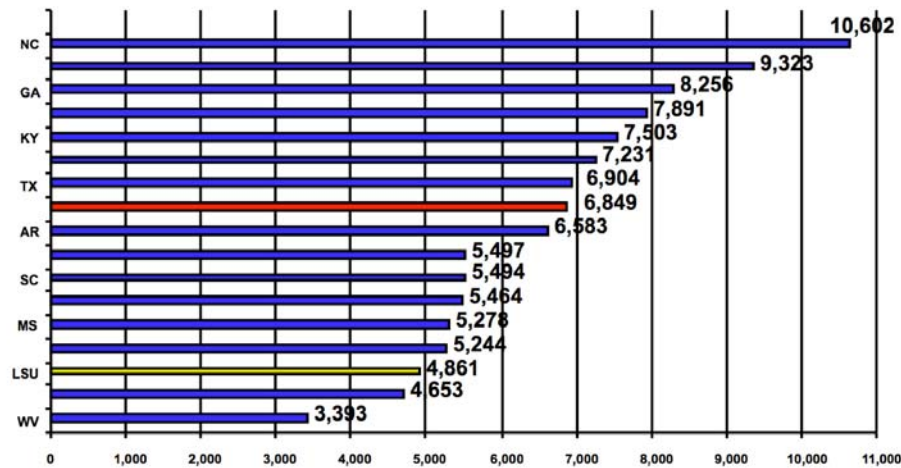


Figure 5.11: State & Local Appropriations Per FTE Student Among SREB Institutions for 2004-2005 Compared to LSU's Position Following Budget Cuts for FY 2006-07.

The importance of these tables lies in the unspoken message: To achieve national prominence and compensate for budget cuts, LSU will likely have to rely on fiscal self-sufficiency. Achieving entrepreneurial success and national academic distinction, however, may be deceptively difficult, based on the revenue outlook for public colleges. A report prepared by Dennis Jones (2006), president of the National Center for Higher Education Management Systems, concluded that all 50 states will face budget deficits by 2013 and will not be able to support spending increases, causing state appropriations for higher education to suffer substantially.

Although the budget shortfalls will affect every state, Southern states will be hit hardest, according to the analysis, particularly Louisiana where the state revenue shortfall by 2013 is expected to be 10.5 percent lower than what would be expected to maintain the current level of state services. Funding for higher education in Louisiana has never matched national or regional averages over the past 30 years, according to Jones. “For most states, it is difficult to see a future for higher education that recreates the prosperity

of the late 1990s,” the analysis concludes. “Colleges and universities -- and the students who enroll in them -- are more likely to face continued financial strain,” said Jones (2006, p. 1).

Summary

LSU’s entrepreneurial ventures spring from a need for the university to be more financially self-sufficient in making up for budget cuts, chronic under-funding, tuition waivers, and scholarships that not only attract better quality students to the university but also cost it money. When combined with increases in state and federal Medicaid spending that reportedly divert money that critics claim would otherwise go to higher education, that institutions like LSU have no alternative but to aggressively pursue entrepreneurial ventures. The centerpiece of those efforts, however, is the Flagship Agenda. University officials point to increases in freshman entrance scores and higher retention rates as signs of progress. At the same time, however, other statistics show faculty hiring is substantially below its goal and the number of graduate students on the A&M campus continues to decline.

Improving LSU’s national reputation, therefore, is a fiscal necessity. The next chapter turns to LSU’s national image and asks whether perceptions about the university being a top institution could be changed with a message strategy that highlights LSU’s value to Louisiana and the nation.

CHAPTER SIX: LSU NATIONAL IMAGE SURVEY

On June 15, 1520, nearly three years after Martin Luther nailed 95 theses to the castle church door at Wittenberg, Germany, Pope Leo X was hunting feral hogs at the Parco de Medici just outside Rome when aides brought him the papal bull *Exsurge Domine* for his signature. An elaborate document, handwritten in flowery Latin, the decree branded Luther a heretic and excommunicated him from the Church with language that compared Luther to a “wild boar from the forest.” It took two years for the bull to be delivered to the defiant monk, who burned it at the gates of Wittenberg (Leon, 1520, f. 251r).

Historically, organizational communications have been problematic, even for an organization as big as the Catholic Church, which virtually invented the term propaganda.⁵⁴ Keeping tabs of rebellious monks or measuring sentiment among believers was unheard of in Luther’s day. Understanding messaging dynamics today, however, is a matter of applying quantitative metrics such as public opinion surveys.

This chapter establishes a baseline appraisal for how the American public views Louisiana State University, especially its academics and research, compared to a small

⁵⁴ In 1622, Pope Gregory XV established the Congregatio de Propaganda Fide (the Congregation for Propagation of the Faith) to centralize Roman Catholic missionary activity under the control of the Holy See. Referred to informally as “Propaganda,” the group of cardinals was charged with the direction of ecclesiastical affairs in non-Catholic countries. In 1627, Pope Urban VIII established the Collegium de Propaganda (the College of Propaganda) in order to educate priests for work in foreign missions.

group of regional and national peer institutions. More importantly, the chapter reports results from a national poll that, among other things, measures opinion on the commercialization of knowledge and how the public evaluates potential messages connected to LSU and its entrepreneurial aims. This chapter also raises the prospect that these results support application of the theoretical issues of knowledge creation and resource dependence theories mentioned in Chapter Two.

As was indicated in Chapter One, the thinking among LSU administrators is that achieving so-called elite status among American universities attracts higher quality students and faculty members, who, in turn, bring in larger amounts of federal and corporate research funding and bigger private donations that build endowments, reducing dependence on state funding. Complicating matters for LSU is the fact that leading U.S. publications repeatedly place LSU among so-called Third Tier institutions in rankings heavily influenced by subjective evaluations of institutional reputation, class size, donations, and academic resources. This chapter addresses public perceptions of LSU strengths and weaknesses that may influence those ratings.

In detailing the findings, the discussion opens with the rationale that went into selecting the polling method. A self-administered online survey was commissioned by the author and conducted during the first week of February 2006 among a pre-selected group of more than 1,000 adults. Results indicate LSU is widely known for its athletics, but little else. Those results include how LSU stacks up in terms of quality measures among other regional and national peer institutions, how the public views collegiate entrepreneurialism, opinions on public versus private colleges, and which messages about LSU seem to strike a chord in nurturing the judgment that LSU is a “top institution.” Finally, the discussion turns to the prospect that LSU communication messages possibly

conflict with results discovered in this survey by stressing imagery and themes that the American public does not consider significant for higher education while failing to intensively advertise research activities the public believes are essential to the university's entrepreneurial designs.

Three, overarching themes emerged from results of this survey:

1. Americans know the LSU brand and LSU athletics.
2. The public knows little else about the university, especially in the Northeast and Far West sections of the United States.
3. When the public is made aware of specific LSU programs and research, it is more inclined to accept the notion of LSU as a top U.S. university.

Self-administered Polling

This survey utilizes a self-administered, online survey to obtain results. Self-administered polling is a relatively new and increasingly popular method for measuring public opinion. While the approach was criticized early on among researchers over potential internal and external validity problems, the method can produce results, as will be discussed later, that are similar to a traditional, random sample telephone poll, still considered to be the “gold standard” among survey researchers. Random Digit Dialing (RDD) has long been viewed as having the potential to provide a true probability sample (Conway, 1999, p. 312). That judgment remains the consensus among social scientists, but it is a view being challenged by the realities, particularly the growing expense, of modern polling.

Self-administered surveys, which leave interviewers out of the data collection process entirely, are growing in popularity in the age of computer-mediated communication (CMC). In the same way personal interviewing was popular in the 1950s and 1960s, and telephone surveys reached their zenith during the 1980s and 1990s, self-

administered surveys are achieving prominence in the early years of the 21st century. These methods include regular mail, courier, fax, electronic mail, the Web, and touch-tone data entry. What appears to be a major societal trend toward “self-administration,” in fact, may be seen in everyday routines as simple as using an ATM, paying bills online, and home diagnostic kits for a variety of medical information, ordering airline tickets, and buying stocks.

Functioning effectively in U.S. society requires interacting with machines, a reality not anticipated a little as a decade ago, such as responding to an e-mail, which calls for a level of effort no greater than answering a telephone. Researchers have noted an increase in e-mail-based surveys accompanied by response rates that approach 58 percent in some surveys (Schaeffer and Dillman, 1997). Researchers also indicate that Web surveys combined with e-mail surveys offer several advantages, including the use of standard formatting.

Reaching people, however, can be challenging. Although e-mail use far surpasses Web browsing as an Internet activity (Heberlein and Baumgartner, 1978), participating in e-mail-based surveys presented respondents with the daunting task of keying in long web addresses. The solution was comparatively easy. If web masters could place an e-mail in a Web page, respondents simply could double-click and move effortlessly through the survey. Programming an entire questionnaire into a computer involved asking people to mark boxes instead of filling in ovals, a process that is less error-prone. Any survey, however, is only as representative as the subjects interviewed. This fact has led to a body of literature that examines how to select respondents for self-administered surveys.

Sampling frames are also important to consider when evaluating web surveys. A sampling frame is “a list or set of directions for identifying the target population”

(Malhotra, 1999, p. 330). On the Internet, the sampling frame could be envisaged in two ways. The first is internal in which respondents are found on the Internet itself either as visitors to web sites or among listings of e-mail addresses. The second is external in which respondents are found elsewhere, perhaps from panels or from paper directories. These respondents are then “invited” to the Internet, which is used as a data-collection medium.

Other useful techniques distinguish among three categories of samples: unrestricted, screened and recruited (Watt, 1997). Unrestricted online surveys are open to anyone and suffer from poor representation. Screened panels that are created from carefully profiled samples based on demographic, geographic, cross-purchasing and consumer preferences, such as 30 year olds from Baton Rouge who earn more than \$100,000 a year and drive Corvettes, may be more representative than recruited samples drawn at random from large, non-specific panels⁵⁵. Respondents for this survey came from recruited panels invited via e-mail to take part.

Chief concerns over online polling center on the voluntary nature of the technique and the simple fact that, while an estimated 73 percent of American adults (147 million people) use the Internet daily,⁵⁶ access to the Net is still limited and not nearly as ubiquitous as telephones. This fact can lead to misgivings about coverage area. In addition, it could be asserted that the recruited panel is somehow biased by the offer of a reward to take part; that results are not truly representative and have debatable external

⁵⁵ In communication research, panel studies are generally considered to be longitudinal studies designed to measure the same sample of respondents at different times in an attempt to uncover the dynamics of change, infer causation, or reduce suspicions. The studies are expensive and time-consuming. For purposes of this dissertation, use of the word “panel” refers to an interest group recruited via e-mail rather than the classic definition of the term.

⁵⁶ Source: Pew Internet & American Life Project, February 15 – April 6, 2006 Tracking Survey. N=4,001 adults, 18 and older. Margin of error is $\pm 2\%$ for results based on the full sample and $\pm 2\%$ for results based on internet users.

validity because the sample frame may not match the population. Overall, it is important to remember that a sample of Internet users is only representative of Internet users. In this case, however, the demographic profile of respondents resembles U.S. population statistics. In addition, justifiable wariness over the use of a web survey for this dissertation may be dispelled somewhat by results from a separate national poll conducted for the LSU Office of Public Affairs at about the same time as this survey, in the Winter, 2006, by the LSU Public Policy Research Lab (Procopio, 2006).

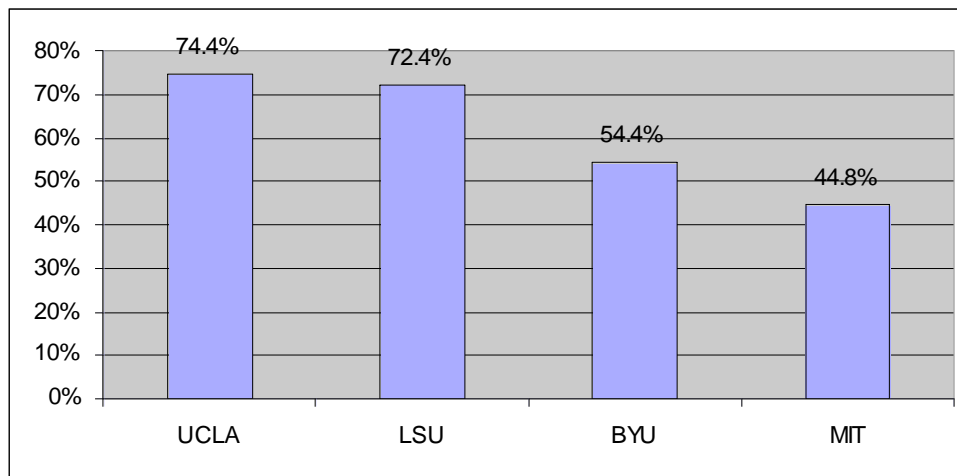


Figure 6.1: Brand recognition by university initials.⁵⁷

The Public Affairs telephone survey, which had a margin of error of ± 3.5 percent, was based on interviews with 800 people contacted randomly. Results, however, were similar to the web survey conducted for this dissertation. For instance, the public affairs survey found (Figure 6.1) that respondents correctly identified what the initials UCLA meant more than the initials LSU by a close 74.4 percent to 72.4 percent margin.

⁵⁷ Respondents were asked whether they could correctly identify initials for Brigham Young (BYU), Louisiana State (LSU), University of California (UCLA) and the Massachusetts Institute of Technology (MIT). Sixty-three percent (63%) of respondents said they had heard about LSU, but large percentages of respondents knew little about the university, its students or research programs.

The central finding of the public affairs study was that “a large proportion of the public is not familiar with colleges and universities” (p. 3). Specifically, the public nationally knows very little about LSU. “The most common response to many of the questions posed in the survey was ‘I don’t know.’ This both poses a challenge and presents an opportunity to LSU. Improving LSU’s national image among the general public will require overcoming the general lack of knowledge the public has about higher education” (Procopio, 2006, p. 3).

Methodology

Interviews for the dissertation survey were conducted among 1,057 adults in the U.S., using an online recruitment and administration techniques. Typically, such a survey would have a margin of error of ± 3.1 percent using 95 percent confidence interval. However, a margin of error doesn’t apply to this poll because respondents were not drawn using a probability sample, but rather pulled at random from a pre-selected group of volunteers.

Sample respondents were generated from a proprietary online panel of consumers acquired by iQ Research and Consulting (iQ) from an Internet panel provider known as e-Rewards™. The sampling frame for this survey was randomly selected from within the e-Rewards™ consumer database, which includes more than 1.6 million pre-screened consumers. Sample balancing and quotas were employed to ensure that the survey sample was representative of the American population in terms of gender, region, age, income, education, and race based on the most recent U.S. Census data.

e-Rewards™ recruits its consumer panel by invitation only, which reduces the self-selection bias often found in panels recruited through other means. Invitations are

generated through a variety of e-Rewards™ partner companies, including American Airlines, Delta Airlines, Hertz Rental Cars, Blockbuster Video and others. Panel members also are recruited through targeted email invitations, physical post card invitations, and direct mail inserts to reduce the bias inherent in recruiting members from only a few sources. In addition, all panelists must provide a valid mailing address, which is cross-referenced with postal service records to avoid duplication or fraud. e-Rewards™ panel recruitment methods, according to the company, comply fully with the Council for American Research Organizations (CASRO) guidelines.

iQ Research, meanwhile, is a subsidiary of Qorvis Communications, a full-service marketing research firm, specializing in customized primary research with both qualitative and quantitative research methodologies, including online and telephone surveys, focus groups, in-depth interviews, website testing, member/employee satisfaction research, and advertisement testing. Typically, iQ clients, including General Motors, Adobe, and Jim Beam Brands, face distinct problems that require the crafting of specific messages for stakeholders, according to the firm.

Once selected, respondents were invited to participate through an e-mail invitation, which included an embedded link, directing them to the survey questionnaire. The survey questionnaire instrument was the result of a collaborative effort between this author and iQ Research. The questionnaire was programmed and hosted, using iQ's online survey software powered by Websurveyor™. All interviews were self-administered from January 31 through February 2, 2006 and the dataset furnished to the author for analysis. The survey instrument and results are contained in Appendix A.

Results⁵⁸

A straightforward assessment of public opinion can be useful in evaluating an organization. Universities are no different, but LSU has rarely conducted an in-depth, national public opinion poll on its image.⁵⁹ Results of this survey indicate that making the LSU brand synonymous with academic excellence may be a challenge outside the Deep South.

For instance, when asked to name any university, participants in the poll overwhelmingly named Harvard University as the school that spontaneously came to mind (Figure 6.2), followed by the University of Michigan, Stanford University, the University of Texas, the University of California at Los Angeles (UCLA), Notre Dame University, the University of Illinois, the University of Southern California, Wisconsin, and Ohio State. LSU ranked 29th.

Perspective is necessary at this point. The schools' ranking was produced by a relatively small number of responses within the larger sample of respondents. Overall, respondents named dozens of different colleges and universities, and in most cases, an analysis of the survey data indicates those choices of a college were correlated to their home states, or, were institutions with which they had a connection, such as having received a degree from the school. As will be demonstrated later in a finding not altogether surprising, a personal tie to LSU is a key factor among respondents who held

⁵⁸ The full questionnaire and responses for this survey are available in Appendix A.

⁵⁹ This dissertation refers earlier (p. 189) to a LSU national image study conducted by Dr. Steven Procopio of the LSU Public Policy Research Lab in the winter of 2006. For purposes of consistency, it should be pointed out that while the Procopio study was "national" in that randomly selected survey calls were placed to all 50 states, the survey instrument was restricted to a handful of questions and demographic variables that produced useful but limited insights.

positive views of the university, especially those who gave the university good or excellent ratings.

	University	Frequency	Percentage
1	Harvard	177	17%
2	Michigan	35	3%
3	Stanford	33	3%
4	Texas	30	2%
5	UCLA	26	2%
6	Notre Dame	23	2%
7	Illinois	21	2%
8	USC	20	2%
9	Wisconsin	19	2%
10	Ohio State	19	2%
29	LSU	5	.04%

Figure 6.2: Question: “When you think of colleges and universities in the United States, which one comes to mind first?” (open-ended) (N=1057)

When asked for a second choice, again, respondents overwhelmingly listed Harvard, followed by Yale, UCLA, Notre Dame, Stanford, Princeton, MIT, and USC, Duke, and Penn State. LSU ranked 17th. While LSU fared slightly better as a “second” choice, the overwhelming finding is participants don’t know Louisiana schools.

	University	Frequency	Percentage
1	LSU	371	35%
2	Don’t Know/No Response	349	33%
3	Tulane	211	19%
4	University of Louisiana at Lafayette	24	2%
5	Loyola University	19	2%
6	Louisiana Tech	15	.08%
7	Grambling	6	.05%
8	Southern University	3	.02%
9	Xavier	1	.009%
10	Dillard	1	.009%

Figure 6.3: Question: When you think of colleges and universities in Louisiana, do any come to mind? Which ones? (open-ended)

When asked to name any Louisiana college or university (Figure 6.3), poll respondents most often mentioned LSU, followed by Tulane University, the University of Louisiana at Lafayette, Loyola University at New Orleans, Louisiana Tech, Grambling, Southern, Xavier, and Dillard. The important finding here, however, was not the ranking but what was not said. “Don’t Know/No response” was the second most frequent reply, indicating widespread unawareness of Louisiana colleges and universities.

A separate national survey conducted by the LSU University Relations office similarly found that three of four Americans recognized the LSU brand, but most knew little about either LSU or any other Louisiana public university.

While the poll for this dissertation, conducted during the first week of February 2006, found a combined 75 percent of respondents said it was “somewhat important” or “very important” that public universities engage in research, less enthusiasm was expressed for the concept of entrepreneurial universities.

Comparing LSU to nationally prominent higher education institutions such as the University of Texas (UT), Harvard, and the University of Virginia (UVA) indicated LSU was rated significantly lower in terms of excellence.

