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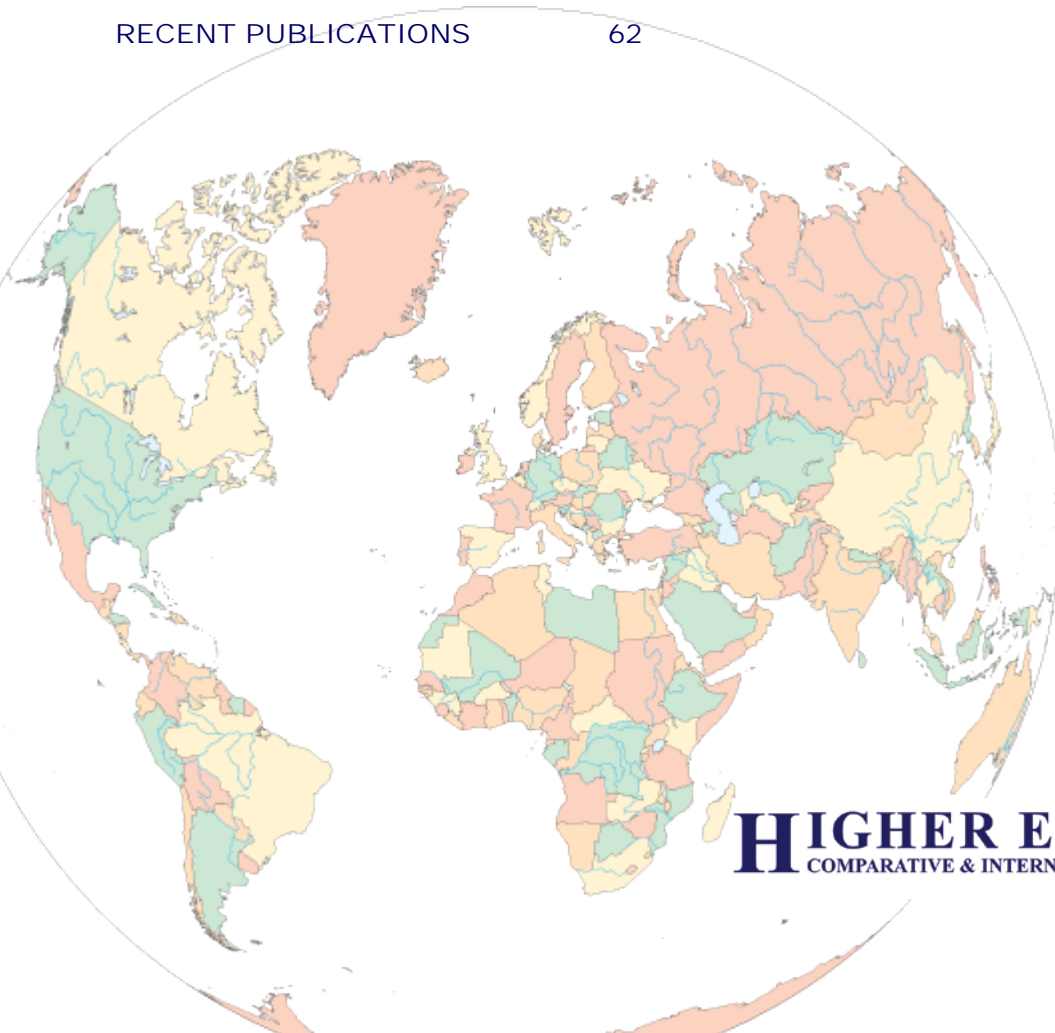
THE OFFICIAL NEWSLETTER OF THE HIGHER EDUCATION SIG

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HIGHER EDUCATION SIG
COMPARATIVE & INTERNATIONAL EDUCATION SOCIETY

COMPARATIVE & INTERNATIONAL HIGHER EDUCATION

Philosophy for *Comparative and Int'l Higher Education*

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International University Partnerships in Cambodian Higher Education

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The privatization policy introduced in the mid-1990s was a landmark change in Cambodian higher education. Public universities were allowed to charge tuition and private universities began to operate. Since then, the system has significantly expanded and greatly diversified to include 39 public and 62 private higher education institutions (HEIs) by 2012 (Ministry of Education, Youth and Sport [MoEYS] 2013). It enrolled more than 216,053 students in 2011-2012 (MoEYS 2013)—representing a marked increase from 13,464 students in 1996 (World Bank 2010). Student tuition fees have become the main source of income for all HEIs. Before the reforms, however, Cambodian HEIs and the country at large were heavily dependent on foreign technical and financial assistance for their rehabilitation after two decades of civil wars and international isolation. Such dependence allowed foreign donors to directly influence the language of instruction, curriculum, and administrative patterns of Cambodian HEIs throughout the 1990s. Hence, the privatization reforms marked a move away from aid dependence to self-reliance in Cambodian higher education.

Against this backdrop, my study aims to explore the power relationships in international partnership programs between Cambodian universities and universities in economically-advanced countries, almost two decades after the privatization reforms. In particular, it examines how far such partnership programs have manifested mutual benefits and equity. Four case study developed countries include France, the United States, Japan, and South Korea. France—Cambodia's former colonizer—was the only developed country to have offered large-scale assistance to Cambodian HEIs, especially throughout the 1990s. In comparison, US assistance to Cambodian HEIs has been quite limited;

however, the American higher education model has increasingly become popular in Cambodia over the last ten years, as in many other countries.

Japan has been the largest donor for Cambodia, with its assistance amounting to US\$2.1 billion from 1992 to 2011—representing nearly one fifth of the official development assistance (ODA) Cambodia received during the period (Cambodian Rehabilitation and Development Board [CRDB] 2011). Nevertheless, Japanese assistance to Cambodian higher education, especially at the engineering university, has only increased recently. Unlike the three countries, South Korea—another economically advanced nation—established its official relationships with Cambodia in 1997. Interestingly, it has emerged as one of the new donors for Cambodia, providing the country with up to US\$180 million from 2005 to 2011 (CRDB 2011). Also, Cambodian-Korean university partnerships have increased over time. Hence, this study offers an interesting comparative analysis of international partnership programs between Cambodian universities and universities in four economically-advanced nations: two Western and two Asian.

It is important to note that in the context of this study, international partnerships refer to the formal linkages between Cambodian universities and their overseas counterparts that are established through the signing of memorandums of understanding (MOUs) or other institutional agreements. These linkage arrangements take various forms, including student/faculty exchanges, joint research, curriculum development, professional training, and dual/joint degree programs.

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Methodology

This study has utilized a qualitative research method to uncover the context surrounding international university partnership programs in contemporary Cambodian higher education. Data was collected through in-depth, semi-structured interviews with senior administrators and faculty at three Cambodian universities from December 2012 to April 2013. These universities, hereafter referred to with the pseudonyms of University A, University B, and University C, represented public specialized HEIs, public comprehensive HEIs, and private HEIs with English as the medium of instruction, respectively. Interviews were also conducted with policy-makers at the MoEYS, the Department of Higher Education, the Accreditation Committee of Cambodia, and the UNESCO office in Cambodia. In total, the study interviewed 44 persons.

Collected data was analyzed within the theoretical framework of mutuality (Galtung 1975; Held 2003, 2010). Within the context of international academic relations, this concept of mutuality is made up of four aspects, including: (a) equity, meaning the aims and forms of cooperative programs are reached through mutual agreement; (b) autonomy, meaning participants from both sides show respect for and are willing to learn about each other's culture, knowledge, and belief systems; (c) solidarity, meaning collaborative programs encourage strong links and interconnectedness among participants in the developing world; and (d) participation, meaning faculty, researchers, and administrators in the developing world participate fully in all activities and contribute to knowledge production on an equal basis.

Overview of International Partnership Programs

This section presents an overview of the current partnership programs between Cambodian universities and universities in the four economically-advanced nations.

Partnerships with French Universities

The study revealed that since the 1990s, almost all French-Cambodian university partnerships at Universities A and B have been initiated and funded by the French government and its international agencies, including the Agence Universitaire de la Francophonie (AUF). The purpose of supporting such university partnerships, according to many participants, is to help improve France's bilateral relations with Cambodia as well as to promote French culture and language in the country. Thus far, French assistance has been limited to public universities, although several private universities have approached the French government for support and partnerships. It is important to note that many French university partnership activities at the two universities have also occurred at the department and individual faculty levels, without any institutional MOU or partnership agreement.

TABLE 1

THE NUMBER OF MOUS AND PARTNERSHIP AGREEMENTS BETWEEN EACH CAMBODIAN UNIVERSITY AND UNIVERSITIES IN FRANCE, THE UNITED STATES, JAPAN, AND SOUTH KOREA IN 2013

Country	University A	University B	University C
France	10 partners	14 partners	–
United States	–	11 partners	17 partners
Japan	7 partners	10 partners	3 partners
South Korea	–	29 partners	8 partners

French assistance to Cambodian higher education has gradually declined since the early 2000s. Cambodia, with its GDP growth hovering between 7-8 percent over the last two decades, is no longer the major priority of French international assistance, which has been primarily directed to the least developed countries in West Africa. The decline of such assistance has greatly affected Cambodian-French university partnership programs. At University A, several partnerships were already gone and the number of scholarships for gradu-

ate studies in France has also dropped. Current partnership activities, although smaller in scope now than in the past, involve technical assistance, joint research, student and faculty exchange programs, and scholarships for graduate studies in France.

At University B, all AUF-supported Francophone activities in such departments as Mathematics, Physics, Chemistry, Geography, and Biology already disappeared. Currently, few partnership activities with French universities remain in these departments, except for the master's program of Mathematics, which still maintains some activities with and are supported by several French universities. In the French language department, AUF assistance has also significantly declined, and is now limited to exchange programs, scholarships for graduate studies in France, and technical support. Overall, not all the 14 French partnership agreements, as shown in Table 1, were active at the time of this study.

Partnerships with US Universities

According to the study, most Cambodian-American university partnerships have taken place mainly through individual and institutional initiation. Especially, University C has been able to form numerous partnerships with its US counterparts through the personal and professional connections of its faculty and senior administrators, mostly foreign-educated. Such partnerships have involved student exchange programs, short-term training for Cambodian staff, and scholarships for Cambodian students. However, not all 17 partnerships listed in Table 1 were active at the time of this study, with many of them being on and off. This is because University C, like the majority of Cambodian universities, has limited resources to contribute to its international programs. In other words, foreign universities are usually the major providers of financial and technical assistance in their partnerships with Cambodian universities.

The most active US-Cambodian partnership at University B at the time of this study was the newly-established bachelor's program of Social Work. This program was opened in 2008, as a result of the partnership agreement between University B and the Universi-

ty of Washington's School of Social Work. In this partnership, six Cambodians have been offered scholarships to pursue their master's degree at the University of Washington. Five of them already completed their study and returned to work as faculty members in the program. The University of Washington has also offered major technical and financial support to the program. Other US partnerships at the university have taken place on a small scale, with many of them being on and off, because of the university's lack of resources to contribute to its international programs. At both Universities B and C, a number of collaborative activities have also taken place at the individual faculty level, without any formal international agreement.

Partnerships with Japanese Universities

The study showed that Japanese university partnerships at University A are larger in scale than those at the other two universities. This is because those programs have occurred under the ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) program, mainly supported and coordinated by the Japan International Cooperation Agency (JICA). Established in April 2001 with the aim to develop well-qualified human resources in the engineering field in ASEAN, the AUN/SEED-Net Program has built strong networks among leading engineering HEIs in the region and in Japan. It is through these networks that University A—the only Cambodian public engineering university—has been connected to many Japanese and ASEAN universities. Hence, Cambodian-Japanese university linkage programs constitute only a small portion of JICA's huge financial assistance to the university under the umbrella of AUN/SEED-Net. Such JICA's assistance has thus far covered various activities, ranging from joint research, professional training, international conferences, scholarships for graduate studies in other ASEAN countries and in Japan, to the development of research facilities. One of the current JICA's projects at University A is the establishment of a new research laboratory, which is worth up to US\$7 million.

At Universities B and C, Cambodian-Japanese partnerships have mostly taken place through individual and institutional initiation. Those partnership activities have involved faculty and student exchange programs, scholarships for Cambodian students to further their graduate studies in Japan, conferences, and joint research.

Japan's increased academic assistance to Cambodia, especially at University A, has been seen to be partly driven by Japanese foreign direct investment (FDI) growth in the country as well as in the ASEAN region. As one participant indicated, "Japan wants to develop skilled labor force to support its firms in Cambodia which have recently increased to more than 100. Another 100 Japanese companies are also coming to the country soon." Hence, improving the quality of HEIs in Cambodia as well as in other ASEAN countries would provide skilled human resources to support Japanese economic expansion in Asia.

Partnerships with Korean Universities

Most Korean-Cambodian partnerships have taken place through individual and institutional initiation, and mainly involved student exchange activities, and scholarships for graduate studies in Korea. Compared to the three countries above, various types of Korean universities have approached their Cambodian counterparts for collaboration, ranging from elite public universities to small private Christian ones. One of the interesting Korean partnerships during this study is the joint master's program of Social Work between University B and Ewha Womans University, which was opened in 2009. In this program, all faculty are Korean professors affiliated with Ewha Womans University, all of whom usually fly to Cambodia for a certain period of time to teach. Hence, in the Social Work program at University B, there are two different models of university partnership: (a) the US-supported bachelor's program, in which all faculty members are Cambodians; and (b) the Korean-supported master's program, in which all faculty are Koreans.

It is interesting that the Korea International Cooperation Agency (KOICA) has lately increased its support for Cambodian public universities, including Universi-

ties A and B, particularly in the area of information technology. At University A, for instance, KOICA has provided funding to build the multimedia laboratory, which is part of KOICA's larger project of promoting e-learning systems in four ASEAN countries, including Cambodia, Laos, Myanmar, and Vietnam. Like Japanese academic cooperation, Korea's support for Cambodian higher education, as pointed out by many interviewees, has been partly related to Korean economic interest in Cambodia, as well as in other ASEAN countries.

Mutuality

This section discusses how far Cambodian partnership programs with institutions in the four economically-advanced nations have manifested mutual benefits and equity.

Equity

The study found that for the most part, there was equity in Cambodian partnership programs with universities in the four case study countries. Although the programs were usually initiated and funded by foreign universities and, in many cases, by their governments and/or international aid agencies, Cambodians were allowed to participate in the program planning so that mutually-beneficial partnerships could be established. For instance, in Cambodian-Japanese joint research projects at University A, the Cambodian side usually took the lead in defining development issues related to Cambodia. Likewise, Cambodian participants were also actively involved in the planning and design of the bachelor's program of Social Work at University B. With France, it is interesting that although AUF demands the use of French language in French-Cambodian partnerships, none of the participants in the study pointed out any requirements by their French partner universities. Likewise, no one mentioned any conditions imposed on the Cambodian side by their Korean partners. Hence, it can be concluded that the aims and modalities of all partnership programs were mutually reached.

Autonomy

There was a high level of autonomy in Cambodian partnerships with French, US, and Japanese universities. For instance, most French-Cambodian university relations have existed since the 1990s, with many French scholars having good knowledge of Cambodia and its culture. US and Japanese participants who were involved in the joint projects with Cambodian universities were also reported to respect their Cambodian counterparts and their values. All Cambodian participants who had been to any of the three countries for their graduate studies claimed that inter-cultural learning was highly valued and promoted in these countries.

