Introduction from the Editor

The idea for Research & Reflections on Higher Education grew from the recognition of the high quality of the work that is regularly submitted by graduate students during the semester and the limited opportunities to share this work within the Lynch School of Education.

The articles included in this issue include reflections on several key issues in US higher education. The essays address seemingly disparate issues but together they offer important reflections on the challenges and dilemmas confronting US higher education today.

The launch of this new publication would not have been possible without design, layout and editing support from Edward Pickett.

Liz Reisberg, Editor

TABLE OF CONTENTS

1. Considering the Democratic Character of American Higher Education
   MARY OGBURN
2. Financial Barriers Facing Adult Students
   KIM TRAUCENIEK
   JENNIFER MAY
4. An Assessment of Internationalization at Connecticut College
   PATTY EAMES
5. Internationalization in STEM-Oriented Institutions of Higher Education: A Case Study on Georgia Institute of Technology
   MEGHAN POPICK
6. The Whole is Greater than the Sum of Its Parts: Internationalization of an Institution
   SARAH WALK

Considering the Democratic Character of American Higher Education

MARY OGBURN

As the twenty-first century brings significant challenges for higher education worldwide, it is more important than ever to understand the unique democratic history and character of American higher education. Fundamental aspects of U.S. universities, including the curriculum, examinations, the bachelor, master, and doctorate degree cycles, and the administrative offices of deans, chancellors, and rectors, were inherited from medieval institutions in Paris and Bologna (Haskins, 1965). Yet despite these Old World roots, post-secondary education in the U.S. has “fused native and borrowed elements in a unique way to produce something new in educational history” (Brubacher & Rudy, 1997, p. 424). In a bold departure from the elite European tradition, American higher education embraced and incorporated the young nation’s democratic ideals. The resulting heritage is visible in both past and current American efforts to broaden access, serve the public good, protect academic freedom, and cultivate a diversity of institutions.

By the mid-twentieth century the broadening, or “massification,” of higher education in the United States achieved the highest university enrollment in the world (Brubacher & Rudy, 1997) and reflects the democratic commitment to equality of opportunity. Americans rejected the European tradition of elite universities in favor of opening universities to a broader population selected strictly on the basis of intellectual merit. After World War II, the 1944 GI Bill significantly increased federal funding to higher education and subsequently enrollments rose dramatically. Affirmative action programs introduced in the early 1970s formalized nondiscrimination policies and assured equal opportunity for women and minority students. Several types of affirmative action programs were challenged in court, but most cases followed the Regents of the University of California v. Bakke ruling that upheld diversity in education as a
“compelling state interest” (Lehmuller & Gregory, 2005, p. 442). While inequalities in U.S. higher education enrollment persist, the gap is narrowing between a traditionally white population and minority groups (Almanac, 2009) as universities seek to expand representation through scholarship programs, financial aid, and need-blind admissions policies.

The democratic character of U.S. higher education is also visible in the diversity of institutions, which vary in size, mission, affiliation, and research. This diversity serves the needs of an extremely heterogeneous population. America’s land-grant institutions, established in the 19th century by the Morrill Act, demonstrated a firm link to society by establishing hubs of scholarship and research to focus on regional needs and disseminate knowledge through networks of extension agents (Brubacher & Rudy, 1997). Today universities address public needs through industry collaborations, such as pharmaceutical research, but this is not without risk. There can be pressure to suppress unfavorable results or favor research projects that promise profitable results (Zusman, 1998). In light of these risks, the university may in fact benefit society to the greatest extent when it puts market trends and utilitarianism aside and pursues scholarly inquiry and research for its own sake (Gutmann, 1987).

While growing privatization poses new challenges for American higher education, the “social contract” between universities and society to protect higher education as a “public good” remains significant. Key to a healthy democracy, citizens who graduate from college are more likely to pay higher taxes, function independently of social welfare, be healthy, vote, and participate in community activities (College Board, 2007).

Similar to the constitutionally guaranteed rights of the freedom of speech and press, American higher education also guarantees academic freedom so that scholars may question prevailing ideas, critique society, and propose new theories. Both public and private universities are a “free marketplace of ideas” where new ideas are judged by their merit, even if unpopular. According to Gutmann (1987), protection of minority theories and opinions prevents the tyranny of the majority and “safeguards against political repression” (p. 177).

The democratic character of U.S. higher education is also visible in the diversity of institutions, which vary in size, mission, affiliation, and research. This diversity serves the needs of an extremely heterogeneous population. For example, liberal arts colleges permit high student-faculty contact and emphasize teaching while large research institutions provide specialized laboratory experience supported by state-of-the-art equipment. Community colleges and technical institutes add to this variegated higher education landscape by meeting needs of convenience, flexibility, practical training, and life-long learning. Each of these institutions enjoys significant autonomy, with only minimal intervention from the federal government or regional accreditation associations.