LSU, for instance, was given a “good” or “excellent” rating by 42 percent of respondents while UT was rated “good” or “excellent” by 58 percent of those surveyed; UVA 56 percent; Harvard 91 percent. In-state rival Tulane University was rated “good” or “excellent” by 59 percent of those surveyed.

Divided Opinions About LSU

Two questions illustrate the gap in national regard between LSU and Top Tier institutions. Asked to rate the overall quality of Harvard, respondents in 49 of 50 states rated Harvard as “good” or “excellent” (90.3 percent). When asked to rate the overall

quality of LSU, respondents gave “good” ratings to LSU in 27 of 49 states and “excellent” ratings in only three states.

Figure 6.4 graphically maps responses to another question that illustrates how opinions of LSU appear to be regionally based. For instance, the maps in Figure 6.4 display, state-by-state, modes (top map) and means (bottom map) for a question, which asked respondents if they viewed LSU as one of the best universities in the South.

While the map of modes (the most frequent answer) implies respondents in many states agree with the proposition, the bottom map (means) indicates respondents who strongly agree with that notion are mainly in Louisiana, Mississippi and states adjoining Louisiana. New Mexico and Idaho responses that indicate strong agreement with LSU being a top southern school appear to be the result of low response rates.

Unmistakable in both maps, however, is the “Don’t know” answer, which is the overwhelming reply. Outside of LSU’s immediate geographic region, there appears to be uncertainty over what kind of university LSU is among other southern schools.

Respondents may not know much about LSU, but a clear division of opinion exists in views of public and private universities. With the exception of the University of California at Los Angeles (UCLA), which received “good” or “excellent” ratings from a combined 78 percent of those taking the survey, regional public universities like LSU didn’t fare well. Among LSU’s regional public peers in fact, while the University of Florida earned a “good” or “excellent” rating from 54 percent of respondents, the University of Georgia drew similar ratings from 49 percent of poll participants, and the University of Alabama, 39 percent.

Although respondents seem to recognize qualitative differences between some public and private universities, the public overall doesn’t see that difference.

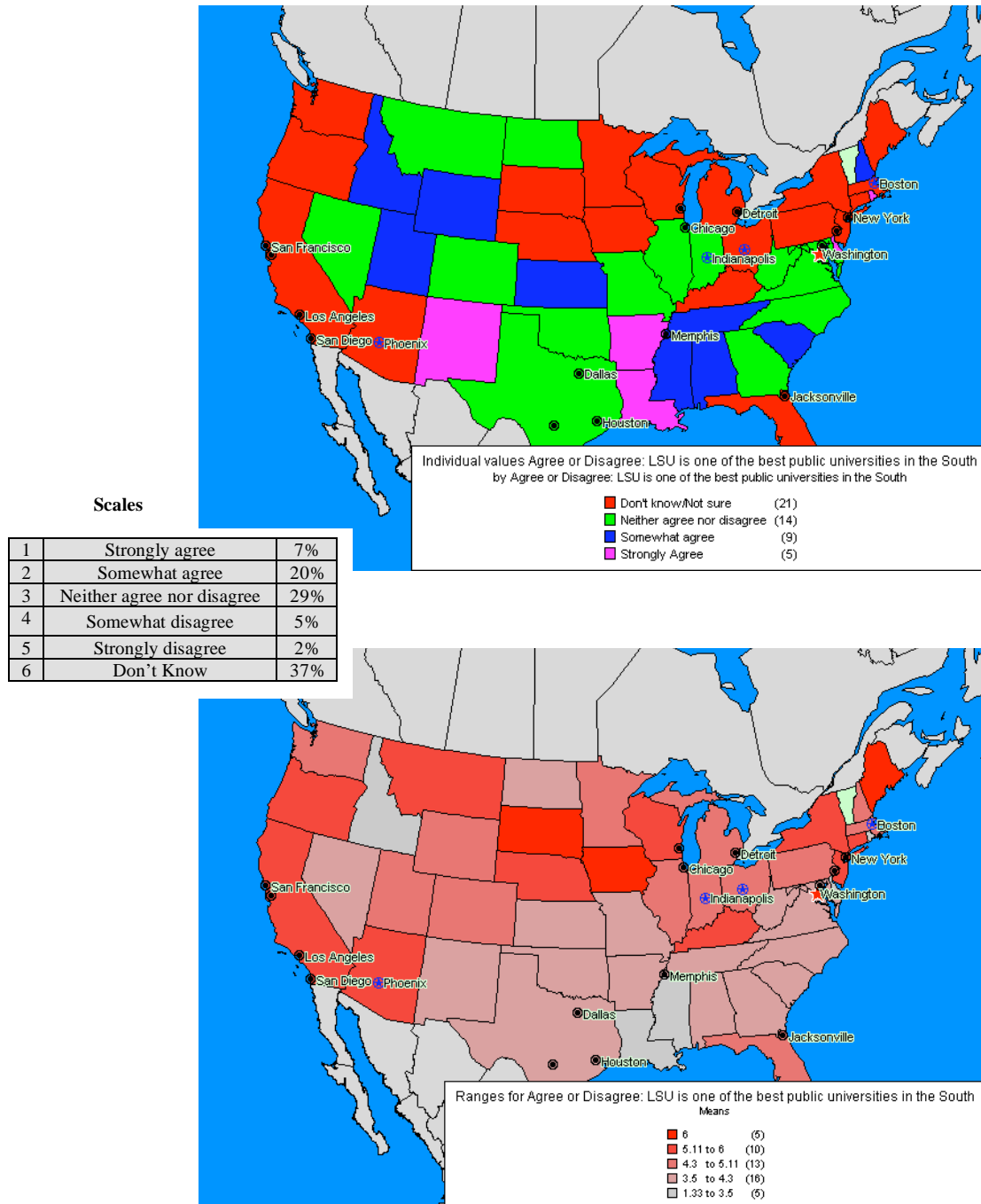


Figure 6.4: Question: LSU One of the Best Universities in the South?

The majority (54 percent, n=567) of adults in the U.S., when asked, rate the quality of education provided by public universities versus private universities “as about the same.” As might be expected, among those who perceive a difference, adults

believe the quality of the education at public universities is “worse” than that provided by private universities by about a two-to-one margin (11 percent, n=120 quality “better” versus 21 percent, n=220) quality “worse”).

Focusing on that segment of adults who view the quality of public universities as “worse,” it is clearly a view more likely to be held by men than women, 26 percent (n=133) to 16 percent (n=87), respectively. Rating the quality of education offered by public universities as “worse” also is more likely to be the view of younger adults (those less than 35) among whom a quarter (25.5 percent, n=80) think it’s “worse.” This is compared with those over the age of 65 among whom less than one in five (19 percent, n=4) think the quality of education from public universities is “worse.”

Age and gender aside, the view that the quality of education from public universities is “worse” seems to be linked with both income and education levels. A quarter of both those who earn more than \$100,000 (27 percent, n=66) and 23.6 percent of those with master’s degrees (n=37), and 35 percent of people with PhDs (n=24) think public universities provide a “worse” education.

Where in the World Is LSU Anyway?

Lack of knowledge about LSU goes beyond quality ratings. Sixty percent of respondents didn’t know LSU is located in Baton Rouge. Among respondents who did know the correct site, 61.5 percent (n=16) agreed “strongly” that LSU is one of the best public universities in the United States. An additional 60 percent of those who “somewhat agreed” with the statement (n=81) also ranked LSU as among America’s best colleges. Those who didn’t know where LSU is located overwhelmingly also tended to disagree with the notion that LSU is a top school (n=242). For LSU, knowledge about the university correlates with positive ratings. Among Louisiana respondents, 77.8

percent (n=7) gave LSU top ratings. For a university aspiring to national prominence, however, the survey suggests a sizeable void in what the nation knows about LSU outside of Louisiana.⁶⁰

Americans are largely uncomfortable rating the quality of Louisiana colleges and universities, with fully 55 percent of respondents unwilling to venture a guess about whether universities in Louisiana are better, worse, or about the same as other public colleges and universities. Among respondents who gave ratings, 31 percent said public schools in Louisiana are about the same as elsewhere, while just 2 percent said they are “better,” and 13 percent “worse.”

Tellingly, however, the gap between Louisiana schools and other public universities was largest among highly educated respondents, 23 percent of those with more than a bachelor’s degree said “worse”—as well as those with the highest incomes—21 percent “worse” among those with annual household incomes exceeding \$100,000.

Indeed, fully 40 percent of survey respondents would not consider sending a child to a school in Louisiana (Figure 6.5), versus just 14 percent who would consider a Louisiana university. This number was slightly higher among Southerners (19 percent would consider), as well as those residing in the states in the SEC (21 percent would consider), but even among these groups “no” responses were nearly twice as common as those in the affirmative.

Among those who **would consider** sending their child to a Louisiana university, “academics” was almost the unanimous reply as the major factor in decision making with fully 57 percent of these respondents saying Louisiana schools would be considered either for their “academics” in general or for a “specific academic program.”

⁶⁰ Nine (n=9) respondents from Louisiana completed the survey.

Among those who **would not consider** sending their child to a university in Louisiana (Figure 6.5), distance was the leading reason, including 32 percent who said Louisiana schools are “too far away” and 12 percent who “would not consider an out-of-state school.” Results from both answers were statistically significant at a less than .001 level of probability. Southerners, who would not send their child to a Louisiana university, were most likely to express concern over academic reputation (22 percent), while those from the SEC states were likely to say they simply preferred another school (25 percent).

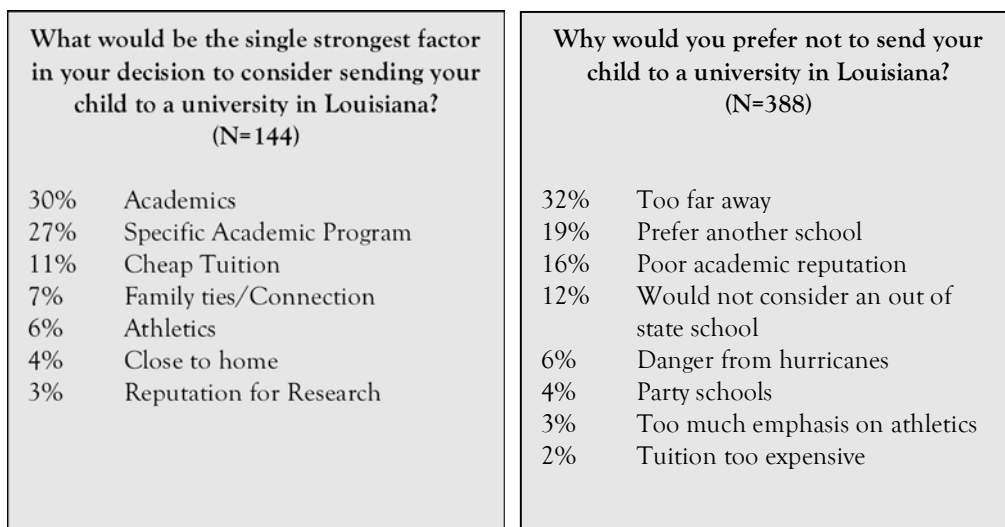


Figure 6.5: Factors in Sending a Child to a Louisiana University.

A comparison of responses (Figure 6.6) between the two answers indicates a combined 57 percent of respondents referring to either “academics” or “specific academic programs” as reasons for choosing a Louisiana university.

While “academics” ranked as the Number One reason among 30 percent of participants for considering a Louisiana university, 10 percent of those taking the poll said they didn’t know enough or were not sure enough to venture an opinion about the

proposition. Curiously, nearly three times more participants volunteered an opinion against sending a child to a Louisiana school compared to reasons for considering a Louisiana university (n=140 for, n=288 against) with distance and poor reputation accounting for the biggest factors

Crosstab analysis for the question (Figure 6.6) suggests lower middle income respondents, earning between \$10,000 and \$30,000 a year (yellow shaded area), are slightly more inclined than high wage earners, those above \$100,000 (green shaded area), to consider sending their children to Louisiana universities.

Income		Yes	No	Maybe	Don't Know	Total
\$10,000 or less		5.1%	41%	33.3%	20.5%	100.0%
\$10,001-\$20,000		17.5%	32.5%	30.0%	20.0%	100.0%
\$20,001-\$30,000		18.2%	28.8%	28.8%	24.2%	100.0%
\$30,001-\$40,000		12.8%	28.2%	35.9%	23.1%	100.0%
\$40,001-\$50,000		10.1%	39.3%	36.0%	14.6%	100.0%
\$50,001-\$60,000		11.0%	34.1%	39.0%	15.9%	100.0%
\$60,001-\$70,000		20.0%	41.2%	28.2%	10.6%	100.0%
\$70,001-\$80,000		17.7%	40.6%	27.1%	14.6%	100.0%
\$80,001-\$100,000		9.6%	46.2%	32.7%	11.5%	100.0%
\$100,000 or more		15.2%	47.1%	27.9%	9.8%	100.0%

Figure 6.6: Consider Sending Child to a Louisiana University?

Highly educated respondents with advanced degrees (MA, JD, PhD), meanwhile, were less likely to consider Louisiana colleges for their children. Combined with results from an earlier question evaluating the quality of Louisiana schools compared to colleges elsewhere, higher income participants not only had a negative view of Louisiana universities but also would not consider them for educating their children.

Among racial categories, white and Asian respondents were more likely to consider Louisiana universities, followed by blacks, mixed race, and Hispanics. Native Americans, however, were least likely to consider Louisiana schools for their children. The analysis does suggest lower income respondents may be more interested in college

programs that lead to getting good jobs, and middle and high income respondents more interested in specific academic programs.

The finding also indicate that proximity considerations notwithstanding, academics are key to attracting students for LSU and increasing the university's overall reputation. Messaging that highlights academic accomplishment would likely resonate among members of the public who consider academics to be a key factor in the choice of a college.

Attitudes Toward LSU

Familiarity with LSU is primarily a function of gender, age, education level, and region. Among the entire survey population, less than one-third (28 percent) were at least “somewhat familiar” with LSU—this figure was largely driven by males, 36 percent of whom are familiar with LSU vs. just 21 percent of women.

Other groups more familiar with LSU than average included:

- **Young respondents.** Among those under the age of 35, 37 percent were familiar with LSU—a significant improvement over older age groups in the survey.
- **Those with at least a BA.** 35 percent of those with a BA and 38 percent of those with a more advanced degree were familiar with LSU, versus just 22 percent of those with less than a BA. Combined with an earlier finding highly educated respondents were less likely to consider sending their children to a Louisiana college, the survey suggests that more education drives a negative view of state colleges, including LSU.
- **Southerners.** 39 percent of those from the South are familiar with LSU versus just 22 percent of those in the West.
- **Those in SEC States,**⁶¹ 39 percent of those in SEC states are familiar with LSU, versus 26 percent of those in non-SEC states.

⁶¹ For purposes of this study, Southeastern Conference States (SEC) are considered to be Louisiana, Mississippi, Kentucky, Arkansas, Alabama, Florida, Georgia, and Tennessee.

One major target group for improvement, however, is parents of high school and college-aged children. Among this critical demographic, just 22 percent were “very” or “somewhat familiar” with LSU, while fully 44 percent said they were “not at all familiar” with the school. Racially, white respondents were nearly ten times more likely to say they are familiar with LSU than blacks or Asians (Figure 6.7).

	Frequency	Percentage of all respondents	Mean	Standard Deviation
White	743	71.5%	3.00	1.308
Black	85	8.2%	2.50	1.373
Asian	78	7.5%	3.00	1.306
Hispanic	89	8.6%	3.00	1.165
Native American	8	.8%	2.75	1.165
Mixed Race	22	2.1%	2.91	.921
TOTAL	1039	100%	2.46	1.328

Scale for: How familiar are you with Louisiana State University or LSU? 1) Very familiar, 2) Somewhat familiar, 3) Not very familiar.

Figure 6.7: Descriptive Statistics for: “How familiar are you with Louisiana State University or LSU?”

Perception as a “Jock School”

LSU is associated (31 percent) with sports above all other attributes (Figure 6.8), although more than half of the respondents (N= 579, 54.8 percent) who were asked to select one of six statements as “best describing” the campus, instead said “don’t know.”

Based on your knowledge, which of the following statements best describes LSU?	
55%	Don’t know/Not sure
31%	It has strong athletic programs
6%	It has strong academic programs
4%	It has a beautiful campus
2%	It has programs in community involvement
2%	It attracts high-achieving students
1%	It produces cutting-edge research

Figure 6.8: Statements that Describe LSU.

Although the percentages were low, those with incomes less than \$30,000 annually were more likely than average to associate LSU with strong academic programs (10 percent), as were those from the South (9 percent) and the SEC states (9 percent). Broken down by race, whites overwhelmingly identified LSU's strong athletic programs as best describing the university ($n=236$, $p = \leq .001$). The statement that LSU produces cutting-edge research, however, was identified as best describing the university by only seven respondents ($n=7$, 0.7 percent); three were Hispanic and two Asian. Overall, those with high school diplomas and bachelor's degrees tended to believe LSU has strong academic programs. LSU's strong identification with athletics cut across all educational levels. Again, however, the dominant answer to what best describes LSU was "Don't Know" (54.8 percent).

LSU Tuition Comparison

Tuition policy at LSU continues to be a source of controversy and misunderstanding among members of the public. Louisiana law requires the Legislature to approve any increase in tuition and limits any hike to 3 percent per year. As a result, LSU main campus administrators⁶² and other Louisiana college officials continually complain that they are not able to build competitive, national-caliber institutions, or in the case of the main campus, meet goals set down in the university's seven-year Flagship Agenda. Their case is straightforward, but results from this survey suggest the public has no firm idea about either college costs or the disparity in tuition among public institutions. An analysis prepared for the LSU System Office of Finance and Administration, based on data compiled by the U.S. Department of Education, National

⁶² The LSU A&M campus in Baton Rouge is commonly within the LSU System referred to as the "main campus."

Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) for Winter 2005-2006 (Figure 6.9), indicates that LSU has a lower tuition in every category for both in-state and out-of-state undergraduate and graduate students when compared to a group of 49 national public university peers.⁶³ The analysis also suggests LSU students have lower tuition and average less money in scholarship and fellowships than their peers at other institutions with most financial aid coming from institutional and Pell Grants (Brewer, 2006).

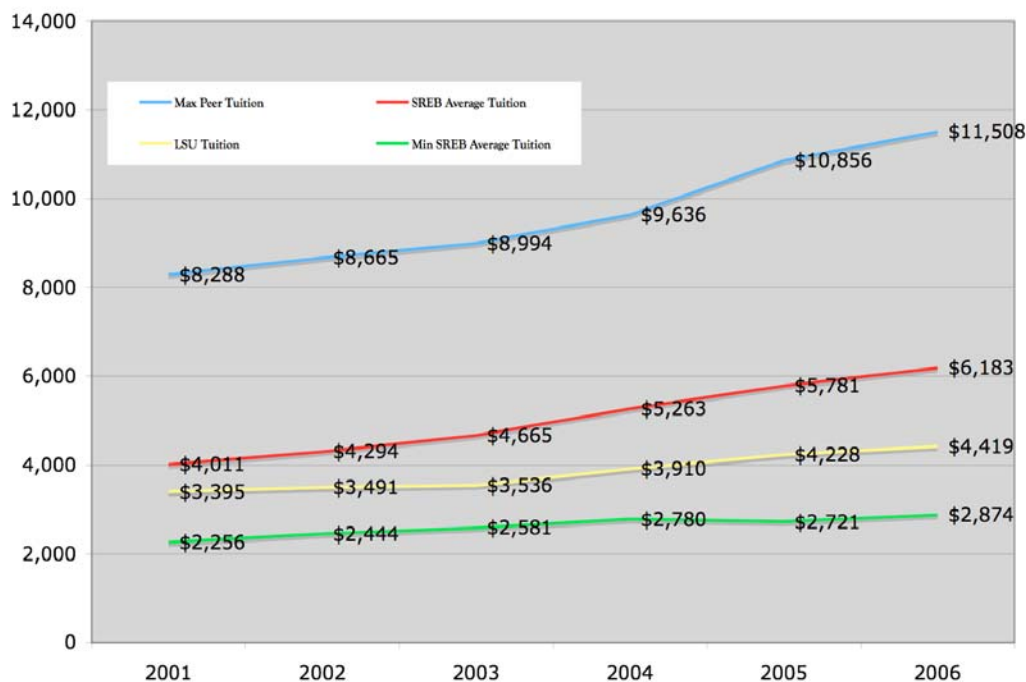


Figure 6.9: LSU In-state Undergraduate Total Tuition with Required Fees.⁶⁴

Figure 6.9 illustrates LSU tuition status. It shows tuition among undergraduates averages \$4,419 compared to \$6,183 among LSU peer institutions. Responses to the

⁶³ Peers included in the LSU comparison group were: Penn State, the University of Michigan-Ann Arbor, University of Minnesota, Ohio State University, University of South Carolina, University of Texas at Austin, University of Kentucky, University of Iowa, University of Colorado at boulder, University of Montana, University of Alabama, University of Georgia, and the University of Arizona.