However, the degree of autonomy in Cambodian-Korean partnership programs was relatively limited, compared to Cambodian university programs with the other three countries. A number of participants who had been to Korea for their graduate studies complained that there was limited room for inter-cultural development in the country, with relatively few Koreans willing to learn about other cultures, especially those of the developing world. It is interesting, however, that Korean staff who were working in Cambodia under KOICA's and other Korean government projects were reported to have good knowledge of Cambodian culture, with some able to speak the Khmer language as well.

Solidarity

In terms of solidarity, most partnerships with the four countries have manifested high levels of support from their institution, the government, and other relevant agencies. In addition, some international programs with Japanese, French, and US universities have led to strong interconnectedness among Cambodian participants as well as between them and institutions in other countries. For instance, AUF-supported partnerships have connected Cambodian universities to those in other French-speaking countries, through scholarship programs, student and staff exchange activities, joint research, and short-term training. The AUN/SEED-Net Program has also built strong connections among ASEAN universities, especially in the field of engineering.

The Korean joint master's program at University B has mainly been managed by the Korean side, and taken place in isolation from the bachelor's program. This greatly affected the degree of solidarity, since two different models were created within one single department at the university. Little was mentioned in this study about the interconnectedness in other Korean-Cambodian partnerships.

Participation

Although the Cambodian side was the main beneficiary of the partnerships, knowledge transfer between Cambodian universities and universities in France, the United States, and Japan has taken place in a mutual manner. Cambodian scholars were respected and allowed to be involved in various activities in their joint projects with universities in these countries. For instance, in the bachelor's program of Social Work at University B, all faculty are Cambodians, who have played an important role in both academic and administrative work. Likewise, all joint research projects funded by JICA at University A have been focused mainly on Cambodian development issues, with all Cambodian participants working collaboratively with Japanese professors throughout the process. Partnerships with French, US, and Japanese universities have also offered Cambodian scholars opportunities to publish their research in international journals as well.

As for the Korean programs, many participants who had been to Korea for their graduate studies pointed out that there were few opportunities for them to participate in the decision-making process. In terms of knowledge transfer, especially in the joint master's program of Social Work at University B, Korean professors flew to Cambodia to manage all academic activities, including teaching, with limited involvement from the Cambodian side. While such assistance has been highly acknowledged, the dominance of the Korean side in the knowledge transfer process has affected the degree to which the program has responded to the needs of Cambodian society.

Conclusion

Overall, this study showed that virtually all international programs between Cambodian universities and their counterparts in France, the United States, Japan, and South Korea have taken the form of foreign assistance. Universities in the four developed countries are the major providers of financial and technical support in their collaboration with Cambodian universities, which have limited resources to contribute to their international activities. It is interesting, however, that in terms of power relationships, most Cambodia's international university programs with French, US, and Japanese universities manifested all aspects of mutuality, which include equity, autonomy, solidarity, and participation. In comparison, the degree of mutuality in partnership programs between Cambodian and Korean universities was quite limited, especially in relation to the issues of inter-cultural development and the decision-making power. Korean universities also paid little attention to promoting interconnectedness among Cambodian participants—another factor affecting the mutuality degree in university partnership programs between the two countries. The comparative findings of this study reflect the lack of international experience of Korean universities, relative to French, US, and Japanese universities, which have long been involved in their international activities, including university partnership programs, thereby able to adopt more strategic and mutual approaches with their foreign partners.

Note

1. This article is a summary of the author's full and more detailed dissertation project, which focuses on the power relationships between Cambodian universities and universities in economically advanced nations.

References

- Cambodian Rehabilitation and Development Board (CRDB). 2011. *The Cambodia development effectiveness report 2011*. Phnom Penh: Council for the Development of Cambodia.
- Galtung, Johan. 1975. *Peace: Research, Education, Action; Essay in Peace Education*. Copenhagen: Christian Ejlertsen.
- Held, David. 2003. Cosmopolitanism: Globalization tamed? *Review of International Studies* 29(4): 465-480.
- Held, David. 2010. *Cosmopolitanism: Ideals, Realities & Deficits*. Cambridge, UK: Polity Press.
- Ministry of Education, Youth and Sport (MoEYS). 2013. *Report on the Education, Youth and Sport Performance in the Academic Year 2011-2012*. Phnom Penh: MoEYS.
- World Bank. 2000. *Higher Education in Developing Countries: Peril and Promise*. Washington, DC: World Bank.

French Higher Education Governance after Shanghai: More State, More Market, and More Humboldt

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This article¹ explores the recent higher education governance reforms in France, which can be viewed as the result of tensions between historical legacies and transnational competitive pressures. While most recent research on the internationalization or Europeanization of higher education focusses on the Bologna Process, I show that other factors such as international comparative rankings and domestic public sector reforms are crucial variables in explaining changing patterns governance. In a state of gradual change since the mid-1980s (Musselin 2001), French higher education has recently undergone extensive reforms, which were accelerated after the very poor performance of French universities in the Shanghai Ranking. Once considered to be the epitome of state-centeredness and educational *immobilisme*, French educational policy-makers have recently embarked on a quest for international legitimacy and increasingly aligned themselves with external models perceived as successful. While the ongoing reforms have most frequently been described as “marketization”, I show that the reality is more complex and that French higher education has also taken on numerous characteristics of Humboldtism (i.e., research-centered universities) while maintaining its traditionally strong degree of state design and intervention.

University Governance in France: A State-Centered Affair

Until the 1960s, French higher education was characterized by two seemingly paradoxical realities: state-centeredness and structural compartmentalization. Strong centralization was reflected in uniform legal framework, degrees and content (Aust and Crespy 2009), while fragmentation was reflected in the absence

of multi-disciplinary universities. Research activities were concentrated in the *grands établissements* and national research centers, while the compartmentalized *facultés* were overshadowed by the prestigious *grandes écoles*. Restored as overarching institutions with the *Faure Law* of 1968 (Musselin 2001), French universities have traditionally been subject to strong state steering (Kaiser 2007). Aside from the financially privileged *grandes écoles*, French higher education policy has remained strongly attached to the notion of equality (*égalité*) and resisted competition and differentiation among education providers. Numerous attempts to grant universities more autonomy have evoked strong resistance, while the tradition of institutional uniformity has been widely upheld. And although influential faculty members have traditionally also “co-administered” higher education policy with the ministry, the design of the institutional architecture, curricula, personnel policy, quality assurance and university-business relations has generally been a state-centered affair.

As a result, French universities previously lacked strong management institutions and had little capacity for strategic action (Musselin 2001). However, even before processes of internationalization set in, the state had begun to push the system in a more market-oriented direction. Particularly noteworthy is the public management instrument of *contractualisation*, which saw for four-year priority and performance-based contracts between universities and the state, while the state also provided new incentives for universities to engage more closely with regional public authorities and enterprises. Hence by the mid-to-late 1990s, French higher education policy had gradually shifted away from hierarchical steering to a new form of polycentric policy-making (Musselin and Paradeise 2009).

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Although France can be regarded as one of the main initiators of the Bologna Process (Hoareau 2011), its effects on governance were less substantial. Unlike in many other European countries, where Bologna generated a snowball effect and spilled over into diverse governance reforms (see Dobbins and Knill 2009; Martens et al. 2010), Bologna was primarily used in France to create more coherency and transparency, as reflected in the new diploma structure (*licence, master, doctorat*) and new transfer possibilities between different types of higher education (*passarelles*) (see Witte 2006). However, efforts to fundamentally transform and “marketize” higher education governance were swatted down by student unions and large parts of the academic community, who feared the disengagement of the state and the overzealous infiltration of businesses into higher education. For example, the Bologna-inspired *loi de modernisation universitaire* (2003), which saw for greater pedagogical and managerial autonomy for universities, was postponed, even though the foreseen self-management capacities for universities would have been smaller than elsewhere in Europe. Thus, Bologna and the Europeanization of higher education initially did not bring about a rupture with the pre-existing historical governance model. For example, in the early 2000s the state still had a heavy hand in university funding, accession conditions, curricular design and the regulation of personnel, while inter-university competition was hampered by uniform, itemized funding schemes, and a lacking institutional differentiation.

The “Shanghai Shock”

Despite a broader international trend towards educational “governance by comparison” (Martens et al. 2010), there is arguably no other country in which international rankings have greeted with greater mistrust than France. This was reflected in years of public critique of PISA secondary education rankings (Dobbins and Martens 2012). Therefore it is all the more surprising that higher education rankings—and most notably the Shanghai ranking—were crucial in transforming French higher education governance. Burgeoning processes of internationalization such as the Bologna and

Lisbon Processes² had already prompted French higher education policy-makers to view the system from a more competition-oriented perspective (McKenzie 2009, 9). Yet it was the very poor performance of French higher education institutions in the Academic Ranking of World Universities (the “Shanghai Ranking”) that provided the final impetus to revamping French higher education governance. In the first round (2003), higher education policy-makers were faced with the reality that only one French university (*Paris-Sud*) ranked among the top 100. The persistent doubts over the explanatory power of international rankings (Dalsheimer and Despréaux 2008) could not conceal the fact that French universities continued to perform poorly in all widely publicized rankings. For example, no French university ranked among the top 100 in the *Times Higher Education* list,³ while French universities lagged far behind their north-west European counterparts in the subsequent 2007 Shanghai Ranking.⁴

Rattled by increasing fears over its international standing, French higher education policy-makers subsequently underwent a complex “multi-directional” development, which could best be described as “state-driven marketization with a Humboldtian touch.” By promoting so-called *pôles de recherche et d’enseignement supérieur* (PRES) since 2006, the state has used its traditional interventionist approach to enforce cooperation and structural convergence between universities, *grandes écoles*, and research institutions. These arrangements enable local groups of higher education and research institutions to develop joint research and education offers together with enterprises and public authorities, and are thus symptomatic of the Ministry’s pushing for the reintegration of research into French universities (Aust and Crespy 2009; MESR 2010). Flanked by a massive increasing research funding, the “re-Humboldtization” of French universities has also been propelled by a state-driven market approach. While a new *Agence Nationale de la Recherche* (ANR) was established to administer research funds for higher education providers, another new agency—*Agence d’évaluation de la recherche et de l’enseignement supérieur* (AERES)—has instituted new bibliometric criteria (e.g., journal impact factors) for performance-based

research evaluation. Thus, the state has prompted universities to boost their research capacities and introduced market mechanisms to chip away at the principle of equal financial treatment of universities.

Most notably, the “Shanghai shock” also spilled over into internal university governance structures. Here, President Sarkozy explicitly drew on international rankings to legitimize his “reform hypothesis” that university output and success correlate directly with their degree of autonomy.⁵ Although it refrained from introducing study fees and selective university admissions (see McKenzie 2009, 56), the resulting *Law on the Liberties and Responsibilities of Universities (LRU)*⁶ substantially boosted the degree of university autonomy, so that French universities now essentially operate global budgets with little state interference over funding allocation. Moreover, their “personnel autonomy” has also been significantly enhanced, as universities may now negotiate employee contracts and salaries without state approval.⁷ Along these lines, the government has also imposed new “entrepreneurialized” governance structures on French universities, the centerpiece of which is the *conseil d’administration*. This governance body was significantly downsized from previously 60 to some 20 to 30 members including not only teaching and research staff, but also external business and regional stakeholders. In line, with more market-oriented systems, the LRU also strengthened the powers of university presidents, who preside over the implementation of the four-year contracts and monitor income and expenditure from governmental and private sources, while also holding substantial powers regarding employment contracts and awarding performance bonuses.⁸ However, the composition of the *conseil d’administration* is also unusual by international standards, as it merges both academic representation and management structures into one institution. This shift in power towards university management, and in particular, university presidents, has been viewed by large parts of the academic community as “academic feudalism” and as potentially detrimental to their professional autonomy (Jourde 2008).

Conclusions: Market-Based Governance by State Design

As demonstrated above, French higher education policy is currently in a state of profound and dynamic change. Altogether, I have aimed to show that the new mode of governance is much more complicated than often assumed and can be classified neither as “pure academic capitalism” (as argued by French leftists) nor as an incrementally reformed, still state-centered model. On the one hand, the France has upheld its historical tradition of state interventionism into education. The state still undeniably has a heavy hand in university governance and has essentially functioned as a “governance designer” during the reform process. This is reflected in the state-enforced convergence of *grandes écoles* and universities and the creation of *PRES*. Moreover, the transfer of greater administrative capacities and new internal governance structures to universities also were not the result of an academic “grassroots” movement, rather targeted state design. The state thus still functions as the “pilot” of an increasingly market- and competition-oriented system (Aust and Crespy 2009), which has been further enhanced by the expansion of state research performance evaluation. On the other hand, the top-down mode of governance has receded with the recent wave of reforms, which force universities to develop their own strategies to boost their international competitiveness and visibility. French universities have thus indeed taken on numerous symptoms of market-based governance such as deregulated personnel recruitment, global performance-based budgeting, entrepreneurial management, and *ex post* quality assurance. Finally, France has also visibly converged on the Humboldtian higher education model of its north-eastern neighbor, as universities have become increasingly research-oriented and researching lecturers (*enseignants-chercheurs*) have also taken on an important role in shaping university profiles.

Altogether, keeping up with the international competition has at least temporarily overtaken “educational equality” as the leading “leitmotiv” of French higher education. Plagued with fears over the competitiveness and viability of French higher education, the state has

visibly engaged in the emulation of what it perceives as international best practice (e.g., selective performance-based funding, qualitative differentiation, entrepreneurial university governance). In contrast to other incremental governance reformers (e.g., Germany, see Schimank and Lange 2009; the Czech Republic, see Dobbins 2011; Italy, see Capano 2008), the state was able to draw on its historically privileged position as a “pilot” or “designer” of the higher education system to uproot entrenched policies and structures. At the moment, France is unlikely to return to its previous governance structures, as the new socialist government has no stated intention to fundamentally uproot the recent reforms (see *Le Monde* 2012). It remains to be seen whether the pursued strategy will have the intended effect and bring France back to the forefront of academic research innovation and reinvigorating its struggling economy.

Notes

1. For a longer and more thorough analysis of the French higher education reforms, see Dobbins (2012).
2. The Lisbon Process was agreed on by the European Council in March 2000 and aimed to make Europe the most competitive and dynamic knowledge-based economy in the world by 2010.
3. Only one *grande école* (*École Polytechnique*) was ranked among the top 100.
4. The CHE Excellence Ranking also reaffirmed the poor performance of French universities in the natural sciences and mathematics, as France was far outperformed than other western European systems with much smaller higher education landscapes such as Sweden, Switzerland, and the Netherlands.
5. Specifically, Sarkozy called for at least two French higher education institutions to rank among the best 20 in the world and at least 10 among the top 100 (Protocol cadre 2007; Sarkozy 2007).
6. *Loi relative aux libertés et responsabilités des universités*; also known as *Loi Pécresse* (2007).
7. The employment of public servants, who partially account for university staff, is still regulated by the state (Schraeder 2008, 7-8).
8. Schraeder (2008, 7) emphasizes that the composition of the *conseil d'administration* is unique by international comparison, because it merges academic representatives and management structures into one institution. In the case of Germany, for example, this would coincide with a merger of academic senate with the newly established administrative councils (*Hochschulräte*), which is not planned anywhere.