As American higher education faces new challenges of “privatization” —shrinking public funding, dwindling tenure track positions, and a growing for-profit sector— implications for our democratic heritage must be considered. University education is increasingly viewed as a “private good” and a means for individual gain (such as resulting salary increases and promotions) with the consequence that state governments and taxpayers are less willing to pay the bill. Whether public universities follow low-tuition/low-aid, or high-tuition/high-aid models, the financial burden on students and their families threatens the notions of the “public good” and universal access. Pressure for fiscal constraint is also associated with an unsettling rise in adjunct (non-tenure-track) faculty positions. Because the tenure system was established explicitly to protect academic freedom, the decreasing number of tenured faculty suggests that academic freedom is more vulnerable than in the past. Finally, although the growing for-profit sector adds to the diversity of higher education institutions, its commodification of higher education tends to focus on profit without considering what is best for society.
The democratic themes of universal access, public good, academic freedom, and diversity of institutions not only define the unique American model of higher education, but also represent its fundamental purpose. Their salience is apparent in the 1973 Carnegie Commission report on the five aims of post-secondary education in the U.S.: “providing opportunities for individual student development, the advancement of human capability in society at large, enlargement of education justice, the transmission and advancement of learning and wisdom, and the critical evaluation of society for the sake of society’s self-renewal” (Kerr, 2001, p. 2). While the full impact of privatization on American higher education is not yet clear, the coming years will likely require a delicate balancing act between meeting the needs of both the democratic society and the individual student.

Mary Ogburn is a graduate student in the masters program in the Higher Education Administration Program and the Graduate Assistant for Summer Programs and for the Global Proficiency Program at the Boston College Office of International Programs. Email: ogburn@bc.edu

Financial Barriers Facing Adult Students

KIM TRAUCENIEK

This article examines some of the barriers that adult students, defined as age 25 years or older, face in pursuing postsecondary undergraduate education and why it is important to improve access and retention of these students. Students age 25-34 make up 21.4% of college enrollment in the United States, while those thirty-five and older make up 15.4% of college students. This means that adult students constitute a formidable segment of total college enrollment at 36.8% (Chronicle, 2009) though this number is down from 45% in 2005 (Purslow & Belcastro, 2006).

Indeed, the number of adult students had been projected to increase much more significantly than it actually has in recent years, raising important questions about access and retention, and appropriate strategies for attracting and supporting this population. For example, nearly two-thirds of low-income adults entering college aspire to earn a college degree but fewer than 10% actually do. Policymakers, educators, scholars, business communities, and other stakeholders—indeed, society in general—should be concerned because there are not enough traditional-aged students, nor will there be over the next several decades, to fill jobs and this threatens the nation’s position in a growing global economy. In other words, the traditional pipeline—that of the graduates emerging from the secondary education system—is no longer sufficient to assure appropriate college enrollment levels, yet states do not provide adequate support to assist adult students in achieving their academic goals as most funding is going to support K-12 education, Medicaid, etc (NGA, 2009; Pusser, Breneman, Milam, Levin, Kohl, Gansneder, & Turner 2007; Shugart, 2008).

Costs can be a tremendous barrier to adult students but being able to afford higher education is a critical issue that reaches beyond tuition. For example, for most adult students the biggest expenses are living expenses while they are in school and the loss of income that comes from working less while pursuing educational goals. It is important to note that college affordability is an issue that deeply affects a great number of adult students, even those not considered low-income by government measures.

Many adult students are not fully eligible for federal financial aid. For example, non-credit bearing classes such as remedial courses are often excluded from financial aid because federal subsidies are linked to the credit hour. This is problematic because these courses are often necessary pre-requisites for adult students who ultimately wish to pursue degree study.

In other words, the traditional pipeline—that of the graduates emerging from the secondary education system—is no longer sufficient to assure appropriate college enrollment levels.

Many working adults are also often disqualified from receiving need-based aid because federal financial aid guidelines do not accurately
reflect the fiscal reality of the adult student population. For example, expenses such as rent and childcare, in addition to debt and family responsibilities, are not taken into consideration when determining student need. Also at issue is the limited amount of aid provided to students enrolled less than half-time, leaving these individuals with insufficient aid or compelling them to both work fulltime while attending school and meeting their other responsibilities, such as parenting (Matus-Grossman, Gooden, Wavelet, Diaz, & Seupersad, 2009). The financial aid system was designed for traditional-age college students and comes up short in terms of meeting the needs of adult students (Spellman, 2007).

In 2005, the average cost of tuition and fees at public, two-year colleges—where most low-wage adult workers enroll—was $2,191. However, the total average cost of actually attending college for commuter students (who are primarily working adults) was $11,692, when living expenses were factored in. States like Massachusetts have responded by offering need-based grants that allow students to apply 30% of these funds to living expenses. Massachusetts also developed the Education Rewards Program, which provides college aid assistance to dislocated workers with incomes less than 200% of the poverty level. Pennsylvania established a new fund called WAGE (Worker Advancement Grant for Education) to help adult workers who are not eligible for traditional financial aid to pay for their postsecondary study (NGA, 2009)

Additional Challenges for Low-income Adults

Additional barriers faced by welfare recipients and other low-income adult students include federal and state policies that often prevent these individuals from pursuing and completing their postsecondary undergraduate education. The National Urban League Institute for Opportunity and Equality found that since the passage of TANF (Temporary Assistance for Needy Families) in 1996, college enrollment of welfare recipients had dropped roughly 20 percentage points. The League examined the policy variables that directly affected the college attendance of welfare recipients (poor women aged 18-35) by comparing states that did not allow postsecondary education to ‘count’ as a work activity with those states that did. The study found that when college courses do not count as a work activity there is a negative effect on the college enrollment of TANF recipients. In fact, state policies accounted for 13% of the variation in whether welfare recipients would enroll in college relative to other poor women who were not on welfare (Kosar, 2003).