⁶⁴ Source: LSU A&M Office of Budget and Planning.

poll, however, imply a significant misunderstanding about college tuition in general and LSU tuition in particular. For instance, the survey indicated (Figure 6.10) that while a plurality (45 percent) of adults reported they're not sure how LSU tuition compares with other schools in the U.S., a majority (53 percent) say it's either "about the same" (28 percent) or actually "less expensive" (25 percent). The answer was fairly consistent across all educational levels with the exception of Grade School graduates, producing a probability level of less than .001. Only 3 percent of adults believed that LSU's tuition is "more expensive," which also is most likely to be the opinion of those under 35 (6 percent), and those earning less than \$30,000 (8 percent). Responses among parents of college-aged children (18-22), however, displayed similar confusion with almost equal numbers of parents (N=192 versus N=160) responding that LSU tuition is "about the same" or "less expensive." The response was not statistically significant ($p=0.071$), but the finding may indicate uncertainty about college costs, especially among parents of college-aged students.

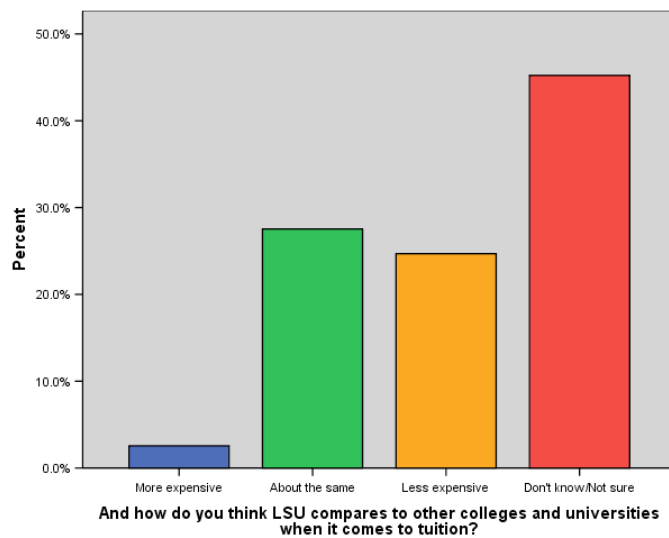


Figure 6.10. LSU A&M Versus Other Colleges on Tuition.

Further analysis suggests that among those from both the South and SEC states, a plurality of each still wasn't sure how LSU's tuition compared with other schools. However, the percentage that rate the tuition costs as "about the same" rises to about a third among those from the South (31 percent) and SEC states (32 percent). The truth is LSU tuition lags substantially behind peer institutions both nationally and regionally. The overriding finding, however, as in other responses, was that the majority of respondents simply didn't know how LSU tuition compared to other colleges.

Delving Deeper into College Cost Attitudes

As one might expect, most (45 percent, n=475) adults in the United States report knowing "a good amount" about what it costs to send a child to college. However, this doesn't square with the fact that 92.3 percent (n=627) of those with children have no current plan (529 "No"=92.3 percent) or pre-paid tuition plan ("No"=96.6 percent) to pay for college, including 94.2 percent (n=129) of parents who have a high-school or college-aged child!

The results among parents with college-aged children were not statistically significant, but the overall findings about college financing have the potential of partially explaining why LSU and other U.S. public universities have had such consistent difficulty in getting tuition and other funding increases from state legislatures and have been forced to turn to tuition increases and entrepreneurialism. In Louisiana, for instance, a two-thirds vote of both houses of the Legislature is required for a tuition increase for public colleges. Specifically, among adults with children of high school or college age, the percentage who say they know "a lot" about what college costs rises to 29 percent. Still, a plurality (42 percent) reports such knowledge of college tuition is of an amorphous variety with a majority saying they know "a good amount."

Views of Responsibility in Paying for College

Nearly one in two (47 percent) adults in the U.S., according to this poll, believe the primary responsibility for funding college tuition costs rests with parents as well as government. Distinguishing the two, however, a third (35 percent) think the responsibility rests more with “parents and families” as compared with 13 percent, who specifically believe paying for college is the responsibility of “state or federal governments.” There is little difference among parents of children in high school or college compared with other adults on this point. Still, about half (49 percent) of this segment believes the responsibility is some combination of parents and government.

The strong consensus among adults (83 percent) in the U.S. is that if someone really wants to attend college, a way will be found to pay for it, even if one has to work while attending school. In fact, almost a majority (49 percent) agrees with the statement that anyone who wants to attend college can find the money to pay for it.

While the consensus among adults in the U.S. is that one can find avenues to fund college for those who want to attend, the criteria government should place on providing tuition assistance is largely polarizing. Forty-four percent (44 percent, n=458) of adults disagree with the notion that the government should provide tuition assistance only to students who cannot afford a college education, while an almost equal percentage (42 percent, n=444) agree.

Key points of demarcation among adults on this critical question emerge most prominently between gender and age of adults. Men and women have largely distinct views on this question. Where most (44 percent) men agree that government should provide assistance to those in need, most (46 percent) women disagree.

Those over 65 strongly endorse government providing tuition assistance only to those in need (54 percent) compared to less than a third (29 percent) of seniors who disagree. Those under 65 are much less resolute in their opinion on this question. Nonetheless, a slim plurality disagrees with government tuition aid.

How do these findings relate to LSU? Forty-four percent (n=122) of those who agreed that government assistance should be need based also rate the overall quality of LSU as “good,” including 22.6 percent of those who said they are “very conservative” on fiscal issues. Interesting is the fact that an identical 22.6 percent of “very conservative” respondents disagreed with need-based tuition assistance.

Necessity of a College Education

Although opinion was split on tuition assistance, very little indecision existed among adults about the necessity a college education in achieving a level of success today. Better than two-thirds (66 percent, n=694) believes a college education is necessary in achieving success compared with 29 percent (n=311), who see “many ways to succeed without a college education.” Those most likely to accept avenues toward success without a college degree include:

- Those over the age of 65 (37 percent)
- Those without a college degree (34 percent)
- Republicans (35 percent)
- Social Conservatives (37 percent)
- Those residing in SEC-states (34 percent)
- Those who rate LSU as “Good” or “Excellent” (44 percent).

Faced with reductions in state spending, universities have turned toward entrepreneurialism. This survey indicates that U.S. adults generally agree with

universities leveraging research. Fifty-four percent (n=536) of all adults agree with the practice compared with only 19 percent (n=197) who disagree. Unlike other questions in this survey, only 7.6 percent (n=80) responded, “don’t know,” evidencing a strong level of support for the concept of universities capitalizing intellectual property.

Entrepreneurialism was even more accepted among social liberals (46 percent), particularly in the western United States (45 percent). The practice is also acceptable to high wage earners (those who make more than \$100,000 a year) and among respondents who believe that one of the missions of public universities, or, for that matter any university is to prepare students for jobs.

Another perspective is provided by analyzing correlations between “excellent” ratings among peer group of institutions established for this survey,⁶⁵ and the question about whether respondents agreed or disagreed with universities turning toward money-raising ventures. Figure 6.11 suggests strong levels of agreement for the concept of universities becoming entrepreneurial with statistically significant, positive correlations between ratings of excellence and the entire peer group. More interesting, however, is the strength of those correlations with mean levels higher at LSU (4.51), the University of Alabama (4.58), and the University of Georgia (4.20) than at Tulane (3.66), the University of Texas (3.82), UCLA (2.70), and Harvard (1.70), all Tier-One institutions with larger endowments and total research expenditures. Does that indicate a greater level of support for research at LSU and its SEC peers? Perhaps. Further research is suggested. What the results may indicate, however, is that those who rate LSU,

⁶⁵ For purposes of this survey a peer group of national universities was established. The group included the University of Texas, University of Georgia, Tulane University, University of Florida, University of Virginia, Harvard University, the University of California at Los Angeles (UCLA), and the University of Alabama.

Alabama, and Georgia as “excellent,” recognize that it is important for these public universities to be entrepreneurial.

	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree	Corr.
Univ. of Texas	11.3%	45.9%	16%	17%	5.7%	.208**
Univ. of Georgia	14.7%	43.2%	23.2%	7.4%	5.3%	.252**
Tulane Univ.	12.9%	51.3%	15.2%	12.9%	4.9%	.288**
Univ. of Florida	14.5%	49.6%	20.5%	9.4%	5.1%	.280**
Univ. of Virginia	12%	51.9%	19%	10.2%	4.6%	.249**
Harvard Univ.	13.1%	43.7%	19.7%	14.3%	4.6%	.295**
Louisiana State Univ.	21.7%	43.5%	15.2%	8.7%	8.7%	.245**
Univ. of Alabama	15.4%	46.2%	15.4%	7.7%	9.6%	.242**
UCLA	13.3%	48.5%	19.2%	11.7%	3.6%	.304**

Figure 6.11: Percentages and Correlations for: “Many colleges and universities have increasingly turned toward money-raising ventures. Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree” by “excellent” ratings against all other universities in the peer group.”

** $p=0.01$

Do American Universities Share Our Values?

On the question of whether adults believe American universities share their values, most survey respondents (54 percent) were either “not sure” (29 percent) or expressly said “no” (25 percent). This was clearly a polarizing issue with another 46 percent, a plurality, agreeing that “yes” universities share their values.

The key aspects in measuring whether universities share the values of Americans tend to be influenced by age and education levels. The younger someone is, the more likely they are to say “yes,” universities share their values. Fifty-four percent of those under 35 years old agreed with the statement compared with only 43 percent of those

over 65. The vast majority (57 percent) of those with graduate degrees also agreed that universities share their values, while about a third (38 percent) of those with less than a college degree agreed. A division was also seen along racial lines with 43 percent of non-whites agreeing universities share their values contrasted with 54 percent of whites who do not.

The issue of whether American universities share the values of respondents becomes potentially important for large public universities such as LSU that are increasingly turning to the marketplace and away from state support. Survey responses, in fact, produced a positive correlation ($r=.292$) between the concept of collegiate entrepreneurialism and the notion that American universities share the values of most citizens. Forty-six percent ($n=487$) of those who agreed that American universities share their values supported the concept of entrepreneurial universities, and slightly more than 51 percent ($n=249$) of those who rate LSU as “excellent” or “good” believe American universities share their values.

Areas of Focus for Universities

The consensus among adults surveyed in this poll is that research (95 percent) as well as excelling in athletics (67 percent) is “important” for public universities. In fact, the importance of research to public universities is a universal opinion that sees virtually no variance across any major demographic subgroup. The value of athletics, while seen as important, does reveal a gradation of opinion among adults. Most (47 percent) actually qualify the importance as only “somewhat important” compared with 20 percent who think it is “very important” to excel athletically. More adults think it is “not very important” (23 percent) for public universities to excel athletically than who think it is

“very important.” This is most likely to be the opinion of those over the age of 65 (34 percent).

It’s notable that results indicate women are slightly more likely than men to view it as “very important” for universities to excel in athletics, 22 percent to 19 percent respectively. There is, however, uniform agreement that both athletics and research are either “very important” or “somewhat important” to a public university. Seventy-three percent (n=493) of those who agreed that it’s important for a public university to excel in athletics also believed research is important.

National Knowledge About LSU

As noted earlier, complicating LSU’s national image may be the public’s knowledge of geography and something as simple as knowing where the university’s main campus is located. Just 39 percent (n=413) of 1,057 respondents correctly identified LSU’s location as Baton Rouge, although an additional 40 percent (n=426) chose a “don’t know” response rather than venturing a guess. Another 10.4 percent thought LSU was located in New Orleans. The results were statistically significant at the $p = \leq .001$ level and also indicated in short:

- Groups most likely to correctly choose Baton Rouge included: men (48 percent), those age 65+ (51 percent), those making \$100K or more annually (51 percent), those with a Masters or PhD (55 percent), and those from the South (50 percent) or SEC states (53 percent).
- Groups placing themselves most solidly in the “don’t know” category included women (50 percent), those with children younger than college age (47 percent), those with less than a BA (49 percent), and New Englanders (53 percent).

Damage sustained by LSU institutions apparently registered with the national conscience. Almost 18 percent of respondents (17.8 percent, n=188) said they believed LSU facilities sustained “severe” damage during last year’s hurricanes while 30 percent

(n=317) reported “little damage” to university institutions. The consensus opinion was that LSU experienced little damage in September 2006; however 42 percent (n=443) of respondents admitted that they were unsure about the damage LSU may have sustained.

Part of the answer to that question may be explained by LSU’s national media reach. Just 40 percent of respondents did not recall hearing anything about LSU in the news recently, although an additional 15 percent weren’t sure what they had read. Information about LSU, responses suggested, most commonly came from television (37 percent, n=391), followed by newspapers (22 percent, n=231), and Internet (12 percent, n=131).

Figure 6.12 depicts LSU’s national media dilemma. Results indicate that among people who have heard something about LSU, many got their information from television, but most respondents in this survey had not heard anything about the university. Of those who had heard something about LSU, fully 78 percent said they had heard something about sports, versus just 50 percent who had heard something hurricane-related and just 14 percent who had heard something about academics.

Medium	Yes %	Frequency Yes	No %	Frequency No
Television	37	391	63	666
Newspapers	21.9	231	78.1	826
Magazines	6.2	66	93.8	991
Word of Mouth	7.9	84	92.1	973
Internet	12.4	131	87.6	926
Radio	8.2	87	91.8	970
None of these/Heard Nothing	40.1	424	59.9	633

Figure 6.12: Frequencies and Percentages for “During the last 6 months, have you seen, read, or heard anything about LSU? If so, where?”

Responses among young, lower middle income Southerners may be the most problematic for the university (Figure 6.13). Only 10 percent of young adults, 10 percent of those making less than \$30,000 a year, and 11 percent of those in Southern states had heard about LSU academics or research. The results were significant at the $p \leq .002$ level.

Nationally, only 6 percent (n=65) of 464 respondents had heard about LSU academics or research. Hurricane-related information was heard by 22 percent (n=230) of those polled. Sports-related information, meanwhile, was heard by 34.3 percent (n=363). Although the question generated an expected higher response, the result was statistically insignificant. Among states, respondents from Texas reported hearing the most about LSU academics or research, sports, and hurricane-related information although the total number of respondents in each category was less than 20 (n=20).

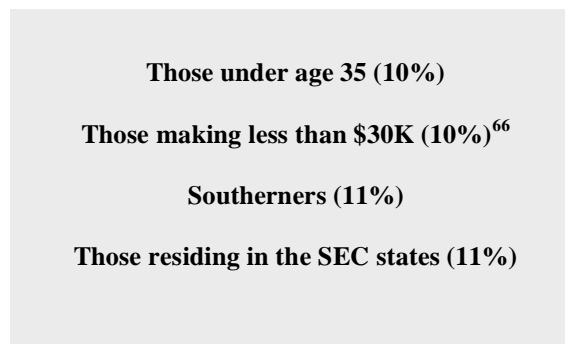


Figure 6.13: Groups Most Likely to Have Heard About LSU Academics or Research.

Sports Fans as Academic Boosters

About one-in-ten (11.3 percent, n=119) Americans in the poll described themselves as fans of LSU sports. That number included 17 percent (n=84) of all men

⁶⁶ Caution with this finding is suggested in that the result may be the result of social desirability bias. An earlier response (Figure 6.3) indicates lower income respondents are more inclined to send their children to Louisiana universities.

surveyed, while just 6 percent (n=35) of females described themselves as Tiger fans. Perhaps surprisingly—or perhaps because of strong athletic rivalries in the region—Southerners and those in the SEC states were only slightly more likely to be LSU fans (11 percent each).

The correlation was positive ($r=.513$) between males, being a fan of LSU athletics, and those who rated the quality of LSU research as either “good” or “excellent” despite the fact that the relationship was not statistically significant ($p=0.061$). At the same time, the correlation was negative between fans and educational levels ($r=-0.045$, $T=-1.49$). The more educated the respondent, the less likely it was that he or she would be an LSU sports fan.

An analysis of “Yes” responses indicated survey participants who completed high school ($N=29$, 24.8 percent), and recipients of Bachelor’s degrees ($N=32$, 27.4 percent) were more likely to be LSU fans than vocational/technical graduates or PhD’s. It should be noted strongly, however, that more than 76.3 percent ($N=766$) of all respondents were not LSU sports fans (Figure 6.14). As a result, wider inferences from this finding could be misleading. Nonetheless, LSU fan support in this poll was strongest among those with less than advanced degrees.

	N	Percent Yes
Grade School	5	0.0%
High School Diploma/GED	258	24.8%
Vocational/Technical	98	8.5%
Associates Degree	147	12.8%
Bachelors Degree	252	27.4%
Masters Degree	157	17.1%
PhD/MD/JD	68	8.5%
Don’t Know/Refused	19	0.9%
Total:	1004	100.0%

Figure 6.14: Descriptive Statistics for “Would you consider yourself a fan of LSU sports?” And “What is the highest level of education you have completed?”

Is there a connection between being an LSU fan and awareness of LSU academics and research? A positive correlation (0.244) resulted between being an LSU fan and those who rated the quality of research at LSU as either “good” or “excellent.” While most respondents in the survey did not consider themselves to be LSU fans and said they didn’t know enough to rate university research (73 percent, n=779), the result among those who are LSU fans and know something about LSU research was statistically significant ($p \leq 0.001$) despite the relatively small number of “Yes” responses among fans. Perhaps encouraging for LSU is the fact that just under a third of those polled (30.9 percent, n=327) rated the quality of education at LSU as either “good” or “excellent.”

Personal Linkage

More than four-in-five respondents (82.8 percent, n=875) had no personal tie to LSU, although 13 percent (n=133) reported having an alum as a friend, 5 percent (n=54) as a colleague, 3 percent (n=33) as a family member, and 1 percent (n=6) attended themselves.

While LSU’s personal ties with people within Louisiana and the surrounding four-state region are strong, beyond the Southeast few have family or business ties to the university. Athletics aside, knowing something about LSU may be a product of having some form of relationship (family, friend, business colleague) with someone who attended the university. A positive, statistically significant correlation ($r=.240, p=0.01$) resulted between those who said they knew someone who attended LSU and family or friends. The result suggests knowledge of LSU, especially its academics and research, may be related to social relationships. Correlations for the questions “Agree or Disagree, LSU is one of the best public universities in the South,” an assessment of the overall

quality at LSU, and the question “Do you know someone who attended LSU?” suggest a direct influence on judgments about the university itself.

Percentages (Figure 6.15) strongly imply the quality ratings of “good” or “excellent” and the ranking of LSU as one of the best public universities in the South were associated with respondents who had parents, family, friends, or colleagues who attended LSU. Many of the findings were statistically significant with the strongest percentages occurring among those whose immediate family members attended the university.