References

- Aust, Jérôme, and Cécile Crespy. 2009. “Napoléon renversé? Institutionnalisation des Pôles de recherche et d'enseignement supérieur et réforme du système académique français.” *Revue française de science politique* 59 (5): 915-938.
- Capano, Gilberto. 2008. “Looking for Serendipity – The Problematical Reform within Italy’s Universities.” *Higher Education* 55 (4): 481-504.
- Clark, Burton. 1983. *The Higher Education System*. Berkeley, CA: University of California Press.
- Dalsheimer, Nadine, and Denis Despréaux. 2008. “Les classements internationaux des établissements d'enseignement supérieur.” *Éducation et Formation* 78: 151-173.
- Dobbins, Michael, and Christoph Knill. 2009. “Higher Education Policies in Central and Eastern Europe: Convergence towards a Common Model?” *Governance* 22 (3): 397-430.
- Dobbins, Michael. 2011. “Explaining Different Pathways in Higher Education Policy in Central and Eastern Europe: The Cases of Romania and the Czech Republic.” *Comparative Education* 47 (2): 223-245.
- Dobbins, Michael. 2012. “How Market-Oriented is French Higher Education?” *French Politics* 10 (2): 134-159.
- Dobbins, Michael, and Kerstin Martens. 2012. “Towards an Education Approach à la Finlandaise?”

- French Education Policy after PISA.” *Journal of Education Policy* 27 (1): 23-43.
- Hoareau, Cecile. 2011. “Globalization and Higher Education Policy-Making in France: Love It or Hate It?” *French Politics* 9 (3): 222-239.
- Jourde, Pierre. 2008. L’université féodale de demain. *Le Monde Diplomatique*, April 2008.
- Kaiser, Frans. 2007. *Higher Education in France: Country Report*. International Higher Education Monitor. Enschede, The Netherlands: Center for Higher Education Policy Studies, University of Twente.
- Le Monde*. 2012. “François Hollande détaille ses propositions sur l’université.” *Le Monde*, 5 March 2012.
- Martens, Kerstin, Alexander-Kenneth Nagel, Michael Windzio, and Ansgar Weymann. (Eds.) 2010. *Transformations of Education Policy*. Basingstoke, UK: Palgrave Macmillan.
- McKenzie, Zoe. 2009. *Higher Education Reform in France: Some Lessons for the Australian Experience*. Working Paper. Paris: Fondation pour l’Innovation Politique.
- Ministry of Higher Education and Research [Ministère de l’Enseignement supérieur et de la Recherche] (MESR). 2010. “Les pôles de recherche et d’enseignement supérieur (PRES): une offre de formation et de recherche plus cohérente.” Paris: MESR.
- Mignot-Gérard, Stéphanie. 2003. “Who are the Actors in the Government of French Universities? The Paradoxical Victory of Deliberative Leadership.” *Higher Education* 45 (1): 71-89.
- Musselin, Christine. 2009. “Seeking Autonomy: French Universities Against the Jacobins.” *International Higher Education*, 56 (Summer): 17-18.
- Musselin, Christine, and Catherine Paradeise. 2009. “France: From Incremental Transitions to Institutional Change.” In *University Governance: Western European Perspectives*, ed. Catherine Paradeise, Emanuela Reale, Ivar Bleiklie, Ewan Ferlie. Dordrecht, The Netherlands: Springer.
- Organization for Economic Co-operation and Development (OECD). 2004. *Regards sur l’éducation*. Paris: OECD.
- Pécresse, Valérie. 2009. “Speech to the French Senate,” 23 June. Available online at: <http://videos.senat.fr/video/videos/2009/video2433.html>.
- Protocole cadre en vue de la conclusion d’un Contrat national pour la réussite des universités. 2007. Available online at : <http://www.gouvernement.fr/presse/le-premier-ministre-a-signé-le-protocole-cadre-pour-la-reussite-des-universites>.
- Sarkozy, Nicolas. 2007. “Lettre de Mission de M. Nicolas Sarkozy adressée à Mme Valérie Pécresse,” *Collectif Papera*, 5 July. Available online at : <http://www.collectif-papera.org/spip.php?article601>.
- Schimank, Uwe, and Stefan Lange. 2009. “Germany: A Latecomer to New Public Management.” In *University Governance: Western European Perspectives*, ed. Catherine Paradeise, Emanuela Reale, Ivar Bleiklie, Ewan Ferlie (pp. 51-75). Dordrecht, The Netherlands: Springer.
- Schraeder, Harald. 2008. *Die Universitätsreform in Frankreich – ein gelungener Auftakt*. Berlin: Forschungsinstitut der Deutschen Gesellschaft für Auswärtige Politik.
- Witte, Johanna. 2006. *Change of Degrees and Degrees of Change: Comparing Adaptations of European Higher Education Systems in the Context of the Bologna Process*. Ph.D. Dissertation, Center for Higher Education Policy Studies, University of Twente.

Central American Exceptions: Institutions that Combine International Cooperation and Local Ingenuity

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Central America is not known for the quality of its higher education. This is reflected in global data with no Central American universities appearing in the international rankings, few of its university professors holding accredited PhDs, and the region accounting for less than 0.10 percent of global research expenditures and Science Citation Index publications (Svenson 2012). In spite of these dismal statistics, there are some exceptional Central American institutions that produce highly qualified graduates and valuable scientific research—particularly in thematic areas important for national and regional development. These exceptions tend to be non-traditional private institutions that combine inputs from both international cooperation and local and regional resources to create unique, practical applications for knowledge transfer and scientific production. They merit attention not only for their impressive academic achievements but also for the lessons they may offer other countries as strategic investment in applied research becomes increasingly vital for small emerging nations in advancing their development agendas (Holm-Nielsen et al. 2005; Svenson 2012).

The Region and Its Challenges

Central America is made up of seven countries—Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama—that lie between Mexico and South America and support a population of about 42 million, mostly Spanish-speaking inhabitants. Over the years, especially in recent decades, these countries have established increasingly stable democratic governments and currently all fall into the World Bank’s “middle-income” category of developing countries (World Bank 2012). While this indicates progress, the middle-income

classification also means that, notwithstanding a 40 percent overall poverty rate, most of Central America is not poor enough to qualify for much donor assistance.

These circumstances, combined with widespread fiscal limitations and historical reliance on commodities and resource extraction for economic activity, affect educational performance at all levels. Apart from Costa Rica, public spending in Central America on education is below the Organisation for Economic Co-operation and Development (OECD) annual average of about five percent of GDP (OECD 2012). Primary education completion and literacy rates have improved dramatically in the past decades but there are still major gaps, especially for the higher levels of education. Secondary enrollment is only around 75 percent, with far lower completion rates, and though tertiary enrollment has reached an average of 25 percent of the age cohort, graduation rates are still well below that. Additionally, quality is an issue everywhere. Many reports highlight serious problems across the region with regard to inadequate and outdated teacher training, curricular development, assessment mechanisms, standard setting, and accountability systems (World Bank 2005; Partnership for Educational Revitalization in the Americas [PREAL] 2007; UNESCO 2007).

Central American higher education has expanded and diversified radically in the past twenty years, particularly in the private sector, but not all of the accompanying changes have been beneficial for promoting research and preparing graduates to make a productive contribution to society. Most of the new private universities are for-profit institutions and often criticized for their commercialization of the sector (World Bank 2005; UNESCO- International Institute for Higher Education in Latin America and the Caribbean [IESALC] 2010). Most of the programs offered through these

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schools focus on teaching for a limited selection of low overhead, non-scientific professional preparation with minimal attention to research. Compounding this situation, the reduction of governmental resources allocated to higher education throughout the region in recent years has meant less university funding almost universally. And unlike their industrialized counterparts, Central America funds most of its research (nearly 70 percent) through public expenditures—as opposed to through private industry and foundation support—with some international sources (roughly 20 percent). This represents a major constraint as most Central American governments find it hard enough to budget sufficiently for infrastructure and basic public services, much less for scientific investigation, which tends to be categorized as a luxury. With no established tradition for private sector financing of research, it makes investment in scientific activity extremely difficult (Svenson 2012).

This brief review of the developmental, educational and scientific reality in Central America presents an unpromising picture. Still, some higher education institutions in the region have managed to beat the odds and produce consistently excellent graduates and scientific studies. A few of these institutions are public and a few are traditional private universities—non-state, non-profit, religious or philanthropic institutions. Here, though, we focus on a different, non-traditional, more ambiguous category of international, non-state, non-profit institution since it is with this type of university that more of the professionals and applied research associated with regional and global development objectives are being produced. Also, this model appears to offer more potentially replicable lessons for other developing countries.

International Cooperation and a Non-traditional University Model

Examples of this non-traditional, international non-state university are found in several countries of Central America and represent a variety of administrative structures and academic concentrations. They have in common the following characteristics: they are not public institutions; their curricula focus on specific thematic

areas of regional importance for development; and they leverage international cooperation as a means to achieving and maintaining their scientific research productivity. Their individual and collective success exemplifies how local academics have been able to partner with international counterparts—multilateral and bilateral organizations, along with recognized universities and private sector actors from both OECD and Latin American economies—to provide an applied, practice-oriented type of higher education and research in Central America that propels important aspects of development. Costa Rica, where national policy and investment have been aimed historically at advancing educational achievement, hosts more of these universities, but similar institutions are also found in other parts of Central America. These schools generally offer a limited range of degrees, often only at the graduate or undergraduate level in a single academic discipline. They devote significant resources to applied research, project development, and consulting as a means of generating both knowledge and revenue. Most operate bilingually, in Spanish and English, and attract international faculty and student bodies. They are also accredited—internationally, nationally or regionally—which is unusual in the region and offers a distinct competitive advantage (Jain 2011).

Examples of this type of higher education and research institution include the following: Centro Agronómico Tropical de Investigación y Enseñanza (Center for Tropical Agricultural Research and Education [CATIE]); the Escuela de Agricultura de la Región Tropical Húmeda (School of Tropical Agriculture [EARTH University]); the Escuela Agrícola Panamericana Zamorano (Zamorano Pan-American Agricultural School); the Facultad Latinoamericana de Ciencias Sociales (Latin American School of Social Sciences [FLACSO]); the Instituto Centroamericano de Administración de Empresas (INCAE Business School); and the Universidad de la Paz (University for Peace [UPEACE]). CATIE, EARTH, INCAE and UPEACE are based in Costa Rica; FLACSO is in Costa Rica and Guatemala (and also in El Salvador with a smaller program); and Zamorano is in Honduras. Each has a regional Central and Latin American research orientation,

rather than a more narrow national concentration, and focuses on relatively few thematic areas. The schools' corresponding degrees, research and publications fall into two general categories of study: earth and environmental sciences (CATIE, EARTH, and Zamorano) and social sciences (INCAE, FLACSO, and UPEACE). Both of these areas are integral to all Central American countries' development and directly linked with national and regional economic and social agendas.

CATIE, EARTH, and Zamorano teach and study subjects related to natural resource management and sustainable tropical agriculture. FLACSO, originally founded with support from UNESCO, is part of a larger Latin American institution devoted to the social sciences; it offers degrees and conducts research in areas such as social development and public policy; migration; economic development; decentralization, democratic governance and political institutions; sustainable tourism; social movements; globalization, markets and inequality; and citizen security. INCAE is dedicated to solely to graduate level study and research in business administration and is affiliated with Harvard Business School. UPEACE is an independent, international, United Nations-mandated institution of higher education for promoting studies on peace, security, governance and sustainable development.

Keys to Success

Although these institutions are different in many ways, they share a number of features that can be linked to their success and that are both internationally and internally organizational in nature. Internationally, all are registered as international organizations dedicated to higher education and research. Their international mission status allows for independence from national government or inter-governmental control and grants autonomy beyond national and regional boundaries. Additionally, these institutions all began with financial and academic support from important international backers and have historically counted on executive boards made up of renowned international scholars and professionals. This propels attraction of international faculty and student bodies, fostering environments of

stimulating diversity that include a wide range of nationalities, socioeconomic backgrounds, life experience and academic orientation. It also means professors are internationally trained and credentialed, which promotes a higher level of academic achievement—particularly for training in research methods—than is typically available in the region. This ensures a more stable human resource base for the formulation and implementation of research projects and for bilingual communications. The international composition of board and faculty also drives the establishment of international academic standards for curricula and for publishing. Adherence to globally accepted standards and methods is essential as internationally compatible curricula and guidelines are what allow for student transferability, and international peer-reviewed publishing is what allows for academic exchange, dissemination of research findings and collegiate cooperation.

The international orientation of these non-traditional universities helps them develop another valuable asset: their extensive global networks. These networks manage relationships with local, regional and international alumni, faculty, board members, partner institutions, clients and other affiliates. They also lead to potential new partners and associates, which can expand research and consulting options, faculty and student bodies, and funding mechanisms. As an example, CATIE claims a network of over 400 strategic partners that include universities, research institutes, development centers, government agencies, nongovernmental organizations, cooperatives, small and medium-sized businesses and corporations, all of which facilitate dissemination of scientific knowledge and practical experience in order to further public and private sector development (CATIE 2011). Similarly, INCAE counts among its critical worldwide network most Latin American governments; the major Central American integration organizations; US and European bilateral organizations; multilateral development organizations such as the World Bank, International Finance Corporation, World Economic Forum, and Inter-American Development Bank, and the United Nations; global foundations like AVINA, Soros, the Inter-American Foundation and Ford; and dozens of regional

business associations (INCAE 2012). International affiliation also drives institutional accreditation processes, which further enhance global academic reputations and possibilities for exchange. Accreditation—as opposed to simple recognition from a national ministry of education—facilitates better cross-border assurance of educational and investigative rigor. It enables international comparison, transfer of credits between institutions and improved research collaboration. It also serves as an impetus for institutions to maintain and expand their research activity in an effort to retain their standing. All of the Central American exceptions presented here are accredited (or in the process of becoming so, as with Zamorano), some by multiple institutions, despite the lack of accreditation culture in the region.

Apart from these universities' international affiliations that enhance their assets, several aspects of their internal organization contribute significantly to their success. First and foremost, they are all organized as non-profit institutions, which allows for reinvestment of all revenue generated beyond their ongoing expenditures. This is critical for keeping tuition costs reasonable and enabling expensive research. Second, these universities have finance structures that are supported by multiple national and international funding sources. Student fees, alumni and organizational donations, national and international development and consulting projects, research funding and entrepreneurial enterprises all contribute to these institutions' independent financing. This diversifies their risk and broadens their revenue generating opportunities. Third, each of these institutions has a relatively narrow thematic focus in an academic area closely linked to development. This promotes strengthening of niche expertise and avoidance of over-extension at the same time as it opens the institutions to technical cooperation benefits. Finally, these universities have all developed in-house capacity for producing internationally competitive project proposals and academic journal publications—in English and Spanish. These abilities broaden the institutions' fundraising and knowledge generation reach and strengthen their academic reputations, international recognition and branding power. Like universities and research centers everywhere, these schools struggle to

maintain the levels of financial and human resources necessary for generating high-quality, international standard research. Nevertheless, the combination of international and internal factors reviewed here appreciably aids their efforts and distinguishes them from their counterparts in the region.