The Opening Doors: Students’ Perspectives on Juggling Work, Family and College research report showed that most participants had negative experiences with TANF and other workforce development programs. Participants, mostly women from diverse ethical and racial backgrounds, described TANF as a “Catch 22.” The program provides education and work training during periods of unemployment, but takes away those key benefits once the recipient finds work (and the job search is mandatory). The data also showed that TANF was geared toward the unemployed but does little for the low-wage worker trying to advance career prospects and better his or her life.

Conclusion

Adult students face a host of unique problems and lack important resources as they are forced to adapt to a system designed to serve younger full-time students. While adult students are on the radar of many higher education institutions, policymakers, government agencies and other stakeholders, research suggests that there is much more to be done especially in terms of financial aid and workforce development policies at the federal, state, and institutional level. With half of all adult students employed full time and many supporting families, only a small percentage attempt the 12-15-credit course loads that traditional students undertake. Having said that, offering flexible financial aid options and programs that support adult students must be realized if access and retention are to be improved. This includes offering financial aid for students enrolled less than half-time and accommodating the intermittent enrollment patterns of adult students. Also critical is for more states to implement financial aid options and programs that

© Lynch School of Education, Campion Hall, 140 Commonwealth Ave, Chestnut Hill, MA. 02467:  bchighered@bc.edu  4
help students cover living expenses (Pusser et al., 2007).

According to the 2000 Census, of the 182 million individuals age twenty-five and older, 126 million have not completed an educational degree beyond a high school diploma. Moreover, in many areas of the United States, the numbers of high school graduates will continue to decrease for the foreseeable future making adult students an important and logical market for higher education to pursue (Compton, Cox, & Laanan, 2006; U.S. Bureau of the Census, 2000). With a growing need for a skilled workforce in our growing economy and a declining number of traditional age students, we must look to our adult population to fill these gaps (Shugart, 2008).

Kim Trauceniek is a graduate student in the masters program in the Higher Education Administration Program at Boston College graduating in May 2010. She is also a Resident Tutor at Eliot House, Harvard College.  
Email: traucen@fas.harvard.edu or trauceni@bc.edu

Context and Consequences: Trends in Higher Education in Texas  
JENNIFER MAY

We often specify “American higher education” rather than simply “higher education” to emphasize the relationship of this sector to its context. Understanding goals and function requires considering the context for higher education, a context that has changed rapidly in the early 21st century. This article examines ways in which specific environmental influences shape trends in higher education, as well as ways in which the institution contributes to its surroundings, through an analysis of the public system in Texas. Four particular characteristics—financing trends, faculty demographics, the role of private education, and the accountability movement—are key to understanding higher education in the twenty-first century.

**Financing Concerns in an Economic Recession**

The early twenty-first century’s severe economic recession has affected almost every facet of American society, and higher education is no exception. Texas relies on sales tax as its primary source of revenue and the recession has led to a decline in spending with a corresponding reduction in the state’s income (Texas Ahead, 2009). Other challenges in Texas, including a high poverty rate, increasing unemployment, and a struggling K-12 school system, have siphoned funds away from higher education (Almanac, 2009; Economy, 2009). Because these obligations are seen as more pressing public needs, higher education, whose rewards are less apparent, becomes less of a priority. Indeed, the state reduced higher education appropriations by 4.7% last year (Palmer, 2009).

Perhaps the most significant repercussion of these reductions is the decline in student access to higher education. Texas institutions have traditionally offered low tuition, deriving most funding from the state budget rather than from students and their families (Texas Ahead, 2009; Stracco, 1997). Though laudable, such a policy has become difficult to sustain, obliging public universities to raise tuition an average of 7.17% last year (THECB, 2009). These increases have raised the family contribution from 22% to 30% of annual income (Measuring Up, 2009). Higher education in the state is thus becoming increasingly unaffordable an especially disheartening trend in a state committed to access.

**Trends in Faculty Demographics**

Faculty demographics in Texas reflect persistent inequalities in American society. White professors outnumber minorities at every academic rank, but especially at the rank of full professor, where only 14.2% are minorities, with minimal increase in the last decade (SREB, 2009). There are similar trends in gender diversity; only 38.6% of full-time faculty is female (SREB, 2009). Senior research and power positions within the university remain securely in the hands of white males. Given the faculty’s influence on American society in terms of both teaching and especially research, such trends reinforce the traditional power patterns in American society.