	Parent	Family	Friend	Colleague	Self
Overall LSU Quality as “Good” or “Excellent”	100.0%^{*67}	78.8%**	63.9%**	68.6%**	100.0%*
Strongly Agree or Somewhat Agree LSU is one of the best public universities in the South.	100.0%*	75.7%**	51.1%**	64.8%**	83.3%*

Figure 6.15: Percentages for: “Do you know someone who attended LSU? If so, who?”
By rate LSU as “Excellent,” “Good,” “Fair” or “Poor.”

**= $p < 0.01$ * = $p < 0.05$

LSU Messaging Testing

Communicating the entrepreneurial nature of the university may turn on how effectively messages about LSU are reaching the public and whether those messages raise the salience of the university nationally. Marketing efforts, such as the 2006 national campaign, “Welcome to the Now,” are aimed at recruiting students and building the university’s endowment. Are these messages on target with the American public? Do they stand a chance of resonating with audiences whose only exposure to LSU has likely been via 30-second commercials during football, basketball or baseball telecasts that feature LSU teams? As part of this survey, a series of 11 message statements about LSU

⁶⁷ It should be noted only three (3) respondents said they had parents who attended LSU.

were tested to determine which could potentially reverberate either positively or negatively with U.S. adults. Respondents were asked to say whether a series of statements about the university made them more or less likely to consider LSU a top school. Six “safe” messages (Figure 6.16) that were typically not perceived negatively included disciplines like professional healthcare education at the LSU medical, dental, and nursing schools.

In addition, scoring well were LSU’s operation of the state’s public hospital system, the involvement of LSU engineers in the 2006 investigation and reconstruction of the failed levee system in New Orleans, LSU’s relatively low tuition, and efforts by the university to increase entrance requirements.

Messages that resonated most were those that emphasized LSU as a value either for Louisiana or the nation. For example, when asked if healthcare education would make them more or less likely to think of LSU as a top university, 20.6 percent (n=218) of respondents said knowing that would make them “much more likely” to see LSU as a top university.

Operating Louisiana’s 10 public hospitals earned the university a 48 percent (n=505) “more likely” rating, and having a lower tuition than many of its peers earned LSU a 52 percent” (n=544) “more likely.” Responses for the six “safe” messages were all statistically significant at the .001 level.

Likewise, questions about engineers involved in levee reconstruction in New Orleans, grade-point averages among students going up, and researchers surpassing national averages for inventions all emphasize the value of LSU to the state in practical terms that have nothing to do with advertising slogans. Some of the other messages tested (Figure 6.17) were designed to evoke potentially negative responses, depending on the

respondent. Several statements also included messages designed to assess potentially harmful or controversial issues surrounding LSU.

Message	Total More likely	Total Less Likely	Results and Demographic notes
LSU trains 70% of the doctors, nurses, and healthcare professionals in Louisiana.	55%	3%	21% “much more likely” overall, including 23% of women, 24% of Democrats, 24% of social liberals, 24% of Southerners, and 24% of those in the SEC region.
LSU runs Louisiana’s public hospital system, which treats two million poor people a year	48%	3%	17% “much more likely” overall, including 20% of women, 19% of nonwhites, 20% of those with incomes between \$50-70K, and 20% each of fiscal moderates and liberals.
LSU charges relatively low tuition, even for out-of-state students compared to other major universities.	52%	5%	This message was almost universally appealing, although 19% of respondents did say it would have no impact on their opinion of LSU.
LSU researchers rank higher than the national average in the number of inventions discovered per research dollar.	50%	2%	11% “much more likely” overall, including 15% of those in the SEC region and 13% of those with an income over \$100K.
LSU has been increasing entrance requirements for Freshmen and improving its six-year graduation rates.	52%	4%	11% “much more likely” overall, including 14% of 50-64 year olds, and 15% of those in the SEC region.
LSU engineers and researchers are involved in trying to rebuild levees that protect the City of New Orleans from future hurricane damage.	48%	3%	The message had “no impact” on 23% of respondents, including 28% of fiscal conservatives, 26% of Southerners, and 27% of men.

Figure 6.16. LSU System Message Testing: “Please say whether the following makes you more or less likely to consider LSU a top university.”

Messages	Total More likely	Total Less Likely	Demographic notes
LSU System campuses have a total endowment of approximately \$594 million while Harvard University has a total endowment of more than \$25 billion.	29%	10%	34% of respondents said this statement had “no impact” on their view of LSU, and 20% of those with an advanced degree said it made them less positive toward LSU (versus 10% of all adults).
LSU is ranked in the Third Tier of schools in the annual U.S. News & World Report listing of U.S. colleges and universities.	32%	15%	This message made 16% of respondents less favorable toward LSU including 21% of those age 65+ ($p=0.073$), 23% of those making \$100K+, 22% of those with a Bachelor’s degree and 29% of those with advanced degrees.
LSU is located in a politically conservative Southern State.	21%	22%	21% of respondents were “less favorable” to this statement, including 31% of those with an advanced degree, 29% of unmarried people, 31% of Democrats and 36% of Social liberals.
The student body at LSU is predominantly white.	14%	16%	This message had “no impact” on 43% of respondents, but it was a turnoff for 26% of non-whites (vs. 12% of whites) and 23% of Democrats (vs. 9% of Republicans).
Athletics dominate activities and spending on LSU’s Main Campus. Although the Athletic Department is self-sustaining financially, spending on academics pales in comparison.	16%	30%	30% of respondents were less favorable toward LSU after reading this message, including 31% of men and 30% of women, 45% of those with an advanced degree, and 38% of social liberals.

Figure 6.17: Other LSU System Messages Tested: “Please say whether the following makes you more or less likely to consider LSU a top university.”

The usefulness of the five messages tested in Figure 6.17 perhaps rests in negative reactions generated by some questions. For instance, although 34 percent (n=356) of respondents said LSU’s comparatively small \$594 million system wide endowment had “no impact” on their view of LSU as a top university, 20 percent of those with an advanced degree said it made them **less** positive toward LSU versus 10 percent (n=110)

among all adults, suggesting the possibility that more educated people may view the size of a college endowment as an indicator of quality.

LSU's consistent placement among Third Tier institutions in the annual *U.S. News & World Report* ranking of colleges also seemed to impact responses among respondent views of whether LSU is a top university. This message made 16 percent of respondents **less favorable** toward LSU, including 21 percent of those over 65, 23 percent of those making more than \$100,000, 22 percent of those with a bachelor's degree and 29 percent of those with advanced degrees.

A nexus seems to exist between ranking status and the age, income and education of survey participants. High educational achievers, high-income respondents and the elderly all viewed a Third-Tier ranking in *U.S. News* negatively. College administrators can argue about whether the *U.S. News* rankings are accurate, but, based on results from this survey, the rankings appear to have an impact on the public's views of LSU.

Asked whether LSU's location in a politically conservative Southern state and whether having a predominantly white student body affected their views of LSU as a top university, 21 percent of respondents rated LSU "less favorably" after hearing the statements, including 31 percent of those with advanced degrees, 29 percent of unmarried people, 31 percent of Democrats, and 36 percent of social liberals.

A companion question asked whether the fact that the student body at LSU is predominantly white would affect their views. Results showed 43 percent of participants said the revelation had "no impact." But the issue was a turnoff for 26 percent of non-whites versus 12 percent of whites, and 23 percent of Democrats versus 9 percent of Republicans.

Finally, among potentially negative messages tested, 30 percent of respondents were less favorable toward LSU after hearing that spending on athletics dominated university spending even if the athletic department was self-sustaining. Results, included 31 percent of men and 30 percent of women, 45.5 percent of those with advanced degrees, and 38 percent of social liberals. This finding represents a potential conundrum for LSU. As this survey suggests, athletics is the predominant way Americans know LSU. Negative responses to the dominance of athletics at the university, however, particularly among the highly educated, may hinder aspirations of achieving national academic distinction by perpetuating the image of LSU as a “jock school,” especially given the importance of reputation in the U.S. News rankings methodology.

Beneath the Surface View of LSU

When asked if they agreed or disagreed that LSU is one of the best public universities in the United States, 33.4 percent (n=353) of respondents said they neither agreed nor disagreed with the statement. Fifteen percent (15 percent, n=116) said they disagreed “somewhat” or “strongly disagreed” with that notion. Like so many other issues surrounding LSU’s national image, the American public seems to be indicating that it doesn’t know enough to make a judgment.

Perhaps a more realistic short-term objective for LSU is establishing itself as a leading public university in the South. And while a plurality (36 percent) (n=382) of adults say they don’t know if they’d agree to that description of LSU right now, adults in the U.S. are about four times as likely to agree as they are to disagree with that statement as it relates to LSU– 27 percent (n=281) to 4 percent (n=78), respectively.

The most significant disparity in the view that LSU is one of the best in the South occurs between men and women. About a third (34 percent) of men “agree,” compared

with only about one-in-five (20 percent) women, who also concur with this assessment of LSU. This is not to say that women necessarily disagree, but rather that nearly half (47 percent) simply “don’t know.”

It’s important to point out that the view of LSU as one of the best universities in the South tends to increase with the education level, with a third (32.5 percent, n=51) of those with graduate degrees, concurring with this view. As one might expect, this view of LSU also tends to rise with adults closer to home as it rises with both those from the South (32 percent) as well as those from SEC states, 35 percent.

	Excellent/ Good	Fair	Poor	Don’t Know	Std. Deviation
Quality of Research	19%	6%	1%	74%	2.614
Service to the Nation	20%	7%	1%	73%	2.586
Sports Teams	51%	6%	1%	43%	3.083
Quality of Education	31%	9%	2%	58%	2.894

N=1057

Figure 6.18: Rating Key Components of LSU Among Adults in the U.S.

Looking at the figure above (Figure 6.18) on how adults rate key components of LSU, what is most apparent is the fourth column (percentage of “don’t know”). These figures are largely consistent with a university with which less than a third (28 percent) of adults indicate any degree of familiarity. The one noteworthy exception, however, is “quality of education” with about a third (31 percent) of adults rating an LSU education as “excellent” or “good.” This is not a statistical anomaly. Respondents clearly demonstrated an ability to simply respond “don’t know” related to other categories tested. Yet the percentage of “don’t knows” drops sharply compared with the top measure (31 percent “Excellent” versus 58 percent “Don’t Know”) in response to this question.

Among respondents who rated the quality of an LSU education as “excellent” or “good” were:

- A third of men (34 percent, n=170), who rated the quality of an LSU education as “good” in stark contrast to 20.3 percent (n=112) of women.
- A third of those with incomes greater than \$100,000 (34 percent, n=94).
- A third of those from the South (34 percent)
- A third from SEC states (35 percent).
- One-fourth of respondents who identified themselves as Christian (26 percent, n=249).

As a relative measure, LSU certainly compares with other SEC or Louisiana schools tested in terms of the quality of education it provides (Figure 6.19).

	Rate quality as Good	Rate quality as Poor	Net Diff.
LSU	38%	3%	+35
U. of Georgia	40%	1%	+39
Tulane	38%	1%	+37
U. of Florida	42%	3%	+39
U. of Alabama	34%	3%	+31

Figure 6.19: How would you rate the quality of these universities?

On the central research question about entrepreneurial universities, the survey revealed strong public support for the concept of research universities (94.7 percent) and for universities engaging in commercial ventures (53.3 percent). Problematic for LSU, however, are the 73.7 percent of respondents who “didn’t know” how they would rate the quality of research at LSU (Figure 6.20). Closer analysis of the means for responses indicates that there is stronger support for entrepreneurial ventures at state universities like LSU and the University of Alabama than there is for universities like Harvard and Stanford, two powerhouse institutions for technology transfers. Does this suggest the

American public thinks state universities should become more capitalistic? Perhaps. Certainly, further research is indicated.

Rating	Percentage
Excellent	4.4%
Good	14.9%
Fair	6.3%
Poor	0.07%
Don't Know/Not Sure	73.7%

Figure 6.20: “How would you rate the quality of research at LSU?”

Discussion

In analyzing public opinion about such a diverse institution as a university, it's useful to establish the knowledge base about the universe studied. While adults nationally know the LSU name, what they know lacks any substantive depth or breadth. Less than a third (30 percent) of adults in the U.S. say they're “familiar” with LSU and that is probably a troubling finding for those promoting LSU as a national-caliber institution. Americans simply don't know much, if anything, about the university that stands behind the initials LSU.

Equally as instructive is that a slim plurality (39 percent) of respondents say they can't hazard a rating or don't know enough to rate the quality of education LSU offers students. A similar percentage (38 percent) of adults rates the quality of education from LSU as “good” while fairly equal percentages rate the quality of an LSU education to the

extremes, either “excellent” (4 percent) or “poor” (3 percent). These findings suggest the university is facing a public opinion chasm when it comes to national awareness of its entrepreneurial and academic efforts. It is a divide that falls along ethnic, educational, and economic lines. Respondents with more advanced degrees who earned more than \$80,000 were significantly less likely to have positive views of either LSU or Louisiana Higher Education. Although the LSU brand is widely known, the results indicate that the university’s national standing as an athletic power is having little, if any, spillover impact on LSU’s aspirations for eminence in research and academics.

Similarly, about a third (31 percent) of adults in the U.S. rate Louisiana colleges as “about the same” as other schools in the U.S. On tuition, better than a quarter (28 percent) of adults say LSU’s tuition rates are “about the same” as other public universities in the U.S., while only 3 percent believe LSU is “more expensive” and a quarter (25 percent) think LSU is actually “less expensive.”

“It’s Louisiana for Pete’s sake”

A more direct measure of how adults view institutions of higher learning in the U.S. comes from asking respondents whether they would consider sending their child to a university in Louisiana. In reply, 14 percent of adults said they “would consider” sending a child to a Louisiana university, while 40 percent indicated they “would not.”

It should be pointed out, though, that most of the 40 percent of respondents who said they would not send a child to a Louisiana university based that opinion on geographic reasons more than academics. Conversely, among the 14 percent of adults who say they would consider sending their child to a Louisiana university, the vast majority (57 percent) cited an academic reason for doing so. While picking a university

close to home was a priority to survey respondents, those who were willing to send their children to a Louisiana school rationalized that decision based on academics.

In the case of the 40 percent of adults who say they would not consider sending their child to a Louisiana university, a third (32 percent) say the reason they wouldn't is simply "it is too far away." By stark contrast, academics are the primary reason(s) offered by those who would consider it: academics generally (30 percent) and specific academic programs leading to a good job (27 percent). At the same time, "poor academic reputation" was noted as a prime reason for not sending a child to a university in Louisiana, a response cited four times more than "danger from hurricanes," which remains a constant threat in South Louisiana.

Verbatim responses volunteered to questions on why someone would or would not send a child to a Louisiana college indicated the state's reputation for crime and corruption was a factor cited by six respondents. "Poor academics and too far away," wrote one participant in the survey. "No kid of mine would go to school in New Orleans," another respondent wrote. "I don't like the element there," said another. "It's Louisiana for Pete's sake," declared yet another participant.

Know Anybody Who Went to LSU?

A further indication of the lack of knowledge among U.S. adults about LSU is evidenced by the 83 percent of adults who say they don't know LSU alumni. What's more, LSU Tiger teams seemingly have done little to further ingratiate LSU into the minds of adults in the U.S. Despite the fact that since 2003, LSU teams have won three national championships in various sports, nine teams finished their respective seasons ranked in the top 10 nationally, and 14 teams have advanced to their respective post

season tournaments, only 11 percent of adults in the U.S. consider themselves “fans” of LSU athletics.

Perhaps a more realistic short-term objective for LSU is in establishing itself as a leading public university in the South. And while a plurality (37 percent) of adults say they don’t know if they’d agree to that description of LSU right now, adults in the U.S. are about four (4) times as likely to agree as they are to disagree with that statement as it relates to LSU—27 percent to 4 percent, respectively.

None of the real core competencies or missions of a university has much traction in association with LSU at this juncture. A solid majority of adults indicates they “don’t know” how they would rate these common missions (research, service to the nation, quality of education) related to LSU while a simple majority (51percent) rate LSU teams as either “excellent” (16 percent) or “good” (35 percent).

LSU Message Testing May Hold

In an attempt to refine areas that represent the best chances for LSU to increase its national reputation, the survey tested a series of 11 message statements intended to enhance the view of LSU as a top university in the minds of adults. Of the 11 statements tested, four stood apart from the rest (Figure 6.21), and really only one demonstrated a strong potential of resonating with U.S. adults in terms of improving the image of the university. That issue was the training of more than 70 percent of the doctors, nurses and other health care professionals who practice in Louisiana. A combined 76 percent of survey participants said they were “more likely” or “much more” likely to consider LSU as a top university because of its record of training physicians and other medical professionals.

Ranking second in salience at 67 percent was LSU's low tuition compared to universities in other states, followed by LSU's operation of Louisiana's public hospitals that treat upwards of two million poor people a year (67 percent), and the involvement of LSU engineers in efforts to rebuild flood-damaged levees in New Orleans (64 percent).

All of the messages concentrated on LSU as a value to Louisiana and the nation such as training doctors, repairing levees, running public hospitals and being a low-tuition bargain at a time when higher education tuition continues to climb nationally. Connecting LSU as having a pragmatic value to the nation seems to have potential to increase the view of LSU as a top-tier university.

LSU Beneath the Surface

The vast majority (60 percent) of adults in the U.S. indicate they have seen, read, or heard something about LSU in the news within the six months prior to the poll. That period includes Hurricane Katrina. Most (78 percent) indicated that what they saw or hear was sports related, while another 50 percent listed Katrina.

Despite the high frequency of news mentions cited about LSU, most people (42 percent) said they're "not sure" of the extent of damage LSU experienced from Katrina. Among the balance, about a third (30 percent) believes LSU experienced "little damage." When studied by gender, slightly more women than men (13 percent versus 10 percent) cited the danger from hurricanes as a reason not to send a child to college in Louisiana.

In terms of the quality of their academic programs, public and private colleges were considered to be "about the same" by a 53.6 percent margin. That was especially true among the 38.3 percent of respondents who rated the overall quality of LSU as "good."

Summary

Findings from this survey indicate that most Americans have little, if any, knowledge about Louisiana State University with the exception of athletics. For a university that aspires to national prominence based on increasing the quality of its research and academics, a finding that indicates nearly three-quarters of the general public knows almost nothing about the quality of either LSU research or academics is a disconcerting discovery. While 50 percent of respondents said they saw, read or heard something about LSU within the six months prior to the survey, much of that finding might be attributable to stories involving LSU's management of Louisiana's public hospitals badly damaged by Hurricane Katrina.

Although it can be argued Americans simply don't know very much about non-athletic LSU, the survey suggests the university could use a number of value-added messaging strategies that might increase public awareness for the university's research and entrepreneurial endeavors. Those include linking LSU to the training of more than 70 percent of the physicians practicing in Louisiana, promoting LSU as a low-tuition, high quality institution, and connecting the university to recovery efforts such as the re-design of the flood protection levees. Results also suggest that LSU, since it is better known and better regarded among respondents in Southeastern states, the university might find a path to higher national recognition by becoming even better known for academics and research among residents of states adjacent to Louisiana, residents who already have a positive regard for LSU research and academics.

Further longitudinal research repeated annually is suggested to better assess any changes in national perceptions of LSU. Additional study also might include focus groups in various areas of the country that test how LSU messages such as TV

commercials, print ads and radio spots register with the American public. In addition, new research might probe specific demographic categories such as the highly educated to measure negative views of the university. Since reputation and peer assessments carry such critical weight in national ranking schemes such as the *U.S. News* rankings, a specific survey of U.S. college administrators might be especially useful. In the absence of additional research, however, LSU's national image remains a blank slate for administrators trying to communicate a different message, especially one that claims LSU is a modern entrepreneurial university worthy of being considered among America's best.