Conclusion

In spite of its poor reputation for research and educational productivity, Central America does foment innovative activity in these areas, much of which comes from the non-traditional, private international centers described above. This model has benefitted from its international mission status and connections with high profile academic, professional and development organizations worldwide. It has also benefitted from an approach that links applied research with teaching, outreach and technical cooperation and that concentrates on singular thematic concentrations tied to regional development objectives. Part of this model's success in Central America may also have to do with the national regulatory environment and sociopolitical conditions found in Costa Rica, host country to the majority of the institutions examined here.

The private, non-profit international university concept is important because of its potential as an international development tool—one that benefits both industrialized and developing countries. The type of collaborative educational research center that combines strengths and resources of international organizations, universities and scholars with those of local and regional actors may offer an effective instrument for other developing regions as well. The global community can provide a necessary and pivotal partner for this. International cooperation can assist with supplemental knowledge, human and financial resourcing, and redirection of research agendas and incentives toward development goals. When combined with local and regional intellectual capacity and insight, international cooperation works to its greatest potential and shifts from being a conditioned, unsustainable imposition to being an integrated collegial partner contributing to practical, sustainable, knowledge-generating solutions.

In this regard, the Central American experience with private, international institutions may have some valuable lessons to offer the rest of the developing—and developed—world.

References

- Centro Agronómico Tropical de Investigación y Enseñanza [Center for Tropical Agricultural Research and Education] (CATIE). 2012. *Acerca de Nosotros*. Available online at: <http://catieeducacion-web.sharepoint.com/Pages/aboutus.aspx>.
- CATIE. 2011. *Biennial Report 2010-2011*. Turrialba, Costa Rica: CATIE.
- EARTH University. 2012. *About EARTH*. Available online at: <http://www.earth.ac.cr/?lang=en>.
- Facultad Latinoamericana de Ciencias Sociales [Latin American School of Social Sciences] (FLACSO) Costa Rica. 2012. *Acerca de...* Available online at: <http://www.flacso.or.cr>.
- Holm-Nielsen, Lauritz B., Kristian Thorn, Jose Joaquin Brunner and Jorge Balan. 2005. *Regional and International Challenges to Higher Education in Latin America*. Washington, DC: World Bank.
- Instituto Centroamericano de Administración de Empresas (INCAE Business School). 2012. *About Us*. Available online at: <http://www.incae.edu/en/master-programs/mba-costa-rica.php>.
- Kumar Jain, Adishwar. 2011. “Calidad y Acreditación en la Educación Superior en Centroamérica” [“Quality and Accreditation in the Higher Education of Central America.”] *ICAP-Revista Centroamericana de Administración Pública* 60-61: 29-57.
- Organisation for Economic Co-operation and Development (OECD)/Economic Commission for Latin America and the Caribbean (ECLAC). 2011. *Latin American Economic Outlook 2012: Transforming the State for Development*. Paris: OECD Publishing. Available online at: <http://dx.doi.org/10.1787/leo-2012-en>.
- OECD. 2012. *OECD Family Database*. Paris: OECD. Available online at: <http://www.oecd.org/social/family/database>.
- Partnership for Educational Revitalization in the Americas (PREAL). 2007. *A Lot to Do: A Report Card on Education in Central America and the Dominican Republic*. Washington, DC: PREAL Task Force on Education Reform in Central America.
- Svenson, Nanette. 2012. “R&D in Central America: Panorama and Prospects for International Cooperation.” *Higher Education* 23 (September): 1-16.
- UNESCO. 2007. *The State of Education in Latin America and the Caribbean: Guaranteeing Quality Education for All*. Santiago, Chile: UNESCO Regional Bureau of Education for Latin America and the Caribbean.
- UNESCO – International Institute for Higher Education in Latin America and the Caribbean (UNESCO-IIESALC). 2010. *La Universidad Latinoamericana en Discusión [Discussion of the Latin American University]*. Caracas, Venezuela: UNESCO-IIESALC.
- Universidad para la Paz [University for Peace] (UPEACE). 2012. *About UPEACE*. Available online at: <http://www.upeace.org/about/>.
- World Bank. 2005. *Central American Education Strategy: An Agenda for Action*. Washington, DC: World Bank.
- World Bank. 2012. *Data—World Development Indicators*. Washington, DC: World Bank.
- Zamorano. 2012. *Explore Zamorano*. Available online at: <http://www.zamorano.edu/english/>.

The Paradox of Mortimer J. Adler: Revisiting the Distinction between Liberal and General Education

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When asked about his desires for his legacy, an aging Mortimer J. Adler (1902-2001) paused, pondered, and replied, “The books I’ve written . . . and the *Great Books*” (Adler 1990).¹ But, perhaps there is a third element of his legacy: A paradox of sorts, and one that reveals much about the tension between, and the conflation of, the paradigms of liberal and general education. This article explores this very paradox and its possible ramifications for the American undergraduate curricular enterprise.

It may be safe to say that Adler considered himself to be liberal education *personified*. Throughout his career, Adler saw the Great Books as the path to and the core of a liberal education (Lacy 2008, 398). Shortly after Adler’s death, Casement (2002) wrote, “The pioneer of the great-books movement remained as an inspiration into the twenty-first century, and will be remembered as its weightiest figure” (36). By championing the teaching of the Great Books to generations of undergraduates at Columbia University and the University of Chicago as well as “popularizing” the texts themselves through an extensive relationship with *Encyclopedia Britannica*, Adler sought to bring what he felt was highbrow culture to the masses (Chaddock 2002; Mulcahy 2008; Lacy 2013). In doing so, he positioned himself not as a modern-day Prometheus, but rather as the foremost expert of the Great Books, even going so far as to oversee and participate in the production of an index of 102 ideas crucial to the Great Books entitled the “Syntopicon” (Beam 2008).

But Adler, who claimed to have been “at the top of [his] class” at Columbia, never earned a bachelor’s degree (Adler 1990). Adler refused to attend the university’s required military exercises, swimming classes, and general courses in physical education. “Nonattend-

ance resulted in a series of F’s on my record.” He recalled in 1977, “At the end of my senior year in 1923, after I had already been awarded a Phi Beta Kappa key and had paid twenty dollars for my diploma, I received a note from Dean [Herbert E.] Hawkes saying that I might attend the commencement exercises but that I would not get my bachelor’s degree because I had neither passed my swimming test nor fulfilled the physical education requirement for graduation” (Adler 1977, 20-21). It was not until 1983 that Columbia would allow Adler to participate in the graduation ceremonies and receive a degree (Grimes 2001). Though Adler was pleased with the honor, he went through his career acknowledging that he held “the rare distinction...of being quite possibly the only Ph.D. in the country without a master’s degree, a bachelor’s degree, or even a high school diploma” (Adler 1977, 21; Adler 1990).

The entire affair raises an interesting paradox. Adler, who was obsessed with obtaining and disseminating *liberal* education, could not claim to have obtained a *general* education. The irony seems to have been lost not only on Adler himself but also on those who have studied him. This paradox also raises a number of questions for scholars of both liberal and general education as well as those interested in reforming the undergraduate curriculum. What is the relationship between liberal and general education? What are the differences between the two? This article briefly explores each of these questions by focusing on the conflation of liberal and general education and the subsequent attempts to delineate the differences between the two paradigms. One body of literature contends that the main distinctions between the two can be counted as differences between aims and curricular structures. After summarizing this literature, the article extends this argument by maintaining that we must also explore the ways that

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research methodologies are applied to general and liberal education. I posit that a significant trend in recent years is the tendency of research on general education to be carried out using quantitative methods and to have a narrow focus on evaluation/assessment. On the other hand, qualitative methods have come to dominate research on liberal education and this genre tends to provide personal narratives and philosophical discussions.

The Conflation of Liberal and General Education and Attempts to Distinguish the Two

It is likely that many see the attempt to distinguish between liberal and general education as a task that is both thankless and ineffective. The consensus appears to be that the conflation of the two is so widespread that any attempt to delineate would be hopeless. As Conrad (1978) notes, "Most attempts to distinguish between general and liberal education are futile because the words have been used interchangeably by too many people for too long to lend themselves to useful distinction" (48; cf. Glycer and Weeks 1998). That said, a few authors have—while acknowledging the difficulty of the task—attempted to distinguish between the two.

Perhaps the first sustained attempt was by Baker (1947). Largely disturbed by the attempts of contemporary educational theorists such as Robert M. Hutchins, Stringfellow Barr, and others to conflate liberal education with general education; he set about tracing the concept of general education through the ancient and modern world. He argued, "General education is the theory of education evolved to fit all students—not just the upper ten per cent—to live in their time. It is not precisely liberal education, because liberal education as often defined and practiced, will not fit all students" (347). In attempting to define general education as separate from liberal (and vocational) education, Baker noted six distinguishing characteristics. He referred to general education as "Universal Education," "Practical Education," "Education for Citizenship," a paradigm that "Educates the Whole Man," "Individualized Education," and a "Unifying Force." To be universal and practical, Baker contended that general education would

need to be focused on citizenship, the "Whole Man," the individual, and the society.

Though Baker was interested primarily in the aims of general and liberal education, later scholars focused on the differences in how the two paradigms were implemented. Morse (1964, 11) echoed Baker in suggesting that general education was "manifestation of the democratic spirit in higher education, for it admits a wider scope of abilities and a far broader clientele." By doing so, Morse reified Baker's stated importance upon the differing aims of the two paradigms. However, Morse complicated the dichotomy by introducing a fuller discussion of the pedagogical differences between liberal and general education. He argued,

Liberal education is considered to be subject centered, with a fairly fixed body of content material, logically organized. Its goal is also the stimulation of reflective thinking, with less emphasis on behavior, and it draws its clientele from the intellectual elite...General education, on the other hand, is more concerned with the learner than with the content...Its goals are individual development in its various aspects, and it places emphasis upon behavior and social usefulness as well as upon intellectual development as an outcome of learning (11).

Despite Morse's attempts to incorporate the pedagogical and curricular manifestations of each paradigm, Miller (1988) noted that such a distinction created its own problems. Though he did not grapple with Morse directly, Miller maintained that "The confusion between liberal and general education . . . rests on two basic problems. One is a tendency to define both general and liberal education too superficially, for instance, to look only at the structure of the curriculum or only at the subject matter in making one's definition. The other is the wide variety of practice that exists within both paradigms" (183-184). In arguing this point, Miller seemed to be suggesting that the two paradigms needed to be understood as unique entities all their own, rather than defined against each other.

Though provocative, this argument was not taken up by the next scholar to address the dichotomy: Erick-

son (1992). In providing a discussion of the dichotomy Erickson further complicated the notions of aims and curricular manifestations. He argued, "It is important to note that general education differs greatly from liberal education in its underlying assumptions, ideological orientations, pedagogical methods, curricular structures, and ultimate aims" (16). By noting that aims were influenced by assumptions and ideology, and that curricular manifestations were made up of structures and pedagogy, Erickson expanded the discourse surrounding the dichotomy.

The issues surrounding the dichotomy between general and liberal education were also faced by numerous scholars across the several campuses that comprise the City University of New York (CUNY). In their first collaborative attempts to discuss and reform the system-wide undergraduate requirements, these scholars noted a list of about two dozen comparable terms that made it difficult to proceed. However, they soon recognized that these terms sprung from the dichotomy between general and liberal education. A major leader of this group recalled, "it became clear that we would not be able to get on with the process unless we clarified what we meant by these two key terms...we agreed that General Education was the more neutral, less value-laden term of the two, and for our purposes, it represented a set of *organizational structures* that could be quantified... What we mean by liberal education and how we define the term is less determined" (Summerfield 2007, 10-11). In the end, the group attempted to combine the two terms, just as others had done before.

Through these varied attempts to grapple with the dichotomy between liberal and general education, there is a tension faced by each of the authors. How can the aims described as liberal education be codified and either infused or separated from the structures of the undergraduate curriculum often distinguished as the measures taken under the guise of general education? Though Baker, Morse, Miller, Erickson, and Summerfield provided excellent insights from their attempts to grapple with the varying degrees of difference between aims and curricular structures, they ultimately provided limited discussions on the research informing and undergirding these aims and curricular structures. A fur-

ther development that has taken place in the years since these publications is the trend toward a split between largely qualitative methods applied to liberal education and predominantly quantitative methods applied to general education. The methods applied to these paradigms have influenced the content of the research produced on them, though not deterministically so. Discussing this development will supplement the insights gained from the earlier authors referenced.

Research on Liberal and General Education in the Undergraduate Curriculum

Reflecting on his attempt to provide a "disinterested account of the history of liberal education" in his book *Orators and Philosophers: A History of the Idea of Liberal Education*, Kimball (1995, vii) noted: "The way that professors have told the story of liberal education has tended to reflect their own interests, both intellectual and professional." Despite the recent appearance of a few "disinterested" histories of liberal education, Kimball's statement still holds true (Bloomer 2011). Research on liberal education can be broken down into the following categories: philosophical narratives, intellectual histories, institutional snapshots, and survey research related to outcomes of liberal education.²

Philosophical narratives have long dominated the study of liberal education (Anderson 1993; Carnochan 1993; Orrill 1995; Farnham and Yarmolinsky 1996; Nussbaum 1997; Boudreau 1998; Levinson 1999; DeNicola 2012). As a general rule, these works explore the intellectual underpinnings of liberal education as it relates to the ways in which such education would strengthen the mental and/or moral faculties of students. They often include reflections on university history and culture, the social applications of knowledge, and make recommendations as to the types of curricula that should be employed.

Institutional snapshots typically center on the author(s)' home institution (Wegener 1978; Levine 2006; Lewis 2006). In this line of inquiry, the author presents a vision of liberal education as it may be practiced at the institution, or rather a straight recording of notable achievements. The final line of inquiry related to liberal

education includes survey research spread across a number of institutions. These works focus on pedagogical techniques (often presented under the umbrella of liberal education) and discuss how well these techniques have led to specific gains in a desired outcome. Major outcomes that have been explored are civic engagement and moral efficacy (Colby et al. 2003; Schneider 2005; Colby et al. 2007; Jacoby and Associates 2009; Saltmarsh and Hartley 2011).

Research on general education disproportionately covers curriculum development, assessment, and evaluation techniques. Indeed, “A majority of scholarship devoted to general education reform,” Gano-Phillips and Barnett (2010, 7) suggest, “has focused almost exclusively on the *content* of the curriculum.” As the authors intimate, there is a strong connection between the focus on content and the ways in which it will be measured. Works on curriculum development tend to be organized as guides for faculties and administrators interested in reforming their general education programs (Kanter et al. 1997; Gaston and Gaff 2009; Gaston et al. 2010; Hanstedt 2012). A major element of these guides involves the presentation of possible approaches to assessment and evaluative techniques. Much of this work relies upon quantitative techniques to indicate how outcomes might be assessed and gains might be achieved (Nichols and Nichols 2001; Ewell 2004; Allen 2006; Banta 2007; Bresciani 2007; Walvoord 2010).