Faculty employment has been problematic. Due to state budget constraints, public university faculty salaries have declined overall, and those that have increased have risen by only about half the national
average (Almanac, 2009). The state will likely lose talented faculty to more lucrative opportunities, jeopardizing higher education research’s contribution to the state economy. Texas has also reduced full-time tenured positions to 40.3% of total faculty, down almost 10% from the previous year (SREB, 2009). Not only does tenure preserve faculty freedom of speech on controversial subjects, but it also enables faculty to pursue research freely, regardless of the immediate benefit to the state or the nation. This protects the integrity of the academy and mitigates against social and economic pressure for research with short-term benefits.

The Dilemma of Private Education

In recent years, private education has played an increasingly significant role in American higher education. Unfortunately, the relationship between public and private higher education in Texas is a tense one. The private sector is criticized for “unused capacity,” that is, failing to assist the public sector in addressing the needs of the expanding college population and the broader concerns of the state (Stracco, 1997). While public institutions continue to struggle with shrinking budgets, state financial aid remains equally available to public and private school students (Handbook, 2009). Private education thus benefits from state funds without significantly helping to alleviate statewide enrollment problems. Moreover, private education does not share the same obligations to serve the state as institutions that receive direct tax funding. This exacerbates tension between the public and private sectors.

Answering Calls for Accountability

In recent years, the public has demanded greater proof of success in exchange for its tax dollars, especially in times of financial stress (Bowen, 1980). Texas has responded to these demands with the ambitious goal of “closing the gaps” by 2015, which aims to improve higher education based on five measurements of achievement: participation, success, excellence, research, and institutional effectiveness and efficiency (Closing the Gaps, 2004). Yet many question the soundness of these criteria and the validity of the accountability movement Schmidtlein and Berdahl (2005) argue that “student outcomes,” including many of Texas’s criteria, tend to be complex and difficult to measure (p. 71). Although participation is quantifiable, measurements for success and excellence are less clear; Texas calculates “success” largely in terms of number of degrees awarded, but there are other variables to consider in defining success, including ability to secure employment (pp. 11-12). Likewise, Altbach (2005) claims that it is impossible to measure “quality of teaching and quality and impact of research,” which Texas includes in its “excellence” category (p. 304). The ambiguity of the criteria defies a clear mechanism for measuring, evaluating, and improving higher education. Insistence on accountability may foster greater tension and confusion rather than improve the relationship between the state, public, and higher education.

Conclusion

Higher education is not an isolated sector, but one intimately intertwined with its context. As illustrated in Texas’s response to financial constraints and pressures for greater accountability, higher education is susceptible to pressures from its political and economic environment. Given current economic circumstances and corresponding budget reductions, it is likely that Texas will continue to flail in its attempts to fulfill the broader mission of American higher education. Moreover, when examining the broader political landscape, policymakers tend to direct funds to more immediate concerns such as poverty. It is often difficult to justify appropriations to higher education because its benefits often emerge over the long term and do not solve immediate problems.

While many of the trends discussed reflect the Texas context, they mirror the interaction between higher education and its context elsewhere. This suggests patterns of analysis that may be applicable to examining the purpose and function of higher education in any context. Such analysis leads to greater understanding of the complex forces that converge in American higher education as a necessary step toward problem solving.

Jennifer May is a masters student in the Higher Education Administration Program at Boston College. She is also a Research Assistant in the Higher Education Administration Department. Email: mayjk@bc.edu
An Assessment of Internationalization at Connecticut College

PATTY EAMES

As our world becomes an increasingly globalized place in which to live and work, we find ourselves scrambling to become effective actors in this interconnected sphere. We turn to our universities—the educators of the next generation of workers and leaders—to guide our society to be competitive in this new world. To better understand how universities are taking part in this movement and making decisions about how to achieve this, I chose to examine the experience of Connecticut College (CC).

A small private liberal arts college in New England, the college puts forth its international priorities in its mission statement: “Connecticut College educates students to put the liberal arts into action in a global society” (CC - Mission, 2008). Although many programs are still finding their footing, internationalization initiatives at this school go wide and deep.

CC students have been studying abroad for almost 70 years and today an average of 55% of each junior class goes abroad for a semester or longer. CC’s Study Away/Teach Away (SATA) programs provide students the chance to study abroad with a faculty member for a semester with a specific curricular theme. SATA experiences were originally designed to take place in developing countries and offer participants, “a joint educational enterprise designed to enhance their knowledge and appreciation of political, economic and social systems different than their own” (CC - Study Away, 2009). Travel, Research and Immersion Programs (TRIPs) offer short-term international experiences specific to coursework (CC - Study Away, 2009).

International students make up roughly 6% of the student body and represent over 70 different countries (CC at a Glance, 2009). Generous financial support for international students, strong academic programs, and a location close to New York City and Boston bring a diverse group of international students to campus each year. Prior to arrival, these students receive a handbook compiled by current and previous international students; they are supported throughout their four years at CC by an International Student Advisor.

CC has also made hiring faculty from other parts of the world and those with international research experience a strategic institutional priority. Recent research has demonstrated that individuals who have lived and researched abroad have higher levels of creativity (Galinsky, 2009), a high probability of acting as role models for international collaboration, an increasing awareness of cultural diversity, and a strong likelihood of encouraging students to study abroad (O'Hara, 2009).