CHAPTER SEVEN: TABULA RASA: PERSPECTIVES AND CONTEXT

Public universities are centers of professional tumult, churning out innovations that generate licensing fees and royalties, but most, as Press and Washburn (2000) reported, are barely breaking even. Schools like LSU are trying to become entrepreneurially aggressive by devising increasingly creative ways to raise revenues. In this chapter, we hear from a university leader and one of the nation's leading higher education consultants. Their comments give depth and context to the survey numbers reported in Chapter Six and shed further light on the financial statistics outlined in Chapter Five. As we will see, those figures show LSU's entrepreneurial performance has been promising but anemic and, in the words of the university's president, "unfocused" because of an apparent lack of long-range strategic planning. In many ways, LSU's entrepreneurial efforts are in the words of the ancient thinkers, *tabula rasa*—a blank slate.

This chapter adds additional elements of the framework for this discussion of LSU entrepreneurial communications by exploring the opinions of two higher education figures—Dr. William L. Jenkins, president of the Louisiana State University System, and Eva Klein, president of Eva Klein Associates, one of the nation's leading higher education consultants. What do Jenkins and Klein think of LSU's entrepreneurial efforts? How do their comments illuminate the organizational and political communication factors discussed in Chapter Two? The Jenkins-Klein comments are frank, usually voiced only behind closed doors or in the amorphous verbiage of

consultant reports. To be sure, some will disagree with their points of view. Their thoughts are worth considering.

We begin with an evaluation of the LSU Flagship Agenda and how the plan has, in Jenkins' words, "ground to a halt." We then turn to a discussion of the state of affairs in Louisiana higher education, which Klein attributes to a failure of vision that is an outgrowth of the state's populist political history. Klein also suggests LSU's technology transfer efforts are misguided, and Jenkins is critical of university entrepreneurial communication, which he describes as "lousy." We conclude the interviews with Klein and Jenkins agreeing that radical change is necessary both for LSU and Louisiana higher education, change wrought in the political and economic upheaval caused by Hurricane Katrina.

Grinding to a Halt

"The biggest challenge has been to try and develop a true strategic plan for our institutions and then to sustain the momentum," said Jenkins. "The difficulty is we never managed to sustain momentum because of budget cuts, and the best example of that is the Flagship Agenda, which has ground to a halt."

Jenkins has been an LSU administrator for 18 years. The South African native came to Baton Rouge after serving as a faculty member in the Department of Veterinary Physiology and Pharmacology at Texas A&M University at College Station, Texas. He became dean of the LSU School of Veterinary Medicine in 1988, Provost and Vice Chancellor for academic affairs in 1993, Chancellor in 1996, and President of the LSU System in 1999. His last two years as president have been turbulent. In February 2006, Jenkins announced that he was retiring. Two state senators claimed in speeches on the Senate Floor that members of the LSU Board of Supervisors led by then board chairman

Bernie Boudreaux forced Jenkins' resignation as part of a move to place University of Louisiana President Dr. Sally Clausen at the LSU helm (Fender, 2006).

Jenkins, who plans to become president emeritus once he steps down, says his biggest disappointment has been resistance by faculty and administrators to setting priorities, trimming unproductive programs and changing the comprehensive, all-things-to-all-people nature of the 150-year-old university. Usually taciturn and reserved, the 69-year-old Jenkins is uncharacteristically direct in evaluating both his own tenure at LSU and the prospects for change. "We should have nimbleness and agility. It's an important part of leadership, and we are absolutely pedestrian at LSU and fixed in our ways," he said.

"We talk well in this state, but if you asked me how much progress has been made in the last 18 years, I'd be honest and say that we're a much better institution than we were; we've identified our strengths, we've made modest progress in some arenas, but we've never had the guts and the will to really focus on our premier priority programs and that's a Louisiana failure. We've tried to retain everything and yet say we want to establish our priorities. We're stuck." Even the man who initiated the Flagship Agenda agrees that the process was never meant to be easy. "We intentionally set very ambitious goals. I think they were appropriate," said Dr. Mark Emmert, former LSU chancellor and current President of the University of Washington. "LSU doesn't belong in the third tier; it's a much better university than that" (Emmert in Sternberg, 2006). What accounts for such ambitions falling short?

A Failure of Vision

Jenkins points specifically to the LSU College of Engineering, a school he says should be at the forefront of the school's entrepreneurial efforts. Instead, he says,

“Engineering is an absolute disgrace. The Electrical, Chemical, and Computer Engineering Department is so far behind its (national) peers that it’s pathetic.” He blames that failure not on money, but “poor leadership, no vision, and no ability to truly develop strategic, measurable objectives.” Part of the problem, he says, are personality conflicts among some department personnel, a view confirmed by a 2005 University Planning Council (UPC) evaluation of the mechanical engineering department. “If any department has committed suicide on this campus, it is mechanical engineering,” said one UPC member. “There has been a civil war going on among the department faculty for years.”

Instead of concentrating on producing engineers for corporations that “don’t give a damn whether we’re doing chemical engineering or petroleum engineering,” LSU, Jenkins said, should be focused on developing a Coastal Engineering department that he contends could “lead the nation” in coastal restoration and research.

Klein, meanwhile, is founder and president of Eva Klein & Associates. For 30 years she has worked with universities and not-for-profit entities on strategic management, planning and financing for higher education in developing knowledge-based economic development. Holder of an MBA from the Wharton School at the University of Pennsylvania, Klein has worked broadly on a number of Louisiana higher education projects and with clients both in the U.S. and overseas to develop research parks and business incubators.

“Government in Louisiana still carries all the strong characteristics of the states’ populist history,” she said. The thinking is “we got \$30 and 30 colleges so we’re going to give one dollar to every college. The people who are in positions of authority are still living in the industrial economy; they still remember more than they should remember

about oil and gas. They don't yet get it that the future isn't going to look anything like the past." To Klein, the future for higher education will see colleges faced with a choice: get integrally involved in economic development or go out of business. "You get a lot of people, high-powered people, who have learned how to talk the talk, but they don't yet know how to walk the walk. They have only learned the talk part, not the walk part."

Jenkins blames that sluggishness to change on Louisiana's notoriously corrupt political atmosphere and on the state's history of paying lip service to higher education. "It's a cultural thing," he said. "We never had the salary raises we should have had, and we never truly rewarded our outstanding faculty." With the exception of research efforts at the Pennington Biomedical Research Center, the LSU president says LSU's entrepreneurial efforts are lagging. "We're not competitive. In fact, we've become a little delusional; we've become spoiled as a faculty. Opportunities abound, yet we have not capitalized on them." And, he said, LSU should begin setting priorities by closing departments. "We don't have the intellectual fortitude to say we're going to shift your funding; we're going to close you down; we're going to reduce you to an academic service function. The only way we'll survive is to truly prioritize and select where we can make a name for ourselves."

Keeping Up with the Market

Klein believes retarding technology development (she doesn't use the phrase technology transfer) by putting up protectionist legal walls around innovations is misguided. "Patenting is less important sometimes because an idea doesn't have three years to prosecute a patent before the market takes it over and bypasses it. Sometimes speed to market is much more important than protecting intellectual property." For entrepreneurial universities that want to maximize their economic impact, Klein suggests

universities give away innovations. “If we’re weighing whether we should give it away to a local company that is willing to commercialize it or spend time patenting it in hopes that one day Japan will buy the license, then you give it away. You have to think differently about what we should do to change our economy as opposed to how many dollars of license income do I get to report to the president this year?” Is it just a matter of money? Klein says, no. “If you give an infinite amount of money to universities, they will use an infinite amount of money. More money is good, but not just thrown into some mushy pot. It’s got to get focused.”

Both Klein and Jenkins believe lethargy also is a big factor in pursuing entrepreneurial efforts. Jenkins remembered being shown a newly built gene therapy lab at the LSU Health Sciences Center shortly after the Louisiana Legislature in 1988 approved a technology transfer enhancement measure that allowed university professors to take equity stakes in companies that were developing their discoveries. The “lab” was one small room, housing one researcher. “That one lab, that one guy, that was LSU’s entire gene therapy initiative,” Jenkins said. The university in 2006 operated a technology center on the main campus, but technology efforts systemwide although encouraging remained weak, as consultant Carla Fishmen (2005) reported. For more information on LSU technology transfers, see Chapter Four).

Klein attributed sluggish entrepreneurial sentiments at LSU to the culture of traditional higher education in the United States. “The culture of the university,” she said, “is that we don’t like to pick winners. We don’t like to write strategic programs that say ‘the following six programs are where we’re going to invest our loose money in the next ten years and everybody else is going to be kept at status quo. We don’t like to do that because the people in the engineering department go a little nuts.’”

LSU officials experienced that reaction in the fall of 2005 when it reevaluated its ten so-called Foundations of Excellence programs that had been given \$4.5 million in enhancements for faculty salaries and recruitment of top graduate students. A committee of LSU academicians (The University Planning Committee) cut the number of programs from ten to seven with LSU Executive Vice Chancellor and Provost Risa Palm declaring that “as LSU strides towards national prominence, we need to identify the early leaders, those units whose strengths can become the basis for an ever-strong faculty and curriculum.” LSU Chancellor Sean O’Keefe said in a news release that “At a time when we’re demanding that incoming students meet higher academic standards, it is appropriate that we raise the bar for our own departments in advancing LSU’s National Flagship Agenda goal of creating a world-class, public research university.”

Lousy Marketing?

What about liberal arts in this age of commercialized knowledge? Jenkins says that while Liberal Arts are “fundamental,” the focus of research universities today must be on science and engineering. “So far, we have not been very successful entrepreneurially,” he noted. Part of the problem, he said, is attributable to the university’s “lousy” marketing and communication efforts. “We sell ourselves by showing our sports programs, the Memorial Tower, crawfish and dancing. Those images have separated us from everyone else, but if I was a parent, I’m not sure I’d be interested in seeing crawfish and dancing and music.” Jenkins said he would prefer a marketing campaign that concentrates more on showing people in goggles in labs running experiments, and he concedes that relatively small amounts of money have been spent on communicating the entrepreneurial LSU. That leaves coverage of LSU sporting events as the lone ways LSU reaches national audiences. “We’ve done a lousy job of marketing

and let's be honest about that, he said. "When I wear LSU regalia, everyone speaks to me, but it's about athletics. They know us, but it's about athletics."

A messaging change is high on Klein's list of recommendations for Louisiana and LSU, a message that declares "war on illiteracy" and emphasizes the power of education. "The message needs to be about learning," she asserted. "The world is a different place and having wealth and prosperity today means having high skills and knowledge. Nothing is more important than learning."

Both Jenkins and Klein, who studied operations of the LSU Health Sciences Center in Shreveport, recommend reevaluating LSU's operation of ten public hospitals that account for more than two-thirds (68.6 percent)⁶⁸ of LSU's \$3.1 billion annual budget. "It's an enormous enterprise and we're acting like it's the French Department except with another couple billion dollars," Klein said. "We gotta change. We gotta say we did it that way for 150 years but that way doesn't work anymore. Jenkins says LSU assuming control of the Charity Hospital system in 1997 was a mistake. "It's so time consuming because of the political ownership of those hospitals," Jenkins said. "It's time consuming; it's a drain on us and it's going to become more expensive."

A study compiled by Price Waterhouse Coopers for the Baton Rouge Area Foundation concluded that public hospital management is not a part of the LSU mission (Louisiana Recovery Authority Health Care Task Force, 2006). The study called for reorganization of the LSU's Health Care Service Division, which operates the public hospital system, including taking away control of the hospitals from LSU, and realigning Louisiana's medical education system with a larger number of resident physicians assigned to rural areas in Louisiana.

⁶⁸ Source: LSU Health Care Service Division.

Jenkins, who said he believes LSU should concentrate only on having two or three academic teaching hospitals, tacitly endorsed the recommendations. Being involved in the hospitals has amounted to a “slow exsanguination, a downward spiral financially,” he said, adding, “We’re headed for a terrible time.” Klein was not so quick to agree, however, pointing to the LSU-run hospital in Shreveport as a model of how to provide top-notch medical treatment and graduate medical education. Klein’s (2005) report examining the possibility of merging LSUHSC and LSU Shreveport, a merger that was in the end deemed unworkable, cited the essence of her philosophy about where LSU and Louisiana Higher education should be headed:

It is clear that a public university with a comprehensive array of higher education programs and a strong commitment to serving this urban center and its surrounding region is needed. Such a university’s assets would include greater enrollment, more diverse programs, and substantial, direct engagement in supporting regional strategies for economic growth. Because human capital is the seed corn from which the Knowledge Economy grows, the absence of such an institution hinders efforts to grow the regional economy. This, in turn, hampers the State’s economic success (Klein, 2005, p. 1).

Summary

What will prompt change in Louisiana? Based on interviews with Jenkins and Klein, both agree the economic and social upheaval inflicted by Hurricane Katrina could be the catalyst that sets education change in motion. Jenkins and Klein agree that LSU and Louisiana higher education should be restructured. Klein specifically cited the university’s operation of public hospitals, saying the continued management of the facilities by LSU should be re-evaluated. What, however, will be the impetus for what both Klein and Jenkins agree should be a fresh start on a blank slate, a *tabula rasa*?

Toward the end of her interview, Klein recalled her days as a graduate student. One of her professors at the Wharton School repeatedly used the French word “inquiétude” (anxiety) to describe the most efficient way to prompt a strategy change. “He used to say that the first thing to understand about strategy is that no one does it unless they’re experiencing “inquiétude.” Hurricane Katrina, she said, was exactly that kind of trigger. “That is the right moment for strategy to be determined,” she declared.

“There is a silver lining to that Katrina cloud if we choose to make it so,” Klein said. “We could use this inquiétude for really thinking freshly about what we’re doing in dealing with health care and higher education in the whole state. If we do, that then Katrina would have served a great purpose other than just devastating lives. It would be a reason to think about the future in a new way. But Klein cautioned that Louisiana won’t change until it elects the kind of leadership that says, “Enough of this old crap. It’s a new day; it’s a new economy; it’s a new set of challenges. I don’t give a flying, flaming hoot how we used to do it. We’re doing it differently now.”

Jenkins and Klein agree higher education in Louisiana should be carefully studied and resources positioned where they can best impact economic development. Both suggest that may involve closing colleges and realigning academic problems, but the two stress nothing should be done hastily. To Jenkins, it’s a matter of tabula rasa: “We should wipe the slate clean,” he said. “What we’re doing now is bizarre.”

CHAPTER EIGHT: CONCLUSION: IN SEARCH OF A MESSAGE

Niccolo Machiavelli, in the spring of 1521, was dispatched on a mission to convince a group of friars living near Carpi, Italy, that they should separate from their order. While visiting the monastery, he got a note from Francesco Guicciardini, then governor of Reggio and Modena, who, tongue n'cheek, warned Machiavelli against the air of Carpi, which, Guicciardini wrote, had a reputation for turning men into liars. Machiavelli replied there was nothing new he could learn about lying, adding: "I have never said what I believed, nor ever believed what I have said; and if it sometimes happens that I tell the truth, I conceal it among so many lies that it is hard to find it" (Hale, 1961, p. 205).

Defining a credible and effective message for its entrepreneurial efforts appears difficult for LSU to articulate, based on the findings of this dissertation. Any claim by LSU to being an entrepreneurial university could be challenged by the facts, especially the university's anemic performance compared to many of its public peers in producing licensing and royalty fees from technology transfers.

In fairness, notions of entrepreneurial universities represent multiple phenomena and are difficult to pin down. The concept embraces market mechanisms in university administration, explaining concentrated participation of academics in technology

transfers (Slaughter and Leslie, 1997), and many attempts by universities to reform themselves (Clark, 1998). Henry Etzkowitz (2002) observed that the entrepreneurial university is a new type of institution, which is evolving as a result of the intense interaction among the previously isolated spheres of the university, industry and government.

As Etzkowitz also asserted, the overlapping of institutional realms has created a new knowledge infrastructure that supports the emergence of hybrid organizations and multi-level collaboration networks, as universities are molded into entrepreneurial entities characterized by a new mission for higher education in addition to direct contributions to the local, state, and national economy (Etzkowitz and Leydesdorff, 2000, pp. 109–111).

LSU, like much of American higher education, is in the throes of a gestalt switch. Economic activity has been integrated into the university as an academic function, almost equal to teaching and research (Etzkowitz, 1998, p. 833). In effect, many universities now function as business incubators that foster new business ventures. Around this change has risen a culture of resource dependence that tries to maximize resources while creating ways of communicating new knowledge as integral to generating licensing and royalty fees from the sale of intellectual property. Many of these techniques encompass communication strategies borrowed from corporate America.

Theoretical Retrospectives

Theoretically, from a structural-functional standpoint, entrepreneurialism is implicitly affecting the voice, rationality, organization, and organization-society relationship of LSU and other universities in the ways they communicate with internal and external stakeholders. In fact, the classic, historical narrative of university development as a social construction seems to be at a turning point. What, however, does

this study contribute to the theoretical understanding of entrepreneurial communication?

As this dissertation delineated, organizational knowledge creation theory appropriately describes how universities are making available and amplifying knowledge by crystallizing and connecting it to the university's knowledge system, administration, and technology management.

Applied to entrepreneurial universities, knowledge creation theory can be understood as a continuous process through which universities overcome individual boundaries and constraints imposed by information and past learning by acquiring a new context, a new view of the world and new knowledge within a university setting. That is perhaps the practical contribution of this work. Theory, after all, essentially explains how the world works, as James Carey noted when he wrote of communication theory, "We not only describe behavior; we create a particular corner of culture—culture that determines, in part, the kind of communicative world we inhabit" (Carey, 1989, p. 32).

Academic entrepreneurial communication is an evolving field that applies techniques from the corporate world to academe, but is, as theorist Robert Craig once observed, "not identifiable as a field yet" (Craig, 1999, p. 119). Where corporate vision and the organizational culture provide the knowledge base from which to tap tacit knowledge, technology generated by university faculty draws on the explicit knowledge in the organization (Nonaka and Takeuchi, 1995) to produce a new way of generating and then dispersing information about innovations.

Techniques of entrepreneurial communication may become a discipline that at its simplest studies the basic communication processes of capitalist universities. Consequently, knowledge creation in either a corporate or academic setting can be regarded as moving up through different organizational levels, from individual to

communities and larger networks as it spans sectional, departmental, divisional and organizational boundaries (Swan et al., 1999). Knowledge creation therefore is shared knowledge, which as a construct, is the kernel upon which academic commercialism is based.

The evolution of entrepreneurial communication has emerged as a distinct intellectual topic in the same way that electrical engineers Claude Shannon and Warren Weaver first used mathematics to analyze telephone signals to create a technical vocabulary of information transmission and feedback that was adopted by social scientists and which now commonly defines symbolic, interactive processes in virtually every field of social practice, ranging from business communication to politics, and family interaction. Academic entrepreneurialism is a field in search of a paradigm.

Much of the impetus for academic capitalism at LSU springs from the necessity of being forced to make up state government under-funding. In an almost textbook application of resource dependence theory that couples the drive to preserve dwindling resources for the long-term survival of the organization (Pfeffer and Salancik, 1978), this dissertation asserted that knowledge creation and resource dependence theories provide meanwhile a useful theoretical framework for conceptualizing university entrepreneurialism.

This dissertation traced the history of entrepreneurialism among American higher education institutions, pointing out that most academic efforts to commercialize knowledge follow one of five prevailing models for technology transfers and economic development (R_1). LSU primarily has used the extension service, Research Park, and business incubator models with sporadic success, it was observed.

On a related note, most of the university's technology transfer endeavors have produced only incremental revenues, generating licensing and royalty fees that, in some cases, fall far short of royalty and licensing fees generated by LSU public peer institutions.

Also assessed was the impact of college rankings that annually rate colleges and universities. Those publications habitually place LSU among the nation's Third Tier institutions. Despite criticism that the rankings are subjective and employ flawed methodology, the evaluations continue to heavily influence universities such as LSU in the quest for elite status, which administrators insist attracts higher quality students, more distinguished faculty, and a larger number of research grants.