Conclusion

Ostensibly, this article has attended to the “what” questions. However, grappling with the “why” questions may prove ultimately more fruitful. Why is liberal education conceived and explored primarily at an abstract level in the world of ideas? Why is general education perceived predominantly as a curricular process that must be implemented and measured on a programmatic scale? One answer may be found in a recent study by Brint (2011) that described two movements that have been gaining traction in the last three decades: one to improve college teaching and another to measure student learning outcomes. By assessing general education,

there is the risk that assessment can be conceived in a narrow fashion and applied only to tangible undergraduate structures, while liberal education objectives will merely exist as broad and largely undefined aims. Perhaps this risk is exacerbated by the ways in which the terms are defined and distinguished from one another. Regardless of the tremendous work being done in these areas and the possible answers already offered, one cannot help but wonder whether examining general education through the qualitative lens often applied to liberal education, and vice versa, might not reveal insights heretofore unexplored and assist all who attempt to reflect and reform.

Notes

1. Italics added to reflect emphasis in Adler’s voice.
2. It should be noted that these outcomes tend to be broader and more abstract than the outcomes often assessed in general education.

References

- Adler, Mortimer J. 1990. “Great Books of the Western World.” Interview by Brian Lamb. *14754-1*. C-Span, October 31.
- Adler, Mortimer J. 1977. *Philosopher at Large: An Intellectual Autobiography*. New York: Macmillan.
- Allen, Mary J. 2006. *Assessing General Education Programs*. Bolton, MA: Anker.
- Anderson, Charles W. 1993. *Prescribing the Life of the Mind: An Essay on the Purpose of the University, the Aims of Liberal Education, the Competence of Citizens, and the Cultivation of Practical Reason*. Madison, WI: University of Wisconsin Press.
- Baker, James K. 1947. “The Evolution of the Concept of General Education.” PhD diss., Yale University.
- Banta, Trudy W., ed. 2007. *Assessing Student Achievement in General Education*. Assessment Update Collections. San Francisco: Jossey-Bass.

- Beam, Alex. 2008. *A Great Idea at the Time: The Rise, Fall, and Curious Afterlife of the Great Books*. New York: Public Affairs.
- Bloomer, W. Martin. 2011. *The School of Rome: Latin Studies and the Origins of Liberal Education*. Berkeley, CA: University of California Press.
- Boudreau, Thomas E. 1998. *Universitas: The Social Restructuring of American Undergraduate Education*. Westport, CT: Praeger.
- Bresciani, Marilee J., ed. 2007. *Assessing Student Learning in General Education: Good Practice Case Studies*. Bolton, MA: Anker.
- Brint, Steven. 2011. "Focus on the Classroom: Movements to Reform College Teaching and Learning, 1980-2008." In *The American Academic Profession: Transformation in Contemporary Higher Education*, edited by Joseph C. Hermanowicz (pp. 44-91). Baltimore, MD: Johns Hopkins University Press.
- Carnochan, W. B. 1993. *The Battleground of the Curriculum: Liberal Education and American Experience*. Palo Alto, CA: Stanford University Press.
- Casement, William. 2002. "Whither the Great Books?" *Academic Questions* 15 (4): 36-51.
- Chaddock Reynolds, Katherine. 2002. "A Canon of Democratic Intent: Reinterpreting the Roots of the Great Books Movement." *History of Higher Education Annual* 22: 5-32.
- Colby, Anne, Elizabeth Beaumont, Thomas Ehrlich, and Josh Corngold. 2007. *Educating for Democracy: Preparing Undergraduates for Responsible Political Engagement*. San Francisco: Jossey-Bass.
- Colby, Anne, Thomas Ehrlich, Elizabeth Beaumont, and Jason Stephens. 2003. *Educating Citizens: Preparing America's Undergraduates for Lives of Moral and Civic Responsibility*. San Francisco: Jossey-Bass.
- Conrad, Clifton. 1978. *The Undergraduate Curriculum: A Guide to Innovation and Reform*. Boulder, CO: Westview Press.
- DeNicola, Daniel R. 2012. *Learning to Flourish: A Philosophical Exploration of Liberal Education*. New York: Continuum.
- Erickson, Michael E. 1992. "General and Liberal Education: Competing Paradigms." *Community College Review* 19 (4): 15-20.
- Ewell, Peter. 2004. *General Education and the Assessment Reform Agenda*. Washington, DC: Association of American Colleges and Universities.
- Farnham, Nicholas H., and Adam Yarmolinsky, eds. 1996. *Rethinking Liberal Education*. New York: Oxford University Press.
- Gano-Phillips, Susan, and Robert W. Barnett. 2010. "Introduction." In *A Process Approach to General Education Reform: Transforming Institutional Culture in Higher Education*, edited by Susan Gano-Phillips and Robert W. Barnett (pp. 7-22). Madison, WI: Atwood Publishing.
- Gaston, Paul L., and Jerry G. Gaff. 2009. *Revising General Education--And Avoiding the Potholes*. Washington, DC: Association of American Colleges and Universities.
- Gaston, Paul L., J. Elizabeth Clark, Ann S. Ferren, Peggy Maki, Terrel L. Rhodes, Karen Maitland Schilling, and Dwight Smith. 2010. *General Education & Liberal Learning: Principles of Effective Practice*. Washington, DC: Association of American Colleges and Universities.
- Glyer, Diana, and David L. Weeks. 1998. "Liberal Education: Initiating the Conversation." In *The Liberal Arts in Higher Education: Challenging Assumptions, Exploring Possibilities*, edited by Diana Glyer and David L. Weeks (pp. ix-xxix). Lanham, MD: University Press of America.
- Grimes, William. 2001. "Mortimer Adler, 98, Dies; Helped Create Study of Classics." *New York Times*, June 29.
- Hanstedt, Paul. 2012. *General Education Essentials: A Guide for College Faculty*. San Francisco: Jossey-Bass.
- Jacoby, Barbara, and Associates. 2009. *Civic Engagement in Higher Education: Concepts and Practices*. San Francisco: Jossey-Bass.
- Kanter, Sandra L., Zelda F. Gamson, and Howard B. London. 1997. *Revitalizing General Education in a Time of Scarcity: A Navigational Chart for Admin-*

- istrators and Faculty. Needham Heights, MA: Allyn and Bacon.
- Kimball, Bruce A. 1995. *Orators & Philosophers: A History of the Idea of Liberal Education*. Expanded ed. New York: College Board.
- Lacy, Tim. 2013. *The Dream of a Democratic Culture: Mortimer J. Adler and the Great Books Idea*. New York: Palgrave MacMillan.
- Lacy, Tim. 2008. "Dreams of a Democratic Culture: Revising the Origins of the Great Books Idea, 1869-1921." *Journal of the Gilded Age and Progressive Era* 7 (4): 397-441.
- Levine, Donald N. 2006. *Powers of the Mind: The Reinvention of Liberal Learning in America*. Chicago: University of Chicago Press.
- Levinson, Meira. 1999. *The Demands of Liberal Education*. New York: Oxford University Press.
- Lewis, Harry R. 2006. *Excellence Without a Soul: How a Great University Forgot Education*. New York: Public Affairs.
- Miller, Gary E. 1988. *The Meaning of General Education: The Emergence of a Curriculum Paradigm*. New York: Teachers College Press.
- Morse, Horace T. 1964. "Liberal and General Education: A Problem of Differentiation." In *General Education: Current Ideas and Concerns*, edited by James G. Rice (pp. 7-12). Washington, DC: Association for Higher Education.
- Mulcahy, D. G. 2008. *The Educated Person: Toward a New Paradigm for Liberal Education*. Lanham, MD: Rowman & Littlefield Publishers.
- Nichols, James O., and Karen W. Nichols. 2001. *General Education Assessment for Improvement of Student Academic Achievement: Guidance for Academic Departments and Committees*. New York: Agathon Press.
- Nussbaum, Martha C. 1997. *Cultivating Humanity: A Classical Defense of Reform in Liberal Education*. Cambridge: Harvard University Press.
- Orrill, Robert, ed. 1995. *The Condition of American Liberal Education: Pragmatism and a Changing Tradition*. New York: College Entrance Examination Board.
- Saltmarsh, John, and Matthew Hartley, eds. 2011. *"To Serve a Larger Purpose": Engagement for Democracy and the Transformation of Higher Education*. Philadelphia, PA: Temple University Press.
- Schneider, Carol Geary. 2005. "Liberal Education and the Civic Engagement Gap." In *Higher Education for the Public Good: Emerging Voices from a National Movement*, edited by Adrianna J. Kezar, Tony C. Chambers, John C. Burkhardt, and Associates (pp. 127-145). San Francisco: Jossey-Bass.
- Summerfield, Judith. 2007. "The Project: Common/Uncommon Ground." In *Reclaiming the Public University: Conversations on General & Liberal Education*, edited by Judith Summerfield and Crystal Benedicks (pp. 3-30). New York: Peter Lang.
- Walvoord, Barbara E. 2010. *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*. Second ed. San Francisco: Jossey-Bass.
- Wegener, Charles. 1978. *Liberal Education and the Modern University*. Chicago: University of Chicago Press.

Academic Capitalism in the Responsiveness of Science Academic Units at Makerere University

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Central America is not known for the quality of its higher education. This is reflected in global data with no Central American universities appearing in the international rankings, few of its university professors holding accredited PhDs, and the region accounting for less than 0.10 percent of global research expenditures and Science Citation Index publications (Svenson 2012). In spite of these dismal statistics, there are some exceptional Central American institutions that produce highly qualified graduates and valuable scientific research—particularly in thematic areas important for national and regional development. These exceptions tend to be non-traditional private institutions that combine inputs from both international cooperation and local and regional resources to create unique, practical applications for knowledge transfer and scientific production. They merit attention not only for their impressive academic achievements but also for the lessons they may offer other countries as strategic investment in applied research becomes increasingly vital for small emerging nations in advancing their development agendas (Holm-Nielsen et al. 2005; Svenson 2012).

The purpose of this article is to illuminate the responses to neo-liberal reforms of four science academic units at Makerere University. Although in this case, the university was successful in its earlier responses to neo-liberal reforms, the university still faces an uphill task to harmonize some of the earlier responses amidst new responses that continue to emerge within the science academic units. These new responses were theoretically interpreted using elements of “academic capitalism,” and were empirically based on document data. The emerging responses of the science disciplines show patterns embedded in “academic capitalism” hence justifying its suitability as an interpretive framework. It

is concluded that whereas the science academic units and the university are becoming active actors in the neo-liberal economy, it is important that institutional mechanisms to manage this process are strengthened in the early stages of this engagement.

Increasingly, higher education institutions are engaging in market-like activities referred to as “academic capitalism” (Slaughter and Leslie 1997, 9-11). Indeed, neo-liberal patterns have remained ubiquitous across higher education systems with an emphasis on privatization, commercialization and deregulation of “state functions to promote the new economy in global markets” (Slaughter and Rhoades 2004, 20). Yet, “while universities were not primary players in creating the neo-liberal state, they often endorsed initiatives, directly or indirectly” (Slaughter and Rhoades 2004, 20). Moreover, academic units within institutions, which choose to ignore the market paradigm and stick to the traditional paradigm, find it difficult to attract external funding. In fact, it is equally likely that such academic units would receive less from the internal financial allocations within universities (Slaughter and Rhoades 2004). Indeed, the pervasiveness of neo-liberalism has also been illuminated in the form of organizational transformations within European higher education institutions after the advent of New Public Management (Reed 2002; Salminen 2003; de Boer et al. 2007).

In Africa, and specifically Uganda, have experienced public sector reforms as early as the early 1990s. As in other developing countries, Uganda’s public sector reforms were World Bank sanctions (Pollitt and Bouckaert 2004). The sanctions were seen in the privatization of the public enterprises, decentralization of political governance and administrative duties, and retrenchment of public servants (Brett 1994). As part of the public sector, higher education was equally affected.

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Three events in 1992 explain the accelerated pace of entrepreneurial response at Makerere University. First, the 1992 *White Paper on Education* was an instrument that made the liberalization of university education a government policy (Musisi and Muwanga 2003; Muwagga 2006). Second, the President decided to relinquish the Makerere University chancellorship if the university became entrepreneurial (Eisemon 1994). Third, in the same way, Makerere University began using private sponsorship (Court 2000; Mayanja 2001) after seven decades of state financing (Senteza-Kajubi 1992).

However, even with the anticipated monetary returns accruing from liberalization, most university faculty preferred to continue pursuit of the basic university mission. In addition, they perceived financial matters as an administrative responsibility. In order for university management to convince the academic units, there was drastic decentralization and emphasis on lump sum funding (Mayanja 2001; Mamdani 2007). Nevertheless, studies on the impacts of the market reforms on university behavior at Makerere University articulate loss of cohesion and stratification of the university in terms of revenues (Carrol 2007). However, at the same time, the Visitation Committee to Public Universities (2007, 75) noted that Ugandan public universities were still “ivory towers” typified by limited interaction with the private and public sectors.

This study builds on these previous studies but with a focus on the science academic units as relevant to the neo-liberal reforms. Undoubtedly, these academic units did not quite fully engage with neo-liberal reforms in the earlier wave of responses, but are leading the current wave of responses. Moreover, there has been very little systematic study reporting on these particular academic units regarding their emerging responses to neo-liberal reforms, which is the basis of this article. The remainder of the article is structured as follows. First, an overview of the theory of academic capitalism as an interpretive framework is presented. Second, the methodology used and brief background of the science academic units are outlined. Third, the emerging responses of the science academic units are described, followed by discussion and the conclusion on the applicability of the

academic capitalism theory in understanding these emerging responses.

Academic Capitalism as an Interpretive Framework

As illustrated above, with diminishing government funding, the different disciplines, faculty members, and the institution as a whole have sought alternative sources of funding university research. At the same time, there has been rising demand for scientific knowledge and products from the universities by industry. Indeed, “[t]he shift has occurred because the corporate quest for new products converged with faculty and institutional searches for increased funding” (Slaughter and Leslie 1997, 7). Examples of the new categories of institutional revenue include: university-industry partnerships, investment in spin-off companies, patenting discoveries, research grants, and student tuition fees (Slaughter and Leslie 1997, 11). The competitive spirit that underlies the process of acquiring these financial resources shows the incidence of “academic capitalism” in the science academic units that have been explored.

Additionally, four elements from the theory of academic capitalism are used as an interpretive framework for the recent responses of the science academic units to the neo-liberal changes. The elements include: circuits of knowledge, interstitial organizational emergence, intermediating networks, and extended managerial capacity (Slaughter and Rhoades 2004). Circuits of knowledge are indicators of a reorientation in the exchange of knowledge. Knowledge is the prime material upon which activities of the university are anchored and has been primarily exchanged between individual experts and within professional associations. However, the traditional modes of delivery of knowledge have been steadily altered to embrace modern learning management systems that augment the standardization of skills, which is a key aspect of professional bureaucracies (Mintzberg 2000). Similarly, the partnership between the university, industry, and government is another circuit of knowledge. In fact, this circuit epitomizes the view that “[t]he market for knowledge—the number of places where it is wanted and can be used—is now wider and more differentiated than it has ever been” (Gib-

bons et al. 1994, 49). In addition, scholars and experts from industry work as peer reviewers on national committees that assess the relevance of particular programs or revision of others in line with national funding priorities. Apparently, corporations or agencies patent knowledge and any other products that originate from the university depending on the product's vitality in the market (Slaughter and Rhoades 2004).