One of the most important is strong institutional leadership. Claire Gaudiani was a change agent for internationalization. The Toor Cummings Center for International Studies and the Liberal Arts or CISLA, is an interdisciplinary center through which about 30 CC students per class can earn a “global citizenship” certificate in addition to their degree after completing a rigorous academic program and an international internship. For 20 years, students from all majors have participated in this “distinctive and academically challenging” program, which has helped to “internationalize their major with intensive language study and a funded international internship” (CISLA, 2009). A Senior Integrative Project serves as the capstone project. An administrator of the program explains that the success of CISLA has attracted much attention and many donations to the college are specifically earmarked for CISLA. The program now operates with its own $7 million dollar endowment (NAFSA, 2009) and supports many of the internationalization initiatives taking place on campus.

A steering committee of faculty and administrators coordinates several campus-wide initiatives. Foreign Language Across the Curriculum or FLAC, provides support to faculty members to create a special section of a regular course conducted in a foreign language. Students receive additional credits for the FLAC section, while curricular planning and faculty support comes from the CISLA’s endowment and funds from a 2009...
Andrew Mellon Foundation grant (Mellon Grant PR, 2009).

Small grants are available for students to conduct research in a foreign language. A Foreign Language Fellows program – involving “16 qualified students (both native speakers and advanced-level foreign language students)… to design and run [co-curricular] events in nine foreign languages” (Walter Foundation Report, 2009) – has just finished its pilot year. Faculty are awarded grant funds from CISLA’s endowment to conduct research overseas, as well (CISLA, 2009).

Recently, the college created the Foreign Language Partnership with local Regional Multicultural Magnet Schools. Teams of students from the college’s Russian, Spanish, and Chinese (Mandarin) language programs teach regular language lessons to fourth and fifth graders and conduct cultural enrichment sessions (Walter Foundation Report, 2009). This program provides CC students with pre-professional experience and teaches the benefits of promoting international engagement and cross-cultural communication to youth.

The college’s Mankoff Center for Teaching and Learning offers two new seminars for foreign language instructors, one to incorporate more interdisciplinary topics and another on new language acquisition pedagogy and instructional technologies. For example, iPod stored course materials (e.g., language drills, popular songs and newscasts) have been piloted in a few CC language programs with great success (Mellon Grant Request, 2009).

A long-standing residential component to international education at Connecticut College is the Knowlton Language House. This international dormitory is housing that students must apply for. Both the dining hall and dorm rooms are organized around the languages the college offers—Arabic, Chinese, French, German, Italian, Japanese, Russian, and Spanish. Residents are expected to only speak these languages and each language group is responsible for organizing a cultural presentation to the campus community (CC-Specialty Housing, 2009).

Awards and Recognition Continue Momentum

The extensive internationalization efforts of Connecticut College have not gone unnoticed in the academic community. In recent years the college has received several large grants from foundations, while gifts from individual donors continue to fund much of the international programming on campus. Recent graduates of the college have also had outstanding success securing Fulbright Fellowships for three consecutive years (Top Fulbright Producers, 2009).

The most recent, and perhaps most prestigious, award was the 2009 Paul Simon Award for Campus Internationalization, given to “institutions where international education has been broadly infused across all facets of the institutions” (NAFSA, 2009, pp. 4,5).

**Keys to Successful Internationalization**

Connecticut College has been able to take many significant steps to internationalize its curriculum and campus due to four key factors. One of the most important is strong institutional leadership committed to internationalization. President of the college from 1988 until 2001, Claire Gaudiani was a change agent for internationalization. Among her lasting contributions are a foreign language requirement, the creation of the CISLA certificate program, the establishment of Knowlton House, and a push to internationalize the faculty. Dean of the Faculty from 2003-2007, Fran Hoffman reinforced the international dimension by leading the faculty to integrate more international topics into the curriculum throughout all disciplines. Researchers in the field of international education affirm that “when leaders create an intercultural learning environment, there is a noticeable change on campus. The components of (this environment) take shape to form an entity that values and appreciates the intercultural dimension of learning, teaching, working, and thriving” (Ellingboe, 2005, p. 42).

Equally important is robust institutional funding for the many initiatives on campus. Several grants and generous donations facilitated early initiatives. The on-going process of incorporating programs into the general operating budget is essential for all of these programs to be sustainable. Another key aspect has been a student body that has embraced opportunities for international engagement. Many of
the newer initiatives described above are programs designed and led by students (including the Foreign Language Fellows, primary school language instruction activities, the guide for incoming international students, etc.). The creativity with which the institution has expanded opportunities for language study—an emphasis on speaking skills, cultural exploration, and the use of new technology—has encouraged many students to engage in these studies.

Lastly, residential components of many programs demonstrate the importance of international education and awareness outside of the classroom. Foreign language use in residential settings strengthens speaking skills, while internationally-themed discussions in non-academic settings further promote international perspectives on a variety of topics.