The restrictive structure of higher education funding in Louisiana serves indirectly as an impetus for entrepreneurial activity, but external stakeholders, especially political actors, have a significant impact on what the university can accomplish (R₃).

Complicating the picture is spending for Medicaid, which is roughly five times larger than spending for higher education in Louisiana. National higher education leaders contend increases in federal Medicaid spending are being drawn from money that would otherwise go to colleges and universities.

Turning to LSU's National Flagship Agenda, a motivating factor in spurring entrepreneurialism is the seven-year plan aimed at boosting LSU's national academic reputation. However, the failure of the university to hire additional faculty and attract a larger number of graduate students appears to have stalled the initiative, in the view of the LSU System President Dr. William Jenkins.

Jenkins was joined in his critique of LSU and Louisiana higher education by education consultant Eva Klein, who believes the time has come for Louisiana to "erase

the slate” and restructure higher education as a way of becoming more competitive in the new “knowledge economy.”

Analyzing current LSU messaging, this dissertation suggested substantial content distinctions in campaigns for LSU and the University of Houston. Those differences came in messaging strategy.

LSU content was stylistic, colorful, and quick-paced, stressing the university’s athletics, campus facilities, and arts, but the University of Houston’s promotional material touted the university’s research activities, its world-class scientists, and the connection between a UH degree and getting a good job. Where the University of Houston stressed value, LSU sold flashy aesthetics (R₄).

There was no direct mention of entrepreneurial endeavors in any LSU advertising or promotional materials, in sharp contrast to the UH campaign, which highlighted UH researchers and their work. This dissertation found (R₇) that LSU’s current communication campaign promoted messages that do not emphasize entrepreneurialism as pointedly as a regional peer institution that is more successful in attracting research dollars and producing licensing and royalty income.

The centerpiece of this dissertation was the LSU National Image Study, which revealed that the American public has an awareness of LSU athletic accomplishments, but knows very little about the university’s academics and research (R₂). For a university with national academic ambitions, this is a problematic finding.

The survey also tested a series of potential messages (R₅) that highlighted LSU-related activities. If used, those messages, which stress LSU’s value to the state and nation, such as training doctors and studying the collapse of levees in New Orleans, show potential for boosting the view of LSU as a top university (R₈).

Increasing LSU's academic reputation is being hamstrung, the dissertation suggested, by chronic under-funding from the state, forcing the university to seek additional revenues through entrepreneurial ventures. The roles of tuition and fee waivers along with the state's TOP's Scholarship in pressuring the university system financially were also discussed, particularly the ironic twist that the scholarships and fee waivers, designed to attract higher quality students, are costing LSU increasing amounts of money as a higher class of student enrolls. Technology transfers are falling short of producing revenues comparable to LSU peer institutions.

At the same time, messages in the current "Welcome to the Now" campaign, are not stressing the university's entrepreneurial messages. This is despite the fact that the national image study conducted for this dissertation suggested that messages that stress LSU's value to the state and nation stand a greater chance of improving the public's view of LSU as a top institution.

What do we make of these findings? Clearly, they represent a call for action in refining LSU's entrepreneurial communications.

Finding the LSU Hot Buttons

Political consultant Bantley Davis, executive vice president and managing partner of Davis & Company, an ad agency and public relations firm that represents issue-oriented organizations, says that "identifying a critical target segment's hot buttons and articulating a creative message in a way that compels the target to favor your side of the issue" is critical in crafting an effective communication campaign (Koons, 2005).

The most effective way to do that, Davis contends, is to employ "creative magic" by drawing people into a communication emotionally when they don't know it's happening. This type of communication often takes risks and initially makes people a

little uncomfortable. How does LSU accomplish that with its entrepreneurial ventures and innovations in ways that best nourish the university's capitalist objectives?

Recommendations:

Based on this study, it's recommended that LSU in communicating knowledge while conserving resources, LSU adopt a series measures that are expansive attempt to capitalize knowledge generated by the university. Suggested steps include:

- 1. Re-crafting LSU's messaging strategy, highlighting content that emphasizes the university's value to the region and the state.**
- 2. Concentrate on building the university's reputation regionally where the survey indicates LSU enjoys higher recognition for its research and academic activities.**
- 3. Seek to modify existing state laws that restrict the university's tuition policies, allowing LSU institutions to set their own tuition policies.**
- 4. Study gradually increasing academic qualifications for the TOPS program and reducing the amount and number of fee waivers, especially for out-of-state students.**
- 5. Allocate sustained funding for university communication efforts in reaching regional audiences with LSU entrepreneurial messages.**
- 6. Unify LSU external communication efforts to arrive at a unified messaging strategy that encompasses all 11 LSU System institutions and their technology transfer endeavors.**
- 7. Intensify economic development surrounding research projects such as the obesity research under way at the Pennington Biomedical Research Center and transgenic projects being conducted by LSU AgCenter scientists.**
- 8. Create a centralized marketing effort for technology transfers that serves all LSU institutions.**

The Rationale Behind the Recommendations

Re-crafting LSU's messaging strategy is expensive, perhaps too expensive to

attempt on a national basis. Currently, LSU's only national media advertising comes from donated ad space in select national magazines, or, the free broadcast of its "Welcome to the Now" spots during nationally televised football, baseball, and basketball games.

The spots, however, as this dissertation noted, may be emphasizing the themes that are wide of the mark, especially in the Southeastern and Southwestern U.S. where public opinion of LSU academics and research is higher than in other parts of the country. Efforts to improve the university's reputation might be more productive closer to home in states within the region with a possible spillover effect to other parts of the country.

Changing Louisiana laws to remove restrictions on university tuition increases appears to be significantly more problematic. Attempts to win approval for tuition hikes in two successive sessions of the Legislature failed to get out of committee. A more successful approach might be to either increase academic qualifications for TOPS scholarships, or, means test recipients along with reducing out-of-state fee waivers that currently account for millions of dollars a year. Both measures, while politically difficult to achieve legislatively and doubtlessly unpopular with voters, could result in improving the flow of revenues to the university by reducing the number of students with TOPS exemptions.

More likely is that the university could improve its regional and then national reputation by allocating foundation revenues to entrepreneurial messaging. State law forbids spending tax dollars for advertising. As a result, non-state funding must pay for any advertising. Those messages, this study suggests, should be built around a uniform theme that encompasses all LSU System institutions, especially highlighting the

development of innovations and how that knowledge creations benefits Louisiana. A big part of that effort should include tying the discovery of innovations with economic development at system institutions that lead the university in technology transfers such as the LSU AgCenter and the Pennington Biomedical Research Center. One way to do that is the creation of a centralized marketing operation designed to get out the word via a website and other promotional efforts.

The pressure to convert innovation to revenues has prompted LSU leaders, like university officials throughout America, to try to decipher the dynamics of innovation in deciding how best to use the human capital on their campuses as knowledge factories that apply scholarship while producing innovations, revenues, and jobs. In many ways, LSU is a latecomer to the competition.

Indications are the battle will get tougher. Industry support for academic research in science and engineering fell for the third straight year in the 2004 fiscal year, according to a report by the National Science Foundation (2006).

LSU ranked 76th in a list of 100 colleges with industry funding of more than \$112 million in company-paid research, an 11 percent increase in government financial support over 2003 (National Science Foundation, 2006, p. 1). The drive to increasing revenues comes at a critical time for LSU because the university lags its national peers in technology transfer revenues. A number of potential solutions should be considered, solutions that are designed to maximize resources while income from entrepreneurial ventures increases revenues to the university. None of these solutions will be easy to achieve. In fact, many are virtually impossible, considering the current state of Louisiana politics. Nonetheless, the following should be considered in light of these findings:

- 1. Divert the bulk of the state's higher education support to its flagship campus while the state's 11 other four-year schools and its vocational-technical system get less. That is considered to be a tough sell politically.**
- 2. Privatize its parts. Under such a plan, the law school, business schools, medical schools, and other professional programs would receive no state funding. In return, they could charge market rates for tuition.**
- 3. Adopt a so-called "higher fee, higher aid" model in which the state dedicates substantial increases in funding to the flagship campus while allowing LSU freedom to set tuition and fees. Doing that would mean repeal of the state law that gives the Legislature ultimate control over setting tuition.**
- 4. Jettison smaller campuses and all seven of ten public hospitals to reduce expenditures, concentrating revenues instead on academics and research that shows promise in generating revenues on the main campus in Baton Rouge, the LSU AgCenter, and the Pennington Biomedical Research Center, which collectively represent the majority of existing technology transfer licensing and royalty revenues.**
- 5. Eliminate red tape involved in licensing innovations and speed up the marketing of patented technology**
- 6. Centralize and fully fund technology transfer operations staffed by experienced tech transfer officers.**
- 7. Fund marketing of innovations by creating websites that promote the sale of new technologies.**
- 8. Sell LSU academics and research by advertising the idea that good things are happening at LSU.**

In the same way that unchaining tuition policy is a tough sell politically, diverting the bulk of the state's higher education support to LSU is also unlikely. LSU already receives significant funding from the state. Its best hope to achieve national prominence may lie in adopting a so-called high-tuition, high-funding model.

As UCLA Chancellor Albert Carnesale (2006) advocated, under the high fee-high aid model, the university will continue to get state support and charge higher fees, but less than the average fees of private institutions across the country. LSU tuition might

still be a comparative bargain, a point that was attractive to respondents in this survey. Tuition increases would be used not only to supplement increased state support but also to maintain and enhance quality.

The upshot of the AGB study of the LSU system and the comments of administrators like Dr. William Jenkins, and consultants such as Eva Klein, is that LSU is trying to do too much. As an institution, critics contend the university is clinging to a comprehensive model of higher education that is no longer useful.

Administering the state's public hospital system consumes, as the AGB consultants noted, almost three-quarters of the LSU system budget and most of its time. "The presence within the system of the state's health care delivery system—with all of its technical and legal complexity and its political ramifications and opportunities—has demanded so much time as to make many wonder whether the LSU System is a system of higher education or a system for health care" (Novak and Weary, 2006, p. 7).

The problem, as the educators noted, was that disparate components of the LSU system have continued to grow and change without a shared vision of "an effective, system wide strategic plan" (p. 8). That lack of unity is seen in the very Flagship Agenda, which was designed to lift the main campus to national prominence. Does the plan apply only to LSU, or, to the LSU system?

The answer remains unclear, as Novak and Weary concluded. That confusion, however, directly impacts LSU messaging, as this dissertation contends. Does jettisoning smaller campuses and the hospital system lead to a streamlined system that focuses solely on academics and research?

In many ways, LSU faces a political marketing problem that will require applying many aspects of a political campaign to make its case to the citizens of Louisiana and by

extension, the nation. Successful entrepreneurial universities today have a market orientation that resembles many corporations. They constantly engage in creating value for their customers. In the same way that marketers anticipate their customers' needs and constantly develop innovative products and services to keep their customers satisfied, LSU should try to constantly create value for its stakeholders by improving the quality of life by producing the most benefit at the lowest cost and then telling people about it.

Reinforcing Worth; Making the Case

LSU's messaging will be improved, the evidence from this dissertation indicates, by reinforcing the university's worth as an academic and research institution that generates innovations and leads regional economic development. The key, as Harvard University professor Henry Chesbrough (2003) emphasized, is for companies to partner through joint ventures with institutions like LSU to create what Chesbrough called "tablets"—small research facilities built by corporations—adjacent to top university research centers instead of at company fabrication facilities.

Under the concept, a university faculty member, who is on academic leave and is not a permanent employee of the corporation, leads each tablet. The company does not own the output of the research, but hopes to benefit by being connected more closely to leading academic research and gaining early access to promising technologies.

At LSU, Chesbrough's concept for the knowledge-based economy is largely embodied in the construction of wet-lab incubators on campus under the premise that skilled people, not computers or other technology, are the fundamental source of the innovation that drives the economy by increasing human capital. Such a concept was recommended in the little-noticed 1994 Center for Geopolitical Studies report on creating entrepreneurial ventures in Baton Rouge. Consultants recommended creation of a

petrochemical research park because of the university's expertise with petroleum engineering education and the heavy concentration of petrochemical plants in South Louisiana. No action was taken on that recommendation.

LSU's current technology transfers in agriculture and biosciences represent perhaps the best opportunities for reviving the lablet concept and promoting the university as an entrepreneurial leader. LSU AgCenter scientist Richard Cooper, for instance, has come up with a way to get chickens to lay eggs that contain human proteins. The new company that resulted from his discovery, TransGenRx, is busy working on a way to make insulin with transgenic chickens. So far, Cooper's flock of White Leghorn chickens show the potential for earning millions of dollars for LSU, continuing a stream of royalty and licensing revenues that has been dominated by agricultural research.

Harvard economist Edward Glaeser has provided empirical evidence that firms gather in particular regions to gain advantages from common labor pools (Glaeser in Florida and Gates, 2002). Nobel prize-winning economist Robert Lucas maintains that the driving force in the growth and development of cities and regions can be found in the productivity gains associated with the clustering of talented people (Lucas in Florida and Gates, 2002). Problematic for LSU are patterns of metropolitan growth driven by an apparent concentration of college graduates.

The Brookings Institution reported that among the country's 100 largest metropolitan areas, the 25 that had the most college graduates in 1990 saw their graduate populations double by 2000. In almost every case, cities with large concentrations of college graduates also attracted large numbers of research ventures attached directly or indirectly with neighboring universities.

Another report found young talent in the United States is streaming into 20 “cities of ideas,” including Atlanta, Boston, Denver, Minneapolis, San Diego, San Francisco, Washington, Boise and Raleigh/Durham (Florida and Gates, 2002, p. 8). In short, the new muscle of the U.S. economy is converging in just a few regions, places where “work is smart, the culture is cool and the environment is clean” (American Association of State Colleges and Universities, 2006, p. 13).

The AASCU (2006) report on entrepreneurial universities observed the evolution of so-called “smart regions” requires leadership from regional “stewards of place” (p. 18) focused on maintaining economic growth.

Douglas Henton (2004) wrote that finding these stewards must require individuals and institutions committed to and actively working for the long-term economic and social successes of their locales—advocating for it, nurturing it, seeking to solve its problems and improving its prospects. This, he said, would result in the creation of a modern-day academy much like that of Plato’s academy and Aristotle’s lyceum that linked “principles with practice, reflection with action” (p. 243). Such a call to civic responsibility was embodied in the missions of America’s earliest colleges such as Yale and Princeton and was the rationale behind the Land Grant Acts that established LSU.

John W. Gardner, former secretary of Health, Education and Welfare, once wrote that most Americans welcome the voice that lifts them out of themselves. “They want to be better people,” he wrote. “They want to help make this a better country. Awaken them to what *they* can do for their country, the country of their children and their children’s children” (Gardner in Henton, 2004, p. 243). LSU is faced with awakening its entrepreneurial voice in lifting itself to higher national recognition while increasing revenues from its innovations.

Pathway for Aspirations

Universities that target national prominence have been forced to compete aggressively for survival in the face of skepticism among internal and external stakeholders through the use of expensive, forward-leaning public relations efforts that, in the case of the University of Houston, cost more than \$5 million. LSU has been badly outspent in its marketing efforts, relying instead on donations from the LSU Alumni Association and the LSU Foundation. For the most part, however, much of the current LSU effort seems to be a blend of sameness—similar messages, similar billboards, similar television commercials—in an apparent admission that LSU cannot admit that it is not good at all things, that it is not capable any longer of being all things to all people.

During the 2005-2006 college football bowl season, for instance, LSU like 56 other universities “sold” itself with free 30-second institutional commercials, aired mostly at halftime as part of the college football television contracts (DeBonis, 2005). The *mise-en-scène* of the spots included the usual quick cuts of greenery, one-on-one pedagogy, chemistry labs along with black gowns and mortarboards. The messages were repeated during LSU’s appearances at the NCAA Final Four basketball tournament in 2006.

Yet among a growing number of entrepreneurial universities, a different pitch is emerging. In an ad for Virginia Tech, the university is depicted as the kind of place where you’ll be hoisted up by a cheering throng while wearing a lab coat and holding an Erlenmeyer flask. Another spot for Florida State University features one of the university’s scientists. “Think you know Florida State University?” asks Dr. Greg Boebinger, director of the school’s National High Magnetic Field Laboratory.

The spot goes on to re-educate those who perceive FSU as little more than a

haven for over-aged quarterbacks. There's the 900MHz Ultra Wide Bore magnet, the commercial says, "an unrivaled scientific marvel that's yielding important discoveries in chemical and biomedical research," declares Boebinger, leaving unsaid the real message: discoveries that are for sale. Recognition is growing nationally that university messaging must embrace more entrepreneurial themes.

Fad or Future?

Current arguments over entrepreneurial universities recognize different points of view. Some critics contend the trend is "another in a long line of educational fads" (SRI International, 1986, p. 9). Others suggest exploitation of higher education for economic development purposes is "improvised and shortsighted" (p. 113).

Cote and Cote (1993) found traditional faculty expectations for research and teaching are seen as an essential impediment in that "governors can speak and university presidents can promise, but until the reward structure is changed, the faculty won't budge" (p. 34). That structure, however, is changing rapidly. It is a cultural shift as profound as any in the history of higher education.

That shift also is under way at LSU. The LSU System, according to figures compiled by the National Association of State Universities and Land Grant Colleges, was awarded \$112 million in competitive grants and contracts in 2004. The Louisiana Business and Technology Center is serving more than 300 small business clients annually and is home to 27 high-tech companies. During the past 10 years, 3,200 jobs have been created by businesses incubated at LBTC, adding more than \$28 million to the state's economy and producing \$3.5 million in taxes.

Unsettled is what happens at schools like LSU that are increasingly deemphasizing the liberal arts in a push toward capitalizing knowledge. Where do young

people looking for a well-rounded education and not just a good job go? What about those who want to enjoy the cultural aspects of collegiate life while developing lifelong friends? Is American higher education headed toward increasing segmentation in which exclusively professional universities evolve, replacing today's comprehensive institutions?

The rise of entrepreneurial universities, according to John V. Lombardi, chancellor of the University of Massachusetts at Amherst, comes at a time when the public tax-supported percentage of public university budgets has been in decline for more than a decade, even though the public investment in public higher education in total dollars continues to rise as more and more students enter postsecondary education (Lombardi, 2006). "Higher education is both a public good and a private good for most of its participants," Lombardi wrote. "Students in particular may attend college for wisdom and knowledge, but primarily they attend college to acquire the skills and credentials needed for the good life" (para. 8). That has been the essence of American higher education since the Revolutionary War.

Entrepreneurial exuberance seems justified on the surface. After all, universities annually earn millions of dollars in licensing revenues. Florida State University has earned more than \$200 million from patenting Taxol; the University of Florida has earned more than \$80 million on Gatorade; and the University of California earns \$3 million a year for a variety of strawberry (Powers, 2006).

LSU's licensing and royalty figures are growing but the university's entrepreneurial communication efforts have failed to penetrate the national conscience. As a result, LSU is a tabula rasa, blank slate, ready to write its own story on the national stage. Aspirations of achieving national academic prominence comparable to Harvard,

Stanford or MIT appear to be a goal currently beyond the grasp of LSU. There is no shame, however, in not being Harvard. LSU has a number of exceptional scholars, research scientists, and academic programs that consistently draw national recognition.

Matchless Institutions

Universities, like the people who create them, have life histories that are distinctive and matchless. Educational researcher Irving Lorge, who developed the Cognitive Ability Test, used to point to those things that help people to “think otherwise,” to look for other perspectives (Cooper and Fisher, 1982) in producing breakthroughs in science and industry. LSU’s challenge is to think otherwise, to touch the values that Louisianans and Americans cherish, connecting the university’s entrepreneurial ambitions to the hopes of the state and nation.