Another theoretical building block, the interstitial organizational emergence, refers to the new organizations created from the interface structures within the university and its subunits. The structures are primarily responsible for the generation of third stream income for the university. One of the characteristics of these structures is the link they establish and sustain between the university, the private sector or corporations, and the government. Examples of these structures are technology licensing offices, economic development offices that strengthen the links between university research, and the national development trends. These units have permeated all organizational levels and continue to emerge at basic unit levels. Moreover, specialized training programs not part of the regular curricula for degree programs are delivered to particular clients by specific units established within the university and its subunits (Slaughter and Rhoades 2004, 23-24).

The third element of the academic capitalism theory are intermediating networks. These are synergies that continue to evolve among the different actors and organizations as a consequence of the emergence of the academic capitalist knowledge/learning regime in the neo-liberal economy. Slaughter and Rhoades (2004, 24) note that "these organizations bring together different sectors interested in solving common problems that often stem from opportunities created by the new economy." In addition, they argue that the "[networks] of intermediating organizations allow representatives of public, nonprofit, and private institutions to work on concrete problems, often redrawing (but not erasing) the boundaries between public and private" (24).

Finally, the extended managerial capacity is an element that buttresses the first three elements of the theoretical framework within universities and colleges. Increasingly, trustees (university councils) and presi-

dents (vice chancellors) acknowledge that university engagement with the markets is perpetual and consideration of strategies to deal with this new environment is crucial. The emergence of patents and copyright in universities and colleges typify the extended managerial capacity. Indeed, intellectual property offices and technology transfer units continue to emerge as additional indicators of the extended managerial capacity whose function is to facilitate the processes of commercializing scientific knowledge and products. Still, the institutional policies concerning copyrights are just beginning to be introduced. In summary, the theory of academic capitalism presupposes that any changes in income streams can certainly determine the strategic direction of the academic enterprise and its units (Slaughter and Rhoades 2004).

Background of Four Science Academic Units at Makerere University

Makerere University is a research-oriented institution with a rich history that began evolving from a technical college, established in 1922. The establishment of Makerere University marked the beginning of higher education in Uganda and the East African region (Ocitti 1991). In 1970, Makerere University became an independent public university funded and directly run by the government of Uganda. In the early 1990s, the university embraced a public-private mix, when students were admitted on a private sponsorship program. In this study, the four science academic units explored are: the College of Health Sciences, the Faculty of Agriculture (now College of Agriculture and Environment Sciences), the Faculty of Computing and Information Technology (now College of Computing and Information Sciences), and the Faculty of Technology (now College of Engineering, Design, Art and Technology). These are hard-applied disciplines based on Biglan's (1973) classification. Further stratification also reveals that the first two academic units belong to the life system while the latter two are part of the non-life system (Biglan 1973). The choice of these units of analysis therefore ensured that any variations in the emerging response patterns could only be partly attributed to the nature of the disci-

plines. Several documents were reviewed and through document analysis, emerging trends were categorized. The documents included the annual report of 2006, the report of Visitation Committee to Public Universities in Uganda, 2007, reports of coordinating units such as the School of Graduate Studies, and speeches by the Vice Chancellor and other senior members of university management. The selection of these documents was the result of extensive review of all documents considered necessary and relevant to the research problem. The selected documents were analyzed in close reference to the elements of the theory of academic capitalism.

Emerging Responses across Four Science Academic Units at Makerere University

In this section, the responses of the four science academic units involved in this study are given. The subsections reflect the components of the academic capitalism theoretical framework. However, the analysis shows that the responses, based on the theoretical elements, are not uniformly evident across all the four academic units. Rather, in the analysis, at least two of the academic units had their responses aligned to a particular element of the theory.

Scientific Discoveries by Individual Academics and Academic Units

There is substantial evidence that individual science professors and researchers at Makerere University have worked as lead experts in decision processes related to science and technology worldwide. These professors have been engaged as individuals and not as institutional experts, especially in the areas of health and agriculture research (Muhumuza et al. 2005; Bakibinga 2006b; Wafula and Clark 2005). The engagements of the science professors have not all been altruistic. Very little research is done at Ugandan public universities without a thought for its monetary benefits. In other words, there has been “little evidence of disinterested basic research whose primary purpose is to produce knowledge without expecting any monetary or other personal return [at Makerere University]” (Visitation

Committee to Public Universities 2007, 50). Several scientific breakthroughs have generated revenue or attracted funding to the science disciplines as well as for the individual professors. One example of a breakthrough by professors in the health sciences was the discovery of the Nevirapine drug that reduces the risk of mother to child transmission of HIV from 30 to 15 percent. This discovery of Prevention of Mother to Child Transmission (PMTCT) has since been replicated in other African countries (Muhumuza et al. 2005, 56; Bakibinga 2006b, 13).

In the Faculty of Agriculture, two crop varieties were discovered that are reportedly resistant to a crop disease that hit several countries in East and Southern Africa. These cowpea and soybean varieties are also grown in the Eastern and North Eastern parts of Uganda and have been named “Makerere” by the rural farmers (Ekwamu 2006, 12). This is among the aggressive breakthroughs in agricultural science in Uganda since crop disease curtailed soybean production. In addition, some of the outputs of crop and food varieties from the Departments of Crop Science and Food Science and Technology have been commercially patented or produced through partnerships with industry (Luboobi 2005). A food processing and incubation center was recently established at the same department. In a similar vein, at the Faculty of Technology, an individual academician’s invention of cheap sanitary pads made from local materials such as papyrus has been perhaps one of the most significant breakthroughs. These pads branded as “Makapads” (originating from Makerere) have been extensively used in schools and in rural areas at a cost of less than US\$0.27 per pack. Moreover, the same innovative academician has also developed bricks that do not require the use of cement during the construction of small apartments (Bakibinga 2006b, 13).

Interface Structures within the Science Academic Units

Three of the four science academic units studied have established unit-specific interface structures. The Infectious Disease Institute (IDI) is an interface structure at the College of Health Sciences, developed in

partnership with leading research institutions in the area of HIV/AIDS. The IDI was opened in 2004 as a national and regional center of excellence for building capacity (of individuals and of organizations) in Africa for the delivery of sustainable, high quality care and prevention of HIV/AIDS and related infections through training and research. The IDI offers HIV/AIDS support services to over 300 patients per day at the National Referral Hospital where the College of Health Sciences is also located. This research and training effort is part of the Academic Alliance for AIDS Care and Prevention in Africa network (Ssebuwufu 2003; Muhumuza et al. 2005). Similarly, a Department of Software Development and Innovation has been established at the Faculty of Computing and Information Technology to primarily develop commercial software and customize some of the existing software. The students studying at the faculty have manufactured several prototypes, and by working closely with the consultancy firm at the faculty, some spin-offs have been registered (Baryamureeba 2006). The faculty also provides consultancy services through ICT Consults Limited, the faculty's consultancy firm.

Technology Consults Ltd. (TECO) is an interface at the Faculty of Technology set up in 1992 as perhaps the first university-industry interface at Makerere University. The objective of this interface was to create synergies among the different engineering fields within the faculty prior to synergistically interfacing with the external environment. In addition, the Uganda Gatsby Trust (UGT) was set up at the Faculty of Technology in 1994 to interface with and build the capacity of small medium enterprises (SMEs) by offering specialized training courses and field attachment for students (Tibarimbasa and Lugujjo 2000; Musisi and Muwanga 2003). Recently, newer interfaces have been created such as the Centre for Research in Energy and Energy Conservation (CREEC), founded in 2001, a research, consultancy and training organization based at the Faculty of Technology. The goal of CREEC is to develop into a center of excellence in energy for Uganda and the entire East African Region. CREEC focuses on energy management, solar photovoltaic (PV), biomass, and hydropower to develop low cost technologies and sys-

tems that have a direct and positive impact on people's everyday lives. The government of Uganda through the Millennium Science Initiative (MSI)—a new avenue for the government to strengthen the country's scientific and technological capacity—has provided some financial support to CREEC. Another interface is the Innovation Systems and Clusters Program—Uganda (ISCP-U) founded in 2005. ISCP-U has been instrumental in supporting the SMEs and innovation clusters in the different sectors of the economy of Uganda. This interface and the clusters in the program have been funded by the Rockefeller Foundation and Sida/SAREC. The Technology Development and Transfer Centre also creates interfaces between the faculty and the private or public sectors (Luboobi 2007).

Intermediating Networks for Aligning Curricula to National Development

Aligning the curricula to the evolving social, political, and economic policy frameworks is one of the challenges that Ugandan higher education is facing during this period of reform and innovation (Liang 2004; National Council for Higher Education 2006). After the decentralization of administrative functions to the local governments in line with the Structural Adjustment Program of deregulation, the shortage of skilled human resources conversant with the operations at the local level became more noticeable in Uganda. However, due to the supply-led nature of the Ugandan higher education system, there has been no attempt to realign the academic provisions to the changing human resource demands at the decentralized districts (Eisemon and Salmi 1993; Musisi 2004). Against this backdrop, the Vice Chancellor of Makerere University at the time constituted a committee of 14 members, comprised of seven faculty deans or directors, and seven individuals from the government ministries of finance, education, local government, and the Economic Policy and Research Centre. The seven deans or directors primarily made the decisions (Musisi and Muwanga 2003, 21). This 14 member committee later metamorphosed into the Innovations at Makerere Committee (I@Mak.com) that implemented curricula changes in some of the aca-

demographic units by encompassing aspects relevant to decentralization. The Rockefeller Foundation and the World Bank funded this process until December 2006.

An earlier study titled “The Decentralization and Human Resource Demand Assessment from the Perspective of the District Study” by I@Mak.com revealed deficits in certain professional disciplines, which were considered critical to development. These included but were not limited to human medicine, agriculture, computer science, engineering, and physical planning (Musiisi 2004, 128). The overarching recommendation was the need to revise the curricula in the universities so that the graduates become more relevant to the national development trends. Consistent with the Strategic Plan 2000/01-2006/07 (Makerere University 2000), the science academic units revised most of their curricula or designed new academic programs. The restructuring of the curricula was extensive and included the outreach components, and university senate approved the institutional guidelines and policies for field attachment for all undergraduate degree programs. The premise for this field attachment policy was the production of “practically oriented graduates [that] meet the required job-related competences of their future [employers].” The first pilot was done in several disciplines including agriculture, basic health and medicine, and engineering. Between 2002 and 2006, more than 8,000 students from Makerere University had successfully engaged in internships in 59 out of the then 78 local government units (districts) in Uganda (Makerere University 2007, 3-4). More specifically, in the 2003-2004 academic year, the Faculty of Medicine (currently College of Health Sciences) introduced a component of outreach known as Community Based Education and Service (COBES). This outreach or field component has enabled medical students to experience real work environments with limited resources in terms of health facilities. Similar arrangements have been made for technology students who have been placed in the local government departments of water, survey, roads, and physical planning (Katunguka 2005, 15). With this repositioning of socioeconomic development, “the university’s contribution to the nation in this sustained effort could be a major and lasting—and, again, a model

for what could be done in other countries” (Clark 2004, 107).

Another intermediating network is the Makerere University Private Sector Forum (MUPSF), established in 2006 as an institutional interface with the private sector aimed at enhancing the university-private sector partnerships through research and development. The MUPSF is headed by an executive director and has a working committee (also serving as the joint advisory council composed of representatives of key stakeholders) chaired by the Vice Chancellor. The forum envisages initiating sustained interfaces between the departments within the university and the private sector to collaboratively engage in socio-economic development. Already, the MUPSF has signed a Memoranda of Understanding with leading private sector bodies and organizations namely the Uganda Industrial Research Institute (UIRI), the Uganda Manufacturers Association (UMA), the Uganda Investment Authority (UIA), the Private Sector Foundation (PSF), and the National Water and Sewerage Corporation (Bakibinga, 2006b p.10-11; Bakibinga 2008, 11). Similarly, the Vice Chancellor announced in 2006 appointments of four honorary professors including the Governor of the Bank of Uganda (Central Bank), the Executive Director of the Uganda Investment Authority (UIA), and two prominent Ugandan private investors. However, the MUPSF, perhaps because it is so new, has not been institutionalized and has been run by just one individual—the Executive Director (Makerere University 2008b). The MUPSF has been further curtailed by the relatively dysfunctional investment department constituted under the investment policy passed in 2006 (Bakibinga 2008, 6).

Intermediating Networks for Capacity Building in Research and Training

Despite the significant achievements made so far, the vitality of graduate research in the science and technology fields has been minimal. Fewer than 10 PhDs are annually awarded in the fields of science and technology at Makerere University (Muhumuza et al. 2005, 11). Moreover, the total output at the PhD level has been equally small; for example, in 2005, only 24 of

917 students obtaining postgraduate qualifications were PhDs (Makerere University 2006b, 19). As a response to this unimpressive record, commendable initiatives have been evident through collaborative arrangements with universities in the global North on sandwich programs for research capacity building or through regional networks. In the Agricultural Sciences, through funding support from The Rockefeller Foundation, the Forum on Agricultural Resource Husbandry (FORUM) was founded in 1991 to build research capacity through graduate training. Of the US\$14 million allocated for the period from 1992 to 2003, US\$5 million was invested at Makerere, which has enabled training and completion of 102 Master of Science students of the 250 students assigned to the project. In addition, the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) evolved from the FORUM. The secretariat of the RUFORUM at Makerere University links the Faculty of Agriculture to other similar academic units at 12 universities from Eastern and Southern Africa. In fact, it has enabled the evolution of “Networks of Specialization” in the agricultural sciences rather than establishing “Centers of Excellence” at individual universities in the region. Through this network, Makerere University is partnering with regional universities in the areas of rural development, natural resource management, and crop improvement, biotechnology, and seed systems (Ekwamu 2006, 10). Moreover, through the RUFORUM, and with a grant of US\$700,000, 25 Master of Science students have been trained as they simultaneously engage in some of the research projects at Makerere University (Luboobi 2004, 14; Ekwamu 2006, 9-10).

Furthermore, the East African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development (BIO-EARN), another regional network, has partnered with the Department of Crop Science at the Faculty of Agriculture to support PhD studies in collaboration with Swedish universities (Wafula and Clark 2005). Currently, the Faculty of Computing and Information Technology is running another four-year collaborative project called “Strengthening ICT Training and Research Capacity in the Four Public Universities in Uganda.” The project

estimated at over US\$7.5 million (€5.7 million) is funded by the Netherlands Organization for International Cooperation in Higher Education (NUFFIC). The NUFFIC has mainly concentrated on the North-South collaboration through which 30 students have been selected to undertake graduate training and research at a PhD level at Makerere, and at the partnering universities in the Netherlands (Baryamureeba 2008). Similarly, the Faculty of Technology runs a joint Masters in Renewable Energy, as well as other regional universities in Africa (South-South collaboration), and the Norwegian University of Science and Technology (situated in the North) hence the North-South-South Collaboration with funding from NORAD.