Connecticut College’s internationalization efforts are laudable but there are still improvements that can be made. A significant portion of the faculty participate and lead the programs described above, but there are others who resist changes in the curriculum and are not interested in travel or professional research that includes more international topics. To fully internationalize the college experience, all faculty must be brought on board, as research shows that “faculty members who are interested in international and global issues and connections are more likely to reflect this interest in the classroom” (Green, Luu & Burris, 2008, p. 88) or in other environments where they interact with each other and the student body. Connecticut College should continue to build on its considerable success to provide meaningful incentives to gain faculty support in order to create widespread educational change through effective internationalization.

Patty Eames is a master’s student in the Higher Education Administration Program at Boston College. She is the Program Coordinator for the Leaders for Global Operations program at MIT and is a graduate of Connecticut College. Email: patricia.eames@gmail.com

Internationalization in STEM-Oriented Institutions of Higher Education: A Case Study on Georgia Institute of Technology

MEG POPICK

Internationalization is an important buzzword on college campuses across the United States. However, it is questionable to what extent institutional policies and initiatives for internationalization are affecting American colleges in substantive ways. The term “internationalization” is appearing in curriculum design, university wide initiatives and mission statements, but for many institutions of higher education, this is much more talk than action. Limited resources, faculty resistance, and the conservative nature of universities are just a few of the reasons some of these initiatives have not been successful at fully achieving their goals.

This has been a special challenge at universities that focus on the STEM fields (science, technology, engineering and math). Some STEM universities mistakenly believe that it is impossible to internationalize the rigid structure of engineering and science programs and that global competency is not as relevant to these careers.

George Institute of Technology in Atlanta (also known as Georgia Tech or GA Tech), has not only proven that internationalization is possible in a STEM-focused institution, but presents a useful model for other universities to consider. The institution’s accomplishments were publicly recognized in 2007, when NAFSA: Association for International Educators awarded Georgia Tech the Paul Simon Award for Campus Internationalization. This award recognizes institutions that have exhibited excellence in the internationalization of its “practices, structures, philosophies, and policies” (Tech Recognized, 2007). Georgia Institute of Technology focused their efforts on three ideas: 1) GA Tech’s global footprint in the world, 2) GA Tech’s global footprint on Atlanta and 3) the global competency of its graduates.

The first sphere of activity, Georgia Tech’s “footprint in the world,” includes the institution’s
educational and research facilities abroad, partnerships with international businesses and universities, international study, research and work opportunities and Georgia Tech’s image abroad. All of these elements work together to give GA Tech students and faculty access to international experiences.

As a major research institution, George Tech has always enjoyed an international reputation; however, its oldest and largest physical presence abroad is in Metz, France. Created in 1990, Georgia Tech Lorraine (GTL) made GA Tech one of the first American universities to offer research opportunities and degrees outside the United States to European students. GTL also offers short-term study abroad programs for Atlanta-based students as well as teaching and research opportunities for GA Tech faculty (Tech Recognized, 2007). More than 80% of GA Tech faculty has spent at least one semester at GTL. Georgia Tech also has campuses, facilities, or partnerships in Singapore, Ireland, China, South Africa, and Costa Rica and is considering opportunities in India, South Korea, and Latin America (NAFSA, 2007).

**George Institute of Technology in Atlanta has not only proven that internationalization is possible in a STEM-focused institution, but presents a useful model for other universities to consider.**

Besides providing students and faculty with international experiences at its campuses and facilities abroad, Georgia Tech has designed additional study, work and research opportunities abroad. Georgia Tech’s faculty, Office of International Education (OIE), and Division of Professional Practice have worked together to create programs that are tailored to the academic, professional, and financial needs of Tech students. Today, Georgia Tech’s Office of International Education offers over 100 exchange programs that meet the requirements of even the strictest STEM curriculum. The institute has made study abroad affordable; the University System of Georgia allows students to use their financial aid to pay for their experiences abroad. Georgia residents are even able to use their merit-based Hope Scholarships to go abroad, while out-of-state students pay in-state tuition plus a $250 fee.

With a supportive administration and faculty, Georgia Tech has been able to slowly increase the number of students with one or more international experiences. Today, about 40% of GA Tech undergraduate students have had an international experience (GA Tech, Office of International Education, 2009). This is five times as many students sent abroad than in 1993 (NAFSA, 2007).

Over the past two decades, Georgia Institute of Technology has created many opportunities for faculty and students to have international experiences, but the institute has also worked hard to create a global footprint in Atlanta. The internationalization of the campus includes services for international students and scholars as well as the incorporation of an international dimension into all aspects of campus life.

Georgia Institute of Technology enrolls nearly 3,500 international students from all over the world. Not only do they bring an international presence and perspective to the Atlanta campus, they are also an integral part of its “research engine.” For the 2007-2008 academic year, Georgia Tech ranked 24th among US institutions for the number of international students enrolled (The Chronicle of Higher Education, 2009); increasing 35% during the last five years alone.