Universities of the 21st century are capitalizing on millennia of learning about the whole human experience in the advancement of knowledge. Accepted wisdom about the commercialized academy holds that large research universities like LSU have been marketing knowledge-based innovations for generations, creating new knowledge expressed in scientific, artistic, and professional forms. Communicating LSU’s entrepreneurial goals, however, requires that LSU adjust nimbly to marketing those innovations and the changing nature of the academy by adapting the language of America’s new knowledge cities. Can that spirit go too far? Are financial interests clouding institutional or faculty judgment?

Critics have argued that allowing business to support research and control publication of innovations, using students as cheap labor, and skirting close to the line on ethical conflicts is threatening academic integrity, which is the very basis of the research university. As University of Indiana Professor Joshua Powers pointed out, “Academe

may get away with ethical violations for a time, but they will eventually erode the public trust and jeopardize far more than just revenues from patents. That sort of behavior ultimately threatens support for federal research grants and state appropriations, and is likely to lead to new federal and state regulation of academic institutions” (Powers, 2006).

More fundamental is what should LSU do to communicate its entrepreneurial ambitions while guarding against a tendency to see faculty as a labor force, knowledge as a product and education as an industry, as veteran college administrator Catharine Stimpson observed (2006). Is higher education to become subservient to corporate values and a zealous fascination with profit?

The rhetoric surrounding entrepreneurial universities is wrapped in the common sense notion that the future of any university is dependent on the economy in which it is embedded as a modern-day incarnation of the university’s historic role to be socially useful. It is a compelling fantasy, especially for universities such as LSU that find themselves among the financial have-nots of U.S. higher education.

In 1925, a member of the Massachusetts Legislature charged that Harvard University “was in the meshes of financiers, that professors dared not speak up on behalf of real scholarship, that ‘big business is in the saddle,’ that business was exercising an alarming tyranny over the entire university, that freedom of speech was dead, and that big business was forcing scholars to say only things approved by J.P. Morgan” (Daniel, 1998). One can wonder whether the medieval tradition of the university as an association of masters and students, of teachers and learners, as Stimpson (2006) noted, is finally disappearing along with the soul of higher education.

Many of America’s largest universities embrace corporate values. Is that a bad

thing at a time of decreasing government funding? The lesson from this dissertation is a brutal reality for college administrators such as those at LSU: Financing research that generates revenues could stave off cutbacks that threaten undergraduate access and endanger the search for new ideas. There seems to be good reason for exuberance over commercializing academic inventions, but not every university makes money.

Educational leadership expert Joshua Powers (2006) reported that after subtracting operating costs for patenting, staffing, and overhead, more than half of all universities lose money on technology transfers. Has the thirst for profits gone too far?

LSU's powerful brand identification rooted in its athletic teams is a tool the university could use as a springboard in generating value in the eyes of the nation as a center for teaching, learning, and meticulous research. Is a university that is increasingly responsive to the marketplace serving society or is it just another expensive commodity?

Have LSU and other universities lost sight of their core functions as primary sources of education and scholarship? Shifting perceptions in higher education demand universities transfer technologies. At the same time, while recognizing a continuing need for large public investments, LSU's future in our knowledge-driven society could well depend on how well the university learns to communicate its entrepreneurial endeavors by stressing the public benefit of its academic commercialism.

James Duderstadt (2004) observed that "the nature of higher education as a public good rather than simply a market commodity needs to be recognized by higher education and reestablished by strong public policy and public investment at the federal, state, and community levels because the future of the university in an ever more knowledge-driven society is clearly a national concern (p. 73). That is the challenge facing LSU and its communication efforts—to win recognition as a public good by connecting the

university's core values of education and knowledge transfer to Louisiana and the nation.

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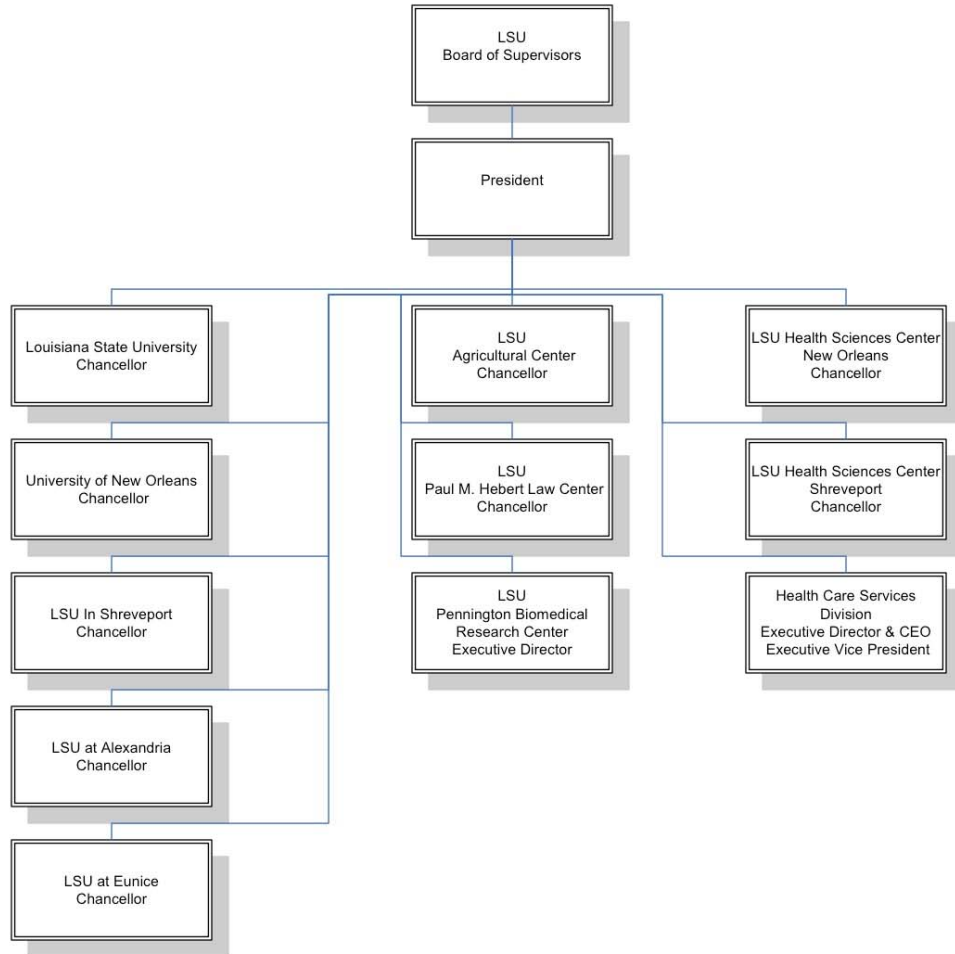
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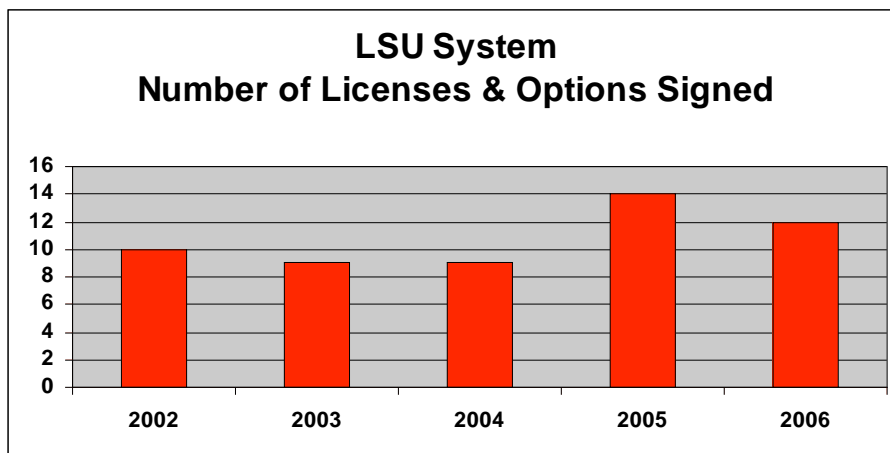
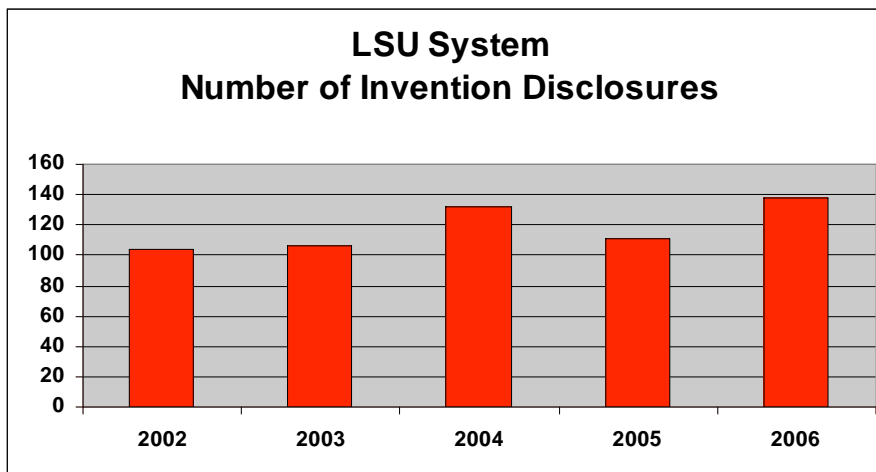
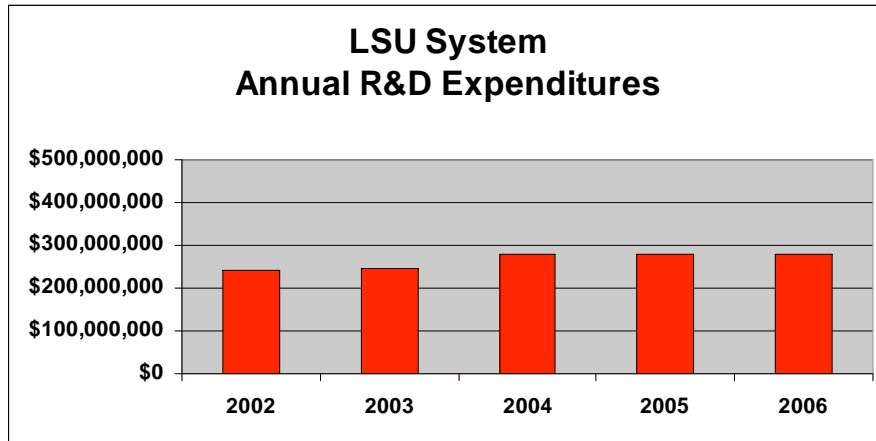
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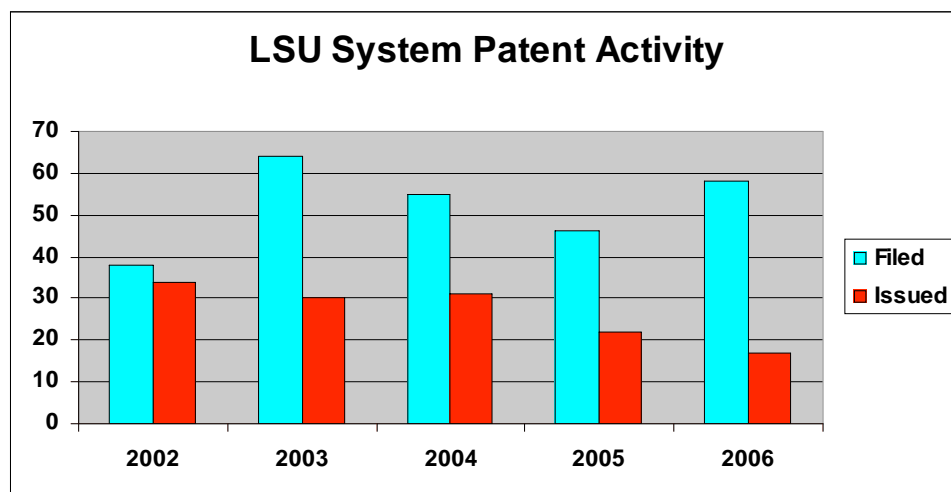
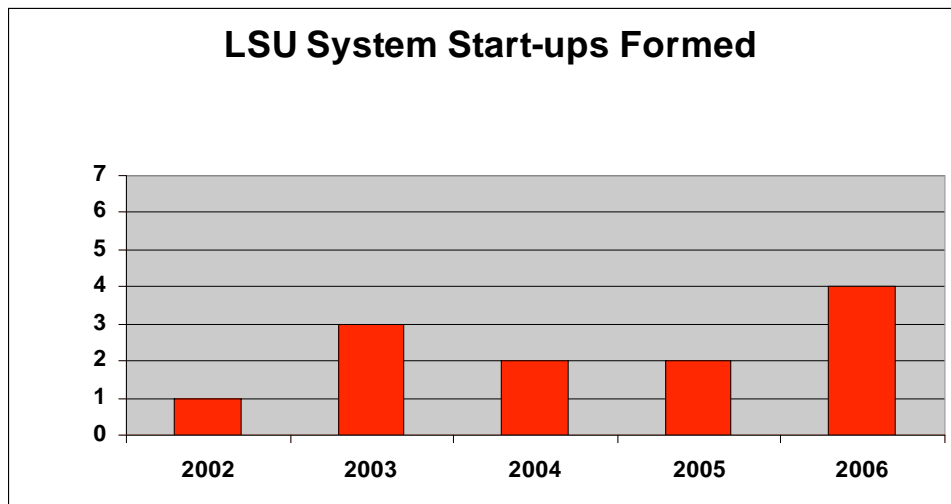
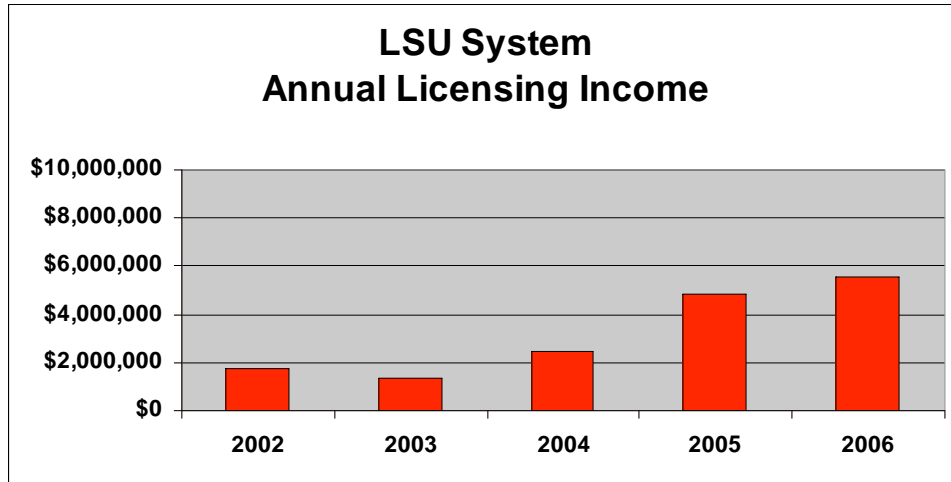
APPENDIX A: LOUISIANA STATE UNIVERSITY SYSTEM ORGANIZATIONAL CHART WITH INDIVIDUAL CAMPUS CHIEF EXECUTIVES

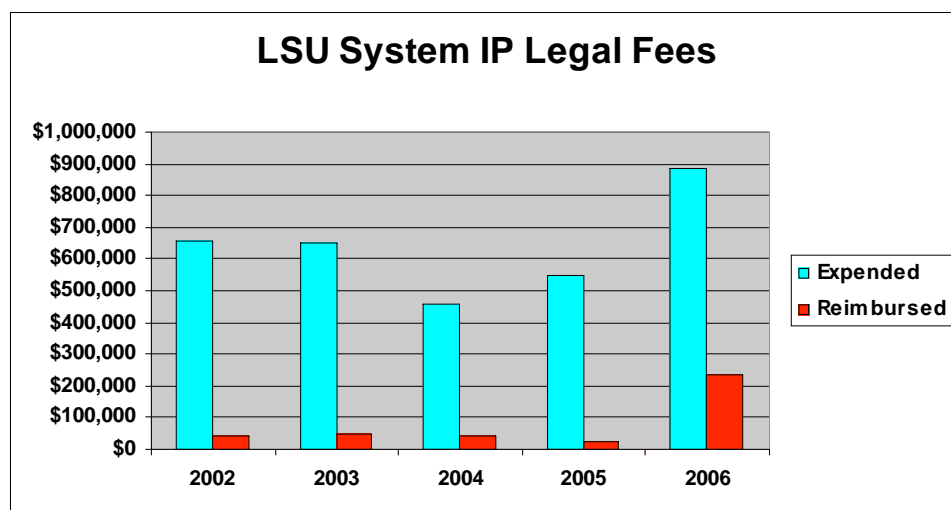
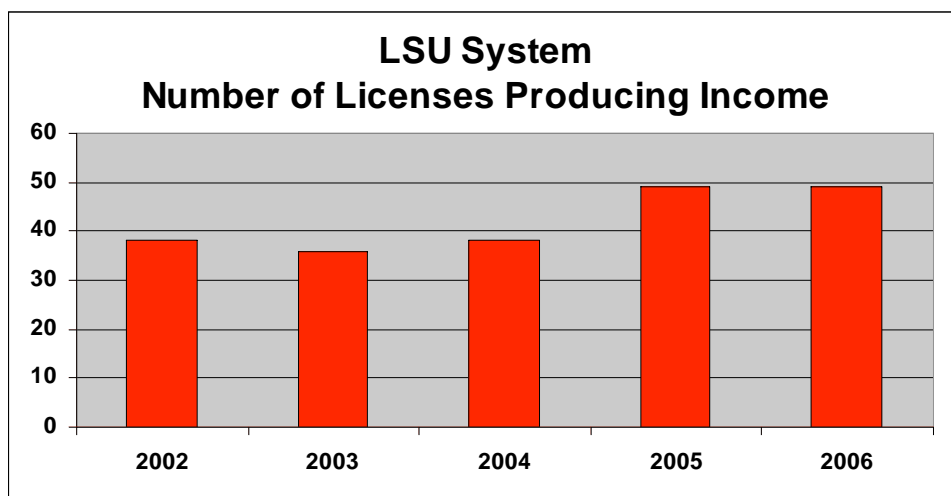


APPENDIX B: LOUISIANA STATE UNIVERSITY SYSTEM TECHNOLOGY TRANSFER SUMMARIES OF ACTIVITY BETWEEN 2002 AND 2006.

SOURCE: LSU Office of Institutional Research







APPENDIX C: LOUISIANA STATE UNIVERSITY NATIONAL IMAGE SURVEY QUESTIONNAIRE AND RESULTS

February, 2006

SAMPLE: n=1057 Adults nationwide

Thank you for your interest in this survey. Please click next page to begin.