Enhancing the Management Capacity Concerning Scientific Discoveries

Generally, although there is substantial evidence of engagement by the science academic units and individual academicians in the markets of scientific knowledge and products, mechanisms within which these synergies are operationalized have been weak at both national and institutional levels. For example, the Ugandan government worked with the Millennium Science Initiative in 2006 to implement a first time US\$33 million earmark in support of the university-targeted Millennium Science Initiative. The goal of MSI is to build a sustainable science and technology human resource and infrastructure in the next five years. Even then, national policies such as the intellectual property rights management policy—through which scientists can own or co-own their inventions and innovations—have been nonexistent (Bakibinga 2006a, 14). Likewise, prior to 2008, intellectual property management policies in most of the East African universities were nonexistent, weak, or inefficient due to lack of institutional mechanisms (Ecuru et al. 2008). Moreover, there has been little or no documented evidence on the patents filed by Makerere University, and individual scholars’ efforts have only been recognized at graduation ceremonies (Visitation Committee to Public Universities 2007). Even then, the Uganda National Council for Science and Technology (UNCST) has noted that 70 percent of the national re-

search and innovations originate from Makerere University (Makerere University 2006b, 20). Consequently, several attempts to harmonize the budding initiatives in scientific discoveries through new institutional policy frameworks and structures have been introduced at Makerere University.

The Makerere University Research and Innovations Policy focuses on “encouraging and providing more opportunity for team/multidisciplinary research and innovation on the one hand, and rationalizing these efforts in a broader university framework of research and innovations” (Makerere University 2008c, 4). The policy requires that staff members spend at least 20 percent of their total official working hours on research. One additional highlight of the policy is that 15 percent will be deducted from all research projects as an overhead cost from which the School of Graduate Studies takes five; the central administration takes four percent, and the department and faculty take 3 percent each. In addition, the policy indicates that the annual contribution to the research fund from the internally generated funds will be increased from the current one percent to 3 percent. The Intellectual Property Management Policy has also been passed at Makerere University (Makerere University 2008a). The basis of this policy is “to stimulate and support innovative thinking among students and staff, and to enable ownership and efficient management of intellectual assets and innovations produced at Makerere” (Makerere University 2008a, 8). The Vice Chancellor is responsible for administering the policy and managing university inventions.

An Intellectual Property Management Unit is to be set up that will cooperate with the inventor/scientist in evaluating the intellectual assets’ potential for transfer to the public or private sectors. Furthermore, the Intellectual Property Management unit “shall work closely with the Research and Innovations office to identify intellectual property issues in research proposals and products of research and innovations including those that may be of interest to the private sector” (Makerere University 2008a, 10). The policy specifies that student inventors can enjoy the privileges of an employee inventor as long as they have assigned their intellectual property to the university. On the sharing ratios, the

inventor earns 80 percent for the first US\$5,000, the parent department takes 10 percent, and the School of Graduate Studies and the central administration each take 5 percent. For anything more than US\$5,000, the ratios will respectively be 50 percent and 25 percent for the inventor and department, and an equal share of 12.5 percent each to the School of Graduate Studies and the central administration.

Discussion and Conclusion

Certainly, the notion of academic capitalism has been evidently entrenched in the science academic units explored in this study, as demonstrated by mobilization of external financial resources and the elements of the theory. Indeed, the four elements of the theory of academic capitalism have been illuminated in the emerging responses to neo-liberal reforms by the science academic units. These units have successfully engaged in attracting external funding for research even during the first responses to the neo-liberal reforms when they were quite constrained, as increased enrolments were registered in the humanities and social sciences disciplines. The external funding is largely from the development partners or donor agencies in the global North. The other avenues such as patenting are in their nascent stages and if properly managed and attuned to the national development agenda, are potentially strong sources of external funding. Because of the differences in the acquisition of external funding, there are some variations across the units with respect to the components of the theoretical framework. In other words, not all the elements of the framework have exact empirical examples within all four units.

Regarding the circuits of knowledge, the academic activities within the science units show an increasing inclination to partnerships between the university, industry, and government. Several patents have been registered by the academic units and scientific discoveries have been instrumental in attracting additional funding from the development partners. The discoveries at the College of Medicine and the Faculty of Agriculture have been further extended to other countries in the region through networks with additional funding from

the development partners. In essence, the responses of the academic units at Makerere University radiate some correspondence with earlier developments in the United States, in which research in agriculture, medicine, and other fields were emphasized (Geiger 2006). It could also be argued that with discoveries such as PMTCT in HIV/AIDS, Makerere University has repositioned for the emerging trends in which funding for basic research is increasingly juxtaposed to the practical relevance it can engender (Pavitt 2001). In Uganda, national competitive funding arrangements are starting to emerge through the MSI initiative and it is also likely that the involvement of experts from industry in the vetting of programs for funding will become more apparent (Slaughter and Rhoades 2004).

The component of the interstitial organizational emergence is empirically evident in the College of Health Sciences, Faculty of Computing and Information Technology, and the Faculty of Technology. Whereas the IDI, an interface structure at the College of Health Sciences is service-oriented, it is possible that through delivery of such services, the College attracts external funding to conduct additional academic research. Besides, the interface was partly conceived as a support unit to the continued scientific discoveries at the College. At the Faculty of Computing and Information Technology, the interface structure has facilitated the development of software for commercial purposes. Perhaps the Faculty of Technology has the highest number of interface structures that are not only intended to generate revenue through consultancy, but also offer specialized training to the SMEs, in addition to steering the activities of the innovation clusters (Hearn and Holdsworth 2002). Obviously, the largest portion of external funding to support these engagements is from the development partners. For example, if science academic units embark on expanding their financial resource bases through industry-funded research, the commercial value of discoveries and growth of spin-offs will increase (Shane 2004). Nevertheless, the participation of universities in intellectual property markets has been hesitant and slow (Dill 2006; Geiger 2006) despite mandates to issue licenses for the discoveries through their technology transfer and licensing offices.

In other words, technology transfer offices have been criticized for delaying processes involved in bringing the discoveries to full commercial production in certain instances (Geiger 2007).

Apparently, the findings illuminate intermediating networks, which are reflected in the form of synergies between the various actors and organizations. In this study, the networks associated with the neo-liberal economy have been divided into two categories: (1) those for aligning curricula and research to national development; and (2) those related to capacity building in research and training. Human resource development was the most significant prerequisite in the realization of the objectives of restructuring the public sector and the decentralization of service delivery. As the leading university, Makerere University engaged different actors from the public and private sectors in the Innovations at Makerere project to build the needed capacity for the decentralized districts of Uganda (Musisi 2004). The science academic units explored in this study were key actors that have also created several sustainable programs by embedding the practices related to the national economy into the academic programs (Katunguka 2005; Makerere University 2007). MUPSF is a recent development that brings together the private and public sectors by signing memoranda as well as appointing non-academic honorary professors. Another intermediating network that spans the national boundaries has been the capacity building for research and training. Clearly, postgraduate training and research in the science academic units has been limited (Makerere University 2006b; Muhumuza et al., 2005). Initiatives in the form of international adaptations through networks have generated external funding for simultaneously conducting research relevant for the national economies as well as training of postgraduate students to obtain advanced qualifications as they participate in projects. This has culminated into "Networks of Specialization" in primarily the agricultural sciences across universities in the Eastern and Southern parts of Africa (Wafula and Clark 2005, 688; Ekwamu 2006, 10).

There is evidence of extended management capacity in the science academic units and the university as a whole. Strategically, there have been attempts at the

institutional level to manage pending inventions that scientists and academic units are producing, although the absence of national mechanisms for intellectual property management had been somewhat replicated within the case university (Bakibinga 2006; Ecuru et al. 2008). This is partly because the affairs of the university were run almost directly by the government, which determined who would become the Vice Chancellor or the composition of the University Council (supreme governing board or trustees). Currently, there are new institutional policies for intellectual property management, and research and innovations at Makerere University. In addition, an intellectual property management unit and the research and innovations office have been identified as possible avenues for managing the discoveries originating from the science academic units (Makerere University 2008a). These institutional mechanisms are relevant to the argument that the relevance of the buffer units hinges on the harmonization of institutional goals and the loyalties faculty have, especially to their disciplines. Such buffer units like the intellectual property offices and technology transfer offices are “brokers” or “intermediaries” for the scientific knowledge and products that originate from the university (Hearn and Holdsworth 2002, 137). They constitute the internal complexity to coordinate the dotted initiatives from the different disciplines or units within the institution. This is a response to an equally complex external environment characterized by numerous actors and organizations in the neo-liberal economy (Hölttä 2000; Hearn and Holdsworth 2002; Geiger 2006; 2008).

Components of the theory of academic capitalism offer an interpretive framework for the emerging responses of four science academic units at Makerere University. Because the intention of the study was to illuminate responses that are closely related to the existing market-like behavior in the neo-liberal universities, the academic capitalism theory was more appropriate. Besides, the theory of academic capitalism suitably anchors the neo-liberal university in the neo-liberal economy. Additionally, within the science academic units studied, academic capitalism has taken the pattern of external funding from development partners. Howev-

er, it is inconclusive whether this represents academic and scientific competitiveness or is just a symbol of adaptive capacities to the markets. It is also argued that, in order to reduce the incidence of the ramifications of the initial responses to the neo-liberal reforms at Makerere University, the extended managerial capacity or the steering core must be strengthened in the early stages of the current wave of responses by the science academic units. At the same time, we ought to be mindful of the fact that inventions and innovations are a product of academic work and originate only from scientific laboratories.

References

- Bakibinga, David J. 2006a. *Intellectual Property Rights in Uganda: Reform and Institutional Management Policy Formulation*. Islamabad, Pakistan: Network of Academies of Sciences in Organization of Islamic Countries (NASIC), International Seminar on “Intellectual Property and Innovation: Value Creation in the Knowledge Economy.”
- Bakibinga, David J. 2006b. *Research Management: Strengths and Weaknesses*. Karolinska Institute Research Training (KIRT) Conference, Stockholm, Sweden.
- Bakibinga, David J. 2008. Accomplishments of the current management and outstanding issues. Management Retreat, Windsor Lake Victoria Hotel, Entebbe, Uganda.
- Baryamureeba, Venansius. 2008. “Science and Technology Cooperation Opportunities in the ICT Field between Uganda and Europe.” Presented at the Euro-Africa ICT Summit on Connecting Sub-Saharan Africa and the European Union for ICT Partnerships Under FP7, Brussels, Belgium.
- Baryamureeba, Venansius. 2006. “On Curricula for Creating Human Capital Needed for ICT-led Economic Growth: Case of Faculty of Computing and IT, Makerere University.” Presented at the *Frontiers of Knowledge in Science and Technology for Africa Conference*, Cape Town, South Africa.

- Biglan, Anthony. 1973. "Relationships between Subject Matter Characteristics and the Structure and Output of University Departments." *Journal of Applied Psychology* 57 (3): 204-213.
- Brett, E. A. 1994. "Rebuilding Organisation Capacity in Uganda under the National Resistance Movement." *The Journal of Modern African Studies* 32 (1): 53-80.
- Carrol, Bidemi. 2007. "Harnessing Private Monies to Fuel University Growth: A Case Study of Makerere University." *South African Review of Education* 13 (2): 77-92.
- Clark, Burton R. 1998. *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Oxford, UK: Pergamon Press for the International Association of Universities.
- Clark, Burton R. 2004. "Makerere University: Entrepreneurial Rebound from the Academic Pits in Uganda." In *Sustaining Change in Universities. Continuities in Case Studies and Concepts*, edited by Burton R. Clark (pp. 99-109). London: Open University Press.
- Court, David. 2000. *Financing Higher Education in Africa: Makerere, the Quiet Revolution*. Washington, DC: World Bank and Rockefeller Foundation.
- de Boer, Harry F., Jürgen Enders, and Liudvika Leisyte. 2007. "Public Sector Reform in Dutch Higher Education: The Organizational Transformation of the University." *Public Administration* 85 (1): 27-46.
- Dill, David D. 2006. "Federal Policies and the Academic Research Enterprise in the United States." Paper presented at *The Public Interest and the Academic Research Enterprise Seminar*, Seville, Spain.
- Ecuru, Julius, R. R. Kingamkono, Jane Omari, Shumu Tefera, and I. Virgin. 2008. *Managing Intellectual Property: East African Universities and Research Institutes Can Do More to Help Scientists*. Policy Brief 1, 24 October 2008.
- Eisemon, Thomas O., Jamil Salmi. 1993. "African Universities and the State: Prospects for Reform in Senegal and Uganda." *Higher Education* 25 (2): 151-168.
- Eisemon, Thomas O., John Sheehan, George Eyoku, Franklin Van Buer, Delane Welsch, Louisa Masutti, Nat Colletta, and Lee Roberts. 1993. *Strengthening Uganda's Policy Environment for Investing in University Development*. Washington, DC: World Bank.
- Eisemon, Thomas O. 1994. "Uganda: Higher Education and the State." In *Government and Higher Education Relationships across Three Continents: The Winds of Change*, edited by Guy Neave and Frans A. Van Vught (pp. 87-105). Oxford, UK: Pergamon Press for the International Association of Universities.
- Ekwamu, Adipala. 2006. RUFORUM-Makerere research and training support programme. Makerere University Stakeholders Consultative Meeting "Partnerships in National Development: Building the Future Together," Makerere University, Senate Conference Hall, Kampala, Uganda.
- Geiger, Roger L. 2006. "The Quest for 'Economic Relevance' by US Research Universities." *Higher Education Policy* 19 (4): 411-431.
- Geiger, Roger L. 2007. "Technology Transfer Offices and the Commercialization of Innovation in the United States." Paper presented at the *Consortium of Higher Education Researchers (CHER) 20th Annual Conference: The Research Mission of the University*, University College Dublin, Dublin, Ireland.
- Geiger, Roger L. 2008. "The Impact of Economic Relevance on University Faculty and Organization in the United States." Paper presented at the *Workshop on the Economics and Policy of Academic Research*, Torino, Italy.
- Gibbons, Michael, Camille Limonges, Helga Nowotny, Simon Schwartzman, Peter Scott, and Martin Trow. 1994. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. London: Sage.
- Hearn, James C., and Holdsworth, Janet M. 2002. "The Societally Responsive University: Public Ideals, Organizational Realities, and the Possibility of Engagement." *Tertiary Education and Management* 8 (2): 127-144.
- Hölttä, Seppo. 2000. "From Ivory Towers to Regional Networks in Finnish Higher Education." *European Journal of Education* 35 (4): 465-474.