With such a large international population, American students at Georgia Tech have many opportunities to interact with their international peers. One opportunity is the Georgia Tech International House (I-house). This living-learning community provides undergraduate students with a language and cultural immersion opportunity without leaving Atlanta (GA Tech, Communications & Marketing, 2009).

Foreign language study is integrated into many majors. Georgia Tech’s School of Modern Languages complements this by offering a “pragmatic approach” to foreign language education. For example, the Language for Business and Technology (LBAT) programs are offered in six countries (China, France, Germany, Japan, Mexico and Spain) (NAFSA, 2007). These 6-8 week long summer immersion trips combine class work in business, culture, and technology, with field work,
cultural events, excursions, and trips to local businesses. An impressive 40% of Tech undergrads study a foreign language (Schuster, 2007).

Tech students can further deepen their international awareness in the classroom at the Sam Nunn School of International Affairs, which notably offers courses focused on science and technology within an international context.

Georgia Tech’s internationalization strategy is to create globally competent college graduates. Georgia Tech began working towards this goal in 2005 with the establishment of the International Plan (IP). Students who participate in this multifaceted program enroll in foreign language courses and internationally focused classes within and outside their major. IP students must spend a minimum of 26 weeks abroad, complete a capstone project, and pass an independent oral exam certified by the American Council on the Teaching of Foreign Languages (GA Tech, The International Plan, 2009). Upon completion of the program, students receive an International Plan designation on their degree and transcript. This designation is not something that Georgia Tech takes lightly. The last time the Institute added a degree designation was in 1912 with the creation of the co-op work program (NAFSA, 2007).

Georgia Tech’s international efforts are extensive. This scope of strategic international engagement is impressive for any type of university. However, as a large STEM-focused institution, Georgia Institute of Technology has proven that internationalization is possible beyond the liberal arts curriculum. Georgia Tech has put extensive staff time and financial support behind their internationalization efforts.

However, universities looking to emulate the GA Tech model should carefully consider their own institution’s history, culture, and financial situation. Even though Georgia Tech’s strict STEM-oriented curriculum presents challenges, Tech has the right conditions for internationalization, conditions that many other institutions may not possess.

Approximately 40% of Georgia Tech’s faculty is foreign born. These professors and the thousands of international students and scholars in attendance, contribute to a significant international presence on the Atlanta campus. As a major contributor to the world’s scientific community, Georgia Tech is connected to research institutes and universities around the world. By building partnerships with others in the global academic community, new cross-border opportunities become available. Also, due to the institute’s international reputation, admission to GA Tech for international students is competitive and institutions and governments abroad are eager to build partnerships with the institute. Lastly, private grants and support from the state of Georgia have given Georgia Tech the ability to focus resources on these initiatives.

These circumstances have placed GA Tech in an ideal situation for internationalization. Before other colleges try to model the success at Georgia Tech, they need to assess their own historical, cultural and fiscal circumstances and develop an international plan that fits their unique niche within higher education.

Meghan Popick is a master’s student in the Higher Education Administration Program at Boston College. She currently works in the Office of International Students and Scholars at Boston College and is a graduate of Georgia Institute of Technology.

Email: popickm@bc.edu

The Whole is Greater than the Sum of Its Parts: Internationalization of an Institution

SARAH WALK

As higher education adapts to the global imperatives of the 21st century, colleges and universities everywhere are striving to incorporate international elements into their missions and educational offerings. Common hallmarks of such efforts include a well-developed study abroad operation, a sizeable international student and scholar presence, and internationally-oriented academic options. However, in the quest to become a truly “internationalized” campus, institutions of higher education must, at the very least, assemble a cohesive array of programs, academic studies, and human resources with some deliberateness. The greater challenge, though, is to
find the glue that holds everything together so that global awareness permeates every fiber of the institution.

As Jane Knight (2003) defined it, internationalization is “the process of integrating an international, intercultural, or global dimension into the purpose, functions, or delivery of post-secondary education”. In formulating an institutional internationalization strategic plan, all of the individual elements must line up purposively and meaningfully in order for the process to succeed. In some cases, however, true internationalization remains elusive because the institution is lacking a key intangible factor, something that all the strategic planning in the world could not remedy. For many universities, exemplified by one particular large, private, urban university (from here forward called LPU), true success in institution-wide internationalization has yet to be realized—despite the relative success of individual parts—because history and circumstances stand in the way.

The Necessary Basics: Internationalization of Co-curricular and Extracurricular Programs

In the past, ad hoc study abroad efforts were believed to provide sufficient global exposure for students and were often the sole international activity of universities. With time schools have also added innovative work and volunteer programs abroad to increase students’ options for international learning throughout the undergraduate degree. However, to move beyond this nominal level of internationalization, institutions must also endeavor to create an equally international environment on campus by integrating abroad experiences into campus life and increasing international student enrollments. International students bring a unique global focus to their classes and campus’ student life; unfortunately, though, the frequent lack of integration with domestic students can minimize the impact of their presence. Universities should create co-curricular and extracurricular programs that actively encourage contact among domestic and international students so that cross-cultural thought and action flourish on campus.