1. To start, please enter your five-digit zip code: _ _ _ _ _

2. And, what state do you live in? (pre-coded list, drop down)

1.	Alabama.....	1%
2.	Alaska	*
3.	Arizona	2%
4.	Arkansas	1%
5.	California	10%
6.	Colorado	1%
7.	Connecticut	2%
8.	Delaware	*
9.	Florida.....	7%
10.	Georgia	4%
11.	Hawaii.....	1%
12.	Idaho.....	*
13.	Illinois.....	5%
14.	Indiana	2%
15.	Iowa.....	1%
16.	Kansas.....	1%
17.	Kentucky.....	1%
18.	Louisiana	1%
19.	Maine.....	*
20.	Maryland.....	1%
21.	Massachusetts	3%
22.	Michigan	6%
23.	Minnesota	4%
24.	Mississippi	*
25.	Missouri	2%
26.	Montana	*
27.	Nebraska	*
28.	Nevada.....	1%
29.	New Hampshire.....	1%
30.	New Jersey.....	3%
31.	New Mexico.....	1%
32.	New York	7%
33.	North Carolina	2%
34.	North Dakota.....	1%

- | | | |
|-----|----------------------|----|
| 35. | Ohio | 4% |
| 36. | Oklahoma..... | 1% |
| 37. | Oregon | 1% |
| 38. | Pennsylvania | 3% |
| 39. | Rhode Island | 3% |
| 40. | South Carolina | 1% |
| 41. | South Dakota..... | * |
| 42. | Tennessee..... | 2% |
| 43. | Texas | 9% |
| 44. | Utah | 1% |
| 45. | Vermont..... | -- |
| 46. | Virginia..... | 3% |
| 47. | Washington | 2% |
| 48. | West Virginia..... | 1% |
| 49. | Wisconsin | 3% |
| 50. | Wyoming | * |
| 51. | Washington, DC..... | 1% |
3. When you think of colleges and universities in the United States, which one comes to mind first? (open-ended)
4. Do any others come to mind? (open-ended)
5. In terms of the quality of academic programs, how would you rate public colleges and universities in America versus private universities? Would you say they are better, about the same, or worse than private colleges and universities?
- | | | |
|----|--------------------------|-----|
| 1. | Better | 11% |
| 2. | About the same | 54% |
| 3. | Worse..... | 21% |
| 8. | Don't know/Not sure..... | 14% |
6. When you think of colleges and universities in Louisiana, do any come to mind? Which ones? (open-ended)
7. Compared to other public colleges and universities in the United States, how would you rate Louisiana colleges and universities?
- | | | |
|----|--------------------------|-----|
| 1. | Better | 2% |
| 2. | About the same | 31% |
| 3. | Worse..... | 13% |
| 8. | Don't know/Not sure..... | 55% |
8. If you had college-bound children, would you consider sending them to a university in Louisiana?
- | | | |
|----|----------|-----|
| 1. | Yes..... | 14% |
|----|----------|-----|

2. No..... 40%
 3. Maybe..... 31%
 8. Don't know/Not sure..... 15%
9. (if yes to Q8, N=144) What would be the single strongest factor in your decision to consider sending your child to a university in Louisiana?
 1. Academics..... 30%
 2. Athletics..... 6%
 3. Reputation for Research 3%
 4. Family Ties/Connection 7%
 5. Specific academic program that leads to a good job..... 27%
 6. Cheap tuition..... 11%
 7. Close to home 4%
 8. Don't know/Not sure..... 11%
10. (if no to Q8, N=388) Why would you prefer not to send your child to a university in Louisiana?
 1. Poor academic reputation 16%
 2. Too much emphasis on athletics 3%
 3. Party schools 4%
 4. Danger from hurricanes 6%
 5. Too far away 32%
 6. Tuition too expensive 2%
 7. Prefer another school..... 19%
 8. Would not consider an out of state school..... 12%
 88. Don't know/Not sure..... 8%
11. How familiar are you with Louisiana State University or LSU?
 1. Very familiar..... 3%
 2. Somewhat familiar 25%
 3. Not very familiar..... 30%
 4. Not at all familiar 38%
 8. Don't know/Not sure..... 4%
12. Based on your knowledge, which of the following statements best describes LSU?
 1. It has strong academic programs..... 6%
 2. It has a beautiful campus 4%
 3. It has programs in community involvement 2%
 4. It produces cutting-edge research 1%
 5. It attracts high-achieving students..... 2%
 6. It has strong athletic programs..... 31%
 8. Don't know/Not sure.....55%
13. To the best of your knowledge, in what city is the LSU campus located?

1. Baton Rouge, Louisiana 39%
 2. New Orleans, Louisiana 10%
 3. Lafayette, Louisiana 7%
 4. Shreveport, Louisiana..... 3%
 8. Don't know/Not sure 40%
14. Do you believe LSU experienced...
 1. Severe damage to facilities during this year's hurricanes 18%
 2. Little damage to facilities during this year's hurricanes 30%
 3. No damage to facilities during this year's hurricanes 10%
 8. Don't know/Not sure 42%
15. During the last 6 months, have you seen, read, or heard anything about LSU? If so, where? (Check all that apply)
 1. TV 37%
 2. Newspapers 22%
 3. Magazines 6%
 4. Word of mouth 8%
 5. Internet 12%
 6. Radio 8%
 7. None of these/Have not heard anything about LSU..... 40%
 8. Don't know/Not sure 15%
16. (IF YES TO AT LEAST ONE ON Q15) What type of information have you heard or read about LSU?
 1. Academic or research-related information 14%
 2. Hurricane-related information 50%
 3. Sports-related information 78%
 4. Other (specify) *
17. Do you know someone who attended LSU? If so, who? (Check all that apply)
 1. Parent *
 2. Family 3%
 3. Friend 13%
 4. Colleague 5%
 5. Self 1%
 8. None 83%
18. Would you consider yourself a fan of LSU sports?
 1. Yes 11%
 2. No 77%

8. Don't know/Not sure..... 12%

In the following section, based on what you know, we are interested in your general impression of the following universities, even if you don't know a great deal about them. We'd like to ask you to rate a series of universities as either "Excellent," "Good," "Fair" or "Poor." (NOTE: Also offering "don't know/not sure" response for each)

19. University of Texas at Austin

- | | | |
|----|---------------------------|-----|
| 1. | Excellent | 18% |
| 2. | Good | 40% |
| 3. | Fair | 9% |
| 4. | Poor | 1% |
| 5. | Don't know/Not sure | 32% |

20. University of Georgia

- | | | |
|----|---------------------------|-----|
| 1. | Excellent | 9% |
| 2. | Good | 40% |
| 3. | Fair | 15% |
| 4. | Poor | 1% |
| 5. | Don't know/Not sure | 35% |

21. Tulane University

- | | | |
|----|---------------------------|-----|
| 1. | Excellent | 21% |
| 2. | Good | 38% |
| 3. | Fair | 10% |
| 4. | Poor | 1% |
| 5. | Don't know/Not sure | 29% |

22. University of Florida

- | | | |
|----|---------------------------|-----|
| 1. | Excellent | 11% |
| 2. | Good | 42% |
| 3. | Fair | 17% |
| 4. | Poor | 3% |
| 5. | Don't know/Not sure | 27% |

23. University of Virginia

- | | | |
|----|---------------------------|-----|
| 1. | Excellent | 20% |
| 2. | Good | 36% |
| 3. | Fair | 8% |
| 4. | Poor | 1% |
| 5. | Don't know/Not sure | 34% |

24. Harvard University

1.	Excellent	79%
2.	Good	12%
3.	Fair	2%
4.	Poor	*
5.	Don't know/Not sure	8%

25. Louisiana State University

1.	Excellent	4%
2.	Good	38%
3.	Fair	16%
4.	Poor	3%
5.	Don't know/Not sure	39%

26. University of Alabama

1.	Excellent	5%
2.	Good	34%
3.	Fair	19%
4.	Poor	3%
5.	Don't know/Not sure	40%

27. University of California at Los Angeles (UCLA)

1.	Excellent	39%
2.	Good	39%
3.	Fair	6%
4.	Poor	1%
5.	Don't know/Not sure	15%

28. Many U.S. colleges and universities have increasingly turned toward money-raising ventures that sell inventions developed by university researchers to corporate interests. Critics of the practice argue universities have become more interested in building their endowments and making money than in teaching. What do you think about universities becoming more and more entrepreneurial? Do you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with this practice?

1.	Strongly agree	13%
2.	Somewhat agree	41%
3.	Neither agree nor disagree	21%
4.	Somewhat disagree	14%
5.	Strongly disagree	5%
8.	Don't know/Not sure	8%

29. Do you think American universities, as a group, share your values?

- | | | |
|----|--------------------------|-----|
| 1. | Yes..... | 46% |
| 2. | No..... | 25% |
| 8. | Don't know/Not sure..... | 29% |

In the following series of questions, we will ask whether you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree. (NOTE: Also offering "don't know/not sure" response for each)

30. LSU is one of the best public universities in the United States

- | | | |
|----|----------------------------------|-----|
| 1. | Strongly agree | 3% |
| 2. | Somewhat agree | 13% |
| 3. | Neither agree nor disagree | 33% |
| 4. | Somewhat disagree..... | 8% |
| 5. | Strongly disagree..... | 7% |
| 6. | Don't know/Not sure..... | 36% |

31. LSU is one of the best public universities in the South

- | | | |
|----|----------------------------------|-----|
| 1. | Strongly agree | 7% |
| 2. | Somewhat agree | 20% |
| 3. | Neither agree nor disagree | 29% |
| 4. | Somewhat disagree..... | 5% |
| 5. | Strongly disagree..... | 2% |
| 6. | Don't know/Not sure..... | 37% |

32. In your opinion, how important is research to a public university?

- | | | |
|----|----------------------------|-----|
| 1. | Very important..... | 64% |
| 2. | Somewhat important | 31% |
| 3. | Not very important | 3% |
| 4. | Not at all important | * |
| 8. | Don't know/Not sure..... | 3% |

33. In your opinion, how important is it for a public university to excel in athletics?

- | | | |
|----|----------------------------|-----|
| 1. | Very important..... | 20% |
| 2. | Somewhat important | 47% |
| 3. | Not very important | 23% |
| 4. | Not at all important | 7% |
| 8. | Don't know/Not sure..... | 2% |

How would you rate each of the following at LSU:

34. Quality of Research

1.	Excellent	4%
2.	Good	15%
3.	Fair	6%
4.	Poor	1%
8.	Don't know/Not sure	74%

35. Service to the Nation

1.	Excellent	3%
2.	Good	17%
3.	Fair	7%
4.	Poor	1%
8.	Don't know/Not sure	73%

36. Sports teams

1.	Excellent	16%
2.	Good	35%
3.	Fair	6%
4.	Poor	1%
8.	Don't know/Not sure	43%

37. Quality of education

1.	Excellent	4%
2.	Good	27%
3.	Fair	9%
4.	Poor	2%
8.	Don't know/Not sure	58%

Now we are going to show you a series of statements. For each statement, please say whether it makes you more or less likely to consider LSU a top university.

38. LSU researchers rank higher than the national average in the number of inventions discovered per research dollar.

1.	Much more likely	10%
2.	Somewhat more likely	40%
3.	No Impact	21%
4.	Somewhat less likely	1%
5.	Much less likely	1%
8.	Don't know/Not sure	27%

39. LSU has been increasing entrance requirements for Freshmen and improving its six-year graduation rates.

- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 11% |
| 2. | Somewhat more likely..... | 41% |
| 3. | No Impact | 18% |
| 4. | Somewhat less likely | 3% |
| 5. | Much less likely | 1% |
| 8. | Don't know/Not sure..... | 27% |
40. LSU runs Louisiana's public hospital system, which treats two million poor people a year.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 17% |
| 2. | Somewhat more likely..... | 31% |
| 3. | No Impact | 23% |
| 4. | Somewhat less likely | 2% |
| 5. | Much less likely | 1% |
| 8. | Don't know/Not sure..... | 26% |
41. LSU trains 70 percent of the doctors, nurses and healthcare professionals in Louisiana.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 21% |
| 2. | Somewhat more likely..... | 34% |
| 3. | No Impact | 18% |
| 4. | Somewhat less likely | 2% |
| 5. | Much less likely | 1% |
| 8. | Don't know/Not sure..... | 26% |
42. LSU System campuses have a total endowment of approximately \$504 million while Harvard University has a total endowment of more than \$25 billion.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 9% |
| 2. | Somewhat more likely..... | 20% |
| 3. | No Impact | 34% |
| 4. | Somewhat less likely | 8% |
| 5. | Much less likely | 2% |
| 8. | Don't know/Not sure..... | 27% |
43. LSU is ranked in the Third Tier of schools in the annual *U.S. News & World Report* listing of U.S. colleges and universities.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 8% |
| 2. | Somewhat more likely..... | 24% |
| 3. | No Impact | 25% |
| 4. | Somewhat less likely | 11% |
| 5. | Much less likely | 4% |
| 8. | Don't know/Not sure..... | 27% |

44. LSU is located in a politically conservative Southern State.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 6% |
| 2. | Somewhat more likely..... | 15% |
| 3. | No Impact | 33% |
| 4. | Somewhat less likely | 11% |
| 5. | Much less likely | 11% |
| 8. | Don't know/Not sure..... | 25% |
45. The student body at LSU is predominantly white.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 3% |
| 2. | Somewhat more likely..... | 11% |
| 3. | No Impact | 43% |
| 4. | Somewhat less likely | 8% |
| 5. | Much less likely | 8% |
| 8. | Don't know/Not sure..... | 26% |
46. Athletics dominate activities and spending on LSU's Main Campus. Although the Athletic Department is self-sustaining financially, spending on academics pales in comparison.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 3% |
| 2. | Somewhat more likely..... | 13% |
| 3. | No Impact | 28% |
| 4. | Somewhat less likely | 17% |
| 5. | Much less likely | 13% |
| 8. | Don't know/Not sure..... | 27% |
47. LSU charges relatively low tuition, even for out-of-state students compared to other major universities.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 16% |
| 2. | Somewhat more likely..... | 35% |
| 3. | No Impact | 19% |
| 4. | Somewhat less likely | 3% |
| 5. | Much less likely | 2% |
| 8. | Don't know/Not sure..... | 26% |
48. LSU engineers and researchers are involved in trying to rebuild levees that protect the City of New Orleans from future hurricane damage.
- | | | |
|----|----------------------------|-----|
| 1. | Much more likely | 16% |
| 2. | Somewhat more likely..... | 32% |
| 3. | No Impact | 23% |
| 4. | Somewhat less likely | 2% |

5. Much less likely 1%
8. Don't know/Not sure..... 26%
49. And how do you think LSU compares to other colleges and universities when it comes to tuition? Do you think LSU is more expensive, less expensive, or about the same as colleges and universities in other parts of the United States?
1. More expensive 3%
2. About the same 28%
3. Less expensive 25%
8. Don't know/Not sure.....45%
50. How much would you say you know about what it costs, on average, to attend a public college these days - a lot, a good amount, a little, or almost nothing?
1. A lot..... 22%
2. A good amount..... 45%
3. A little..... 16%
4. Almost nothing..... 6%
8. Don't know/Not sure..... 11%
51. When it comes to paying for a college education, who do you think should have the primary responsibility - parents & families or the government?
1. Parents & Families 35%
2. State or Federal Government 13%
3. Both 47%
8. Don't know/Not sure..... 6%
52. Do you think that a college education is necessary for a person to be successful in today's work world, or do you think there are many ways to succeed to without a college education?
1. College education is necessary 66%
2. Many ways to succeed without a college education 29%
8. Don't know/Not sure..... 5%

Please tell me whether you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements:

53. If someone really wants to go to college, they can find a way to pay for it, even if they have to go to school and work at the same time.
1. Strongly agree 49%
2. Somewhat agree 34%
3. Neither agree nor disagree 4%
4. Somewhat disagree..... 8%

5. Strongly disagree..... 3%
8. Don't know/Not sure..... 2%
54. The government should only provide tuition assistance to students who cannot afford a college education.
1. Strongly agree 16%
2. Somewhat agree 26%
3. Neither agree nor disagree 12%
4. Somewhat disagree..... 22%
5. Strongly disagree..... 22%
8. Don't know/Not sure..... 3%

Finally, just a few questions for demographic purposes.

55. What is your political party affiliation?
1. Republican Party 27%
2. Democratic Party..... 30%
3. Independent..... 22%
- X. Other (specify) _____ 19%
8. Don't know/Not sure/Depends 2%
56. The terms “liberal” and “conservative” may mean different things to people, depending on the kind of issue one is considering. In terms of ECONOMIC issues, would you say you are:
1. Very liberal 4%
2. Liberal..... 12%
3. Somewhat liberal..... 10%
4. Moderate 24%
5. Somewhat conservative 18%
6. Conservative 18%
7. Very conservative..... 5%
8. Don't know/Not sure 8%
57. Now, thinking in terms of SOCIAL issues and people's behavior, would you say you are:
1. Very liberal 10%
2. Liberal..... 17%
3. Somewhat liberal..... 15%
4. Moderate 17%
5. Somewhat conservative 14%
6. Conservative 14%
7. Very conservative..... 7%
8. Don't know/Not sure 6%

58. What race or ethnicity do you consider yourself?

1.	White	70%
2.	Black.....	8%
3.	Asian.....	7%
4.	Hispanic	8%
5.	Native American	1%
6.	Mixed Race	2%
X.	Other (specify)	2%
8.	Don't know/Not sure.....	1

59. What is the highest level of education you have completed?

1.	Grade School.....	5%
2.	High school diploma/GED	24%
3.	Vocational/Technical Degree	9%
4.	Associates Degree	14%
5.	Bachelors Degree	24%
6.	Masters Degree	15%
7.	PhD/MD/JD	6%
8.	Don't Know/Refused.....	2%
X.	Other (specify)	5%

60. What colleges or universities have you personally attended? (open-ended)

61. What was your age on your last birthday? Mean=45.46 years

62. What is your marital status?

1.	Single.....	26%
2.	Married	59%
3.	Divorced/Separated	10%
4.	Widowed.....	2%
8.	Don't know/Not sure/Other	4%

63. Do you have any children?

1.	Yes.....	64%
2.	No.....	36%

64. (if YES to Q 63, N=679) How old are your children? (check any category that ... applies)

1.	Pre-school (less than 5 years old)	13%
2.	Grade school (ages 5-12).....	19%
3.	High School (ages 13-17).....	17%
4.	College Age (ages 18-22).....	20%
5.	Adult children (age 23+)	60%

65. (if YES to Q 63) Have you used any of the following college savings plans in order to save money for your children's college education? (check any that apply)

- | | | |
|----|--------------------------------|-----|
| 1. | 529 Plan | 8% |
| 2. | Pre-paid tuition..... | 3% |
| 3. | Education Savings Account..... | 13% |
| 8. | Don't know/Not sure..... | 3% |
| 9. | None of these | 70% |

66. Would you estimate your total 2005 household income before taxes? Please keep in mind that this information is only for statistical purposes and is confidential.

- | | | |
|-----|--------------------------|-----|
| 1. | \$10,000 or less | 3% |
| 2. | \$10,001-\$20,000 | 4% |
| 3. | \$20,001-\$30,000 | 6% |
| 4. | \$30,001-\$40,000 | 7% |
| 5. | \$40,001-\$50,000 | 8% |
| 6. | \$50,001-\$60,000 | 8% |
| 7. | \$60,001-\$70,000 | 8% |
| 8. | \$70,001-\$80,000 | 9% |
| 9. | \$80,001-\$100,000 | 10% |
| 10. | \$100,000 or more | 23% |
| 88. | Don't know/Not sure..... | 13% |

67. In terms of religious beliefs, do you consider yourself...

- | | | |
|-----|--|-----|
| 1. | Catholic..... | 24% |
| 2. | Jewish | 4% |
| 3. | Protestant | 23% |
| 4. | Evangelical Christian (Born Again)..... | 10% |
| 5. | Muslim..... | 1% |
| 6. | Buddhist..... | 1% |
| 7. | Atheist (do not believe in God)..... | 3% |
| 8. | Agnostic (Do not practice religion but believe in God) | 11% |
| 88. | Don't know/Not sure/Refused | 12% |

68. Gender

- | | | |
|----|--------------|-----|
| 1. | Male..... | 48% |
| 2. | Female | 52% |

VITA

Charles Zewe is the vice president for communications and external affairs for the Louisiana State University System. Before attending LSU as a graduate student, he was a 32-year veteran of the news business both at the local and national level, including more than 12 years at the Cable News Network (CNN) as an anchor and correspondent. In addition to his anchoring duties for CNN Headline News, he covered numerous national and international stories, including Gulf War I in 1991, and the bombing of the A. P. Murrah Federal Building in Oklahoma City in 1995. CNN coverage of both events won National Emmy Awards.

A native of Reserve, Louisiana, he graduated with a Bachelor of Arts degree in Journalism in 1968 from Louisiana State University at Baton Rouge. He earned a Master of Arts degree in mass communication in 2003 from Loyola University at New Orleans. In 2006, he received his doctorate in the area of mass communication and public affairs from the Manship School of Mass Communication at Louisiana State University at Baton Rouge.