Internationalization progresses significantly when existing abroad and on-campus programs are leveraged strategically by increasing awareness, interest, and institutional funding. LPU reflects a strong record of success in this regard; existing domestic programs in co-curricular employment and community service have come to include more international options, and programs abroad have been augmented and integrated into the institution’s undergraduate learning model. Overall, LPU has effectively reframed and strengthened programs to expand international interest and opportunities for students, but unfortunately successful co-curricular and extracurricular programs alone do not constitute true internationalization.

If an internationalization plan is appropriate to institutional identity yet ambitious enough to encourage growth, the resulting whole should be greater than the sum of many individually-existing parts.

Bringing the World into the Classroom: Internationalization of the Curriculum

Further strengthening of institutional internationalization occurs with the integration of global thinking into the academic curricula. At a minimum this must include language instruction for all students, as well as internationally-focused academic programs. Moreover, infusion of global thinking into the general education curriculum is equally important, particularly since these classes are often taken early in a student’s academic career. Genuine internationalization is achieved once global themes are incorporated across all curricula, especially in majors such as business, engineering, or nursing, which have traditionally been domestically oriented. With the emergence of a global knowledge-based economy, all fields require international competences for future success in employment, regardless of geographic location.

Despite success in internationalizing its co-curricular and extracurricular programs, LPU demonstrates many of the common difficulties of the internationalization process. First, LPU’s overall success in internationalization will be limited unless all students (particularly those in the sciences) are given more flexibility in their course plans to take foreign language and are required to do so to
graduate. Second, the new more internationally-focused majors lack sufficient faculty and resources to reach their full potential on campus. And third, international elements have not been incorporated into fields such as engineering and business as they could be. By concentrating internationalization efforts on co-curricular and extracurricular programs, many schools like LPU neglect to modify the core academic curriculum at home.

The People Matter: The Role of Students, Faculty, and Administration in Internationalization

Attempts at institutional internationalization begin to achieve broader success when various constituencies across a campus recognize the validity of such efforts and value their outcomes. First and most importantly, there must be unwavering high-level executive support on the part of university presidents, vice presidents, and provosts in order for the internationalization process to progress. Employing an executive-level administrator dedicated to global strategies is extremely beneficial; under ideal circumstances this individual serves as chief coordinator of all international activities, as well as provides an institutional vision and strategic plan to integrate and sustain the many separate pieces.

A top-down push for internationalization will not succeed unless met by equal interest at the grassroots level from students and program administrators. Staff members responsible for international programs are at the front lines of internationalization efforts; filling these positions with highly qualified individuals with international experience is crucial. However, it is student interest that serves as the best barometer of success—steady growth in student interest in international options propels the process, while persistent fragmentation in student interest can jeopardize even the best institutional strategy.

While high-level support and low-level action are important, these two spheres must meet in the middle, via the university faculty. A common problem for many schools, the issue of faculty involvement has complicated LPU’s internationalization attempts. A large portion of the university’s faculty has been resistant to changes in the academic curriculum and student body composition; moreover, many faculty members’ own work is completely domestic in nature, in effect eliminating classroom instruction as a vehicle for internationalization. Overall, it is clear that all three groups—administration, students, and faculty—must be in balance for systemization, integration, and change to occur in internationalization.

The Glue That Holds It All Together: The Importance of History and Context

The greatest lesson learned from LPU is the importance of institutional history and context and how they affect success or failure in internationalization. As an institution deeply involved in its local urban environment since its founding, LPU’s push for internationalization has been met with sharp resistance by long-time faculty, alumni, and historical “feeder” communities. Moreover, a prolonged period of the school’s recent history saw administrative and financial focus center on improving domestic reputation, enhancing the student profile, and reengineering institutional operations. Because these reforms took place during a crucial time for internationalization of institutions nationwide, LPU has missed vital opportunities to truly internationalize by not pursuing this goal until now.

As the case of LPU reveals, it is imperative that colleges and universities take into account their own history, demographic makeup, alumni perspective, and institutional context in strategic planning so that their efforts may be sustained into the future. Institutions must appropriately and responsibly match their internationalization strategy to their institutional identity, recognizing that there is no ‘one size fits all’ approach to the process. In spite of their genuine interest and intentions, it seems that LPU has achieved limited success in internationalizing thus far because it has done so according to a strategy incongruent with its own history and context.

Conclusion

In today’s global, knowledge-based economy, it is a university’s responsibility to prepare students with the critical thinking and cross-cultural skills needed...
internationalization plan is appropriate to institutional identity yet ambitious enough to encourage growth, the resulting whole should be greater than the sum of many individually-existing parts.

Sarah Walk is a master’s student in the Higher Education Administration Program at Boston College and is a graduate advising assistant at BC’s Office of International Programs. Email: walks@bc.edu.

References

Considering the Democratic Character of American Higher Education

Financial Barriers Facing Adult Students


**Context and Consequences: Trends in Higher Education in Texas**


**An Assessment of Internationalization at Connecticut College**


Internationalization in STEM-Oriented Institutions of Higher Education: A Case Study on Georgia Institute of Technology

The Whole is Greater than the Sum of Its Parts: Internationalization of an Institution