- Katunguka, Samwiri. 2005. "Towards Making University Education Relevant to Society Needs through Curriculum Reviews." *The Uganda Higher Education Review: Journal of the National Council for Higher Education* 2 (2): 14-17.
- Liang, Xiaoyan. 2004. *Uganda Tertiary Education Sector Report*. Washington, DC: World Bank.
- Luboobi, Livingstone S. 2004. Address by the Vice Chancellor on the occasion of the 46th congregation of Makerere University, Freedom Square, Makerere University, Kampala, Uganda.
- Luboobi, Livingstone S. 2005. Address by the Vice Chancellor on the occasion of the 47th congregation of Makerere University, Freedom Square, Makerere University, Kampala, Uganda.
- Luboobi, Livingstone S. 2008. Address by the Vice Chancellor on the occasion of the 58th graduation congregation of Makerere University, Freedom Square, Makerere University, Kampala, Uganda.
- Luboobi, Livingstone S. 2007. Address by the Vice Chancellor on occasion of the 54th and 55th graduation ceremonies, Freedom Square, Makerere University, Kampala, Uganda.
- Maassen, Peter. 2003. "Shifts in Governance Arrangements: An Interpretation of the Introduction of New Management Structures in Higher Education." In *The Higher Education Managerial Revolution?*, edited by Alberto Amaral, Vincent Lynn Meek, and Ingvild M. Larsen (pp. 31-53). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Makerere University. 2000. *Makerere University Strategic Plan 2000/01 – 2006/07*. Kampala, Uganda: Planning and Development Department Makerere University.
- Makerere University. 2006a. *Makerere University Annual Report 2006*. Kampala, Uganda: Makerere University.
- Makerere University. 2006b. *School of Graduate Studies (SGS) 1st Annual Report*. Kampala, Uganda: Makerere University.
- Makerere University. 2007. Guidelines for Field Attachment, approved by the Senate at its special meeting held in July 2006. Kampala, Uganda: Makerere University.
- Makerere University. 2008a. *Intellectual Property Management Policy*, as approved by the University Council at its 112th meeting, 13 May 2008, Makerere University, Kampala, Uganda.
- Makerere University. 2008b. Minutes of the Special Meeting of the University Council, 25 April 2008, in the council room at 8:30 a.m., Makerere University Office of the University Secretary, Kampala, Uganda.
- Makerere University. 2008c. *Research and Innovations Policy*, as approved by the University Council at its 112th meeting, 13 March 2008, Makerere University, Kampala, Uganda.
- Mamdani, Mahmood. 2007. *Scholars in the Marketplace. The Dilemmas of Neo-liberal Reform at Makerere University, 1989-2005*. Kampala, Uganda: Fountain Publishers Ltd.
- Mayanja, Muhammad K. 2001. "Makerere University and the Private Students Scheme." *International Higher Education* 25 (1): 11-13.
- Mintzberg, Henry. 2000. "The Professional Bureaucracy." In *Management and Decision-making in Higher Education Institutions*, edited by Ineke Jenniskens (pp. 171-194). The Hague: Lemma Publishers.
- Muhumuza, Fred, John Daly, Sara Farley, and Michael Crawford. 2005. *The State of Science and Technology in Uganda*. Unpublished Report, Kampala, Uganda.
- Musisi, Nakanyike B. 2003. "Uganda." In *African Higher Education: An International Reference Handbook*, edited by Damtew Teferra and Philip G. Altbach (pp. 611-623). Bloomington & Indianapolis, IN: Indiana University Press.
- Musisi, Nakanyike B. 2004. "The Role of Makerere University Higher Education in the Decentralization Process." In *Decentralization and Transformation of Governance in Uganda*, edited by Delius Asiimwe and Nakanyike B. Musisi (pp. 125-134). Kampala, Uganda: Makerere University Institute of Social Research.
- Musisi, Nakanyike B., and Nansozi K. Muwanga. 2003. *Makerere University in Transition, 1993-2000*. Ox-

- ford, UK and Kampala, Uganda: James Currey and Fountain publishers.
- Muwagga, Anthony Mugagga. 2006. "The Philosophical Implications of the Liberalization of University Education in Uganda." PhD dissertation, Makerere University, Kampala, Uganda.
- National Council for Higher Education. 2006. *The State of Higher Education in Uganda, 2005*. Kampala, Uganda: National Council for Higher Education, Ministry of Education and Sports.
- Ocitti, J. P. 1991. "Uganda." In *Handbook of World Education: A Comparative Guide to Higher Education & Educational Systems of the World*, edited by Walter Wickremasinghe (pp. 817-826). Houston, TX: American Collegiate Service.
- Pavitt, Keith. 2001. "Public Policies to Support Basic Research: What Can the Rest of the World Learn from US Theory and Practice? (And What Should They Not Learn)." *Industrial and Corporate Change* 10 (5): 761-779.
- Pollitt, Christopher, and Geert Bouckaert. 2004. *Public Management Reform: A Comparative Analysis* (2nd ed.). Oxford, UK: Oxford University Press.
- Reed, Michael I. 2002. "New Managerialism, Professional Power and Organisational Governance in UK Universities: A Review and Assessment." In *Governing Higher Education: National Perspectives on Institutional Governance*, edited by Alberto Amaral, Glen Jones, and B. Karseth (pp. 163-185). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Salminen, Ari. 2003. "New Public Management and Finnish Public Sector Organisations: The Case of Universities." In *The Higher Education Managerial Revolution?*, edited by Alberto Amaral, Victor Lynn Meek, and Ingvild M. Larsen (pp. 55-69). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Kajubi, W. Sentenza. 1992. "Financing Higher Education in Uganda." *Higher Education* 23(4): 433-441.
- Shane, Scott. 2004. "Variation in Spinoff Activities across Institutions." In *Academic Entrepreneurship. University Spinoffs and Wealth Creation*, edited by Scott Shane (pp. 67-90). Northampton, MA: Edward Elgar Publishing.
- Slaughter, Sheila, and Leslie, Larry L. 1997. *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore and London: Johns Hopkins University Press.
- Slaughter, Sheila, and Gary Rhoades. 2004. *Academic Capitalism and the New Economy: Markets, State, and Higher Education*. Baltimore and London: Johns Hopkins University Press.
- Ssebuwufu, P. John M. 2001. Address by the Vice Chancellor on the occasion of the 39th congregation of Makerere University, Freedom Square, Makerere University, Kampala, Uganda.
- Ssebuwufu, P. John M. 2003. Address by the Vice Chancellor on the occasion of the 43rd graduation ceremony, Freedom Square, Makerere University, Kampala, Uganda.
- Tibarimbasa, Avitus M., and Eriabu Lugujjo. 2000. "The Management of University-Industry Relations at Makerere University, Uganda." In *The Management of University-Industry Relations: Five Institutional Studies from Africa, Europe, Latin America, and the Pacific Region*, edited by M. Martin (pp. 215-261). Paris: International Institute for Educational Planning/UNESCO.
- Visitation Committee to Public Universities. 2007. *Report of the Visitation Committee to Public Universities*. Kampala, Uganda: Visitation Committee to Public Universities.
- Wafula, David, and Norman Clark. 2005. "Science and Governance of Modern Biotechnology in Sub-Saharan Africa—The Case of Uganda." *Journal of International Development* 17 (5): 679-694.

Upcoming Conferences and Events

Africa

The African Network for Internationalization of Education Conference, 2-4 October 2013, Addis Ababa, Ethiopia. Website:

<http://www.anienetwork.org/content/5th-anie-annual-conference-addis-ababa-ethiopia#attachments>

1st International Conference of the African Virtual University, Integrating eLearning and Open Education, 20-22 November 2013, Nairobi, Kenya. Website:

<http://www.avu.org/1st-international-conference-of-the-avu.html>

International Conference on Higher Education, 20-21 November 2013, Cape Town, South Africa (ICHE 2013). Website:

<http://www.waset.org/conferences/2013/capetown/iche/>

7th Pan Commonwealth Forum on Open Learning, 2-6 December 2013, Abuja, Nigeria. Website:

<http://www.col.org/pcf7>

6th International Conference on ICT for Development, 7-10 December 2013, Cape Town, South Africa.

Website: <http://www.ictd2013.info/>

SCECSAL XXI Conference, Information and knowledge management as a driving force for socio-economic development in Africa, 28 July to 1 August 2014, Lilongwe, Malawi. Website:

<http://www.scecsal.org/conferences/scecsalxxi.html>

Education and the Constitution at 20, 7-9 April 2014, Potchefstroom, South Africa. Website:

http://www.nwu.ac.za/webfm_send/45411

Asia Pacific

International Multidisciplinary Research Conference on Higher Education, 3-4 October 2013, Manila, Philippines. Website:

<http://www.pup.edu.ph/Announcements/20130708NRC.aspx>

National Conference on Higher Education in India: Opportunities and Challenges, 15-16 November 2013, Madurai, Tamil Nadu, India. Website:

<http://www.mkuniversity.org/ASC/conference>

Asian Conference on Multidisciplinary Research in Higher Education (ACMRHE 2013), 26-28 November 2013, Pasay, Philippines. Website:

http://www.iamure.com/?page_id=12001

Global Higher Education Forum 2013 (GHEF2013), 4-6 December 2013, Putrajaya, Wilayah Persekutuan Putrajaya, Malaysia. Website:

<http://www.gheforum.usm.my>

2nd International Higher Education Teaching and Learning Conference 2013, 9-10 December 2013, Miri, Sarawak, Malaysia. Website:

<http://www.eventm.net/tl2013>

Higher Education Research and the Student Learning Experience in Business Conference, 11-13 December 2013, Melbourne, Australia. Website:

<http://fbe.unimelb.edu.au/celt/conference>

Latin America

Conference of the Americas for International Education (CAIE), 16-18 October 2013, Monterrey, Mexico. Theme: Knowledge and mobility: Responsibility and resources. Website: <http://www.caie-caei.org/en/>

3rd International Conference on Higher Education, 4-6 November 2013, Villa Hermosa, Tabasco, Mexico. Theme: University training through skills development. Website: <http://www.congresoujat.org.mx/>

COMIE'S XII National Conference on Educational Research, 18-22 November 2013, Guanajuato, Mexico. Theme: Several topics, including higher education. Website: <http://congreso.comie.org.mx/>

6th International Conference on Training for Employment, 17-18 December 2013, University of Rovira I Virgili, Tarragona, Spain. Theme: Training for Employment in Times of Crisis: Balance and Prospective. Website:

<http://grupocifo.uab.es/congreso/htm/sede.htm>

Hispanic Association of Colleges and Universities, 26-28 October 2013, Chicago, IL, USA. Theme: Championing Hispanic Higher Education Success:

Securing the American Dream. Website:
http://www.hacu.net/hacu/Annual_Conference1.asp

United States and Canada

EDUCAUSE, 15-18 October 2013, Anaheim, California, United States. Website:

<http://www.educause.edu/annual-conference>

History of Education Society (HES) Annual Meeting,
31 October - 3 November 2013, Nashville, Tennes-

see, United States. Website:

<https://cmt.research.microsoft.com/HES20123>

Association for the Study of Higher Education (ASHE)
Conference, 14-16 November 2013, St. Louis, Missouri, United States. Website: <http://www.ashe.ws/>

Recent Publications in International Higher Education

Select Journal Articles by Geographic Region

Global

- Farrugia, Christine A., and Jason E. Lane. 2013. "Legitimacy in Cross-Border Higher Education: Identifying Stakeholders of International Branch Campuses." *Journal of Studies in International Education* 17 (4):414-432.
- Middlehurst, Robin. 2013. "Shifting Patterns of International Higher Education: Ebb and Flow or Sea Change?" *Change* 45 (5): 28-35.
- Mountford-Zimdars, Anna, and Daniel Sabbagh. 2013. "Fair Access to Higher Education: A Comparative Perspective." *Comparative Education Review* 57 (3):359-368.
- Spencer-Oatey, Helen. 2013. "Maximizing the Benefits of International Education Collaborations: Managing Interaction Processes." *Journal of Studies in International Education* 17 (3): 244-261.

Africa

- Brown-Luthango, Mercy. 2013. "Community-University Engagement: The Philippi Citylab in Cape Town and the Challenge of Collaboration across Boundaries." *Higher Education* 65 (3): 309-324. doi:10.1007/s10734-012-9546-z
- Buckner, Elizabeth. 2013. "Access to Higher Education in Egypt: Examining Trends by University Sector." *Comparative Education Review* 57 (3): 527-552. doi:10.1086/670665
- Cossa, José. 2013. "Power Dynamics in International Negotiations toward Equitable Policies, Partnerships, and Practices: Why it Matters for Africa, the Developing World, and their Higher Education Systems." *African and Asian Studies* 12 (1-2):100-117.
- Dahl, Kari Kragh Blume. 2013. "'Paradoxical Health Education': Learning about Health in Kenyan Teacher Training Colleges." *Compare: A Journal*

of Comparative and International Education, (ahead-of-print).

doi:10.1080/03057925.2013.800784

- Jeffery, Roger. 2013. "Authorship in Multi-disciplinary, Multi-national North-South Research Projects: Issues of Equity, Capacity and Accountability." *Compare: A Journal of Comparative and International Education*, (ahead-of-print). doi:10.1080/03057925.2013.829300
- Samuel, Michael A., and Hyleen Mariaye. 2013. "Decolonising International Collaboration: The University of Kwazulu-Natal-Mauritius Institute of Education Cohort PhD Programme." *Compare: A Journal of Comparative and International Education*, (ahead-of-print). doi:10.1080/03057925.2013.795100
- Wei, Hao. 2013. "An Empirical Study on the Determinants of International Student Mobility: A Global Perspective." *Higher Education* 66 (1): 105-122. doi:10.1007/s10734-012-9593-5

Asia Pacific

- Daquila, Teofilo C., and Shirlena Huang. 2013. "Introductory Editorial for a Special Theme of the Journal of Studies in International Education: Internationalizing Higher Education in Southeast Asia—Government and Institutional Responses." *Journal of Studies in International Education* 17 (5):624-628.
- Davidovitch, Nitza, Elena Lobova, Elena Pryamikova, Tatiana Semenova, Tatiana Pechenkina, and Maria Yachmeneva. 2013. "Students' Evaluations of Profit and Utility of Higher Education: A Comparative Case Study." *World Journal of Education* 3 (1):23-31.

Europe

- Ana, Mihei. 2013. "International Trade with Higher Education Services and Economic Growth in Cen-

- tral and Eastern Europe." *CES Working Papers* 5 (3): 412-421.
- Andres, Lesley, and Hans Pechar. 2013. "Participation Patterns in Higher Education: A Comparative Welfare and Production Régime Perspective." *European Journal of Education* 48 (2): 247-261.
- Bleiklie, Ivar, and Svein Michelsen. 2013. "Comparing HE policies in Europe: Structures and Reform Outputs in Eight Countries." *Higher Education* 65 (1): 113-133.
- Christine, Teelken, and Deem Rosemary. 2013. "All Are Equal, But Some are More Equal than Others: Managerialism and Gender Equality in Higher Education in Comparative Perspective." *Comparative Education* 49 (4): 520-535.
- Hoareau, Cecile, Jo Ritzen, and Gabriele Marconi. 2013. "Higher Education and Economic Innovation: A Comparison of European Countries." *IZA Journal of European Labor Studies* 2 (1):1-24.
- Lepori, Benedetto, Vitaliano Barberio, Marco Seeber, and Isidro Aguillo. 2013. "Core-Periphery Structures in National Higher Education Systems: A Cross-Country Analysis Using Interlinking Data." *Journal of Informetrics* 7 (3): 622-634.
- Riko, Novak, Slatinšek Anja, and Devetak Gabrijel. 2013. "Importance of Motivating Factors for International Mobility of Students: Empirical Findings on Selected Higher Education Institutions in Europe." *Organizacija* 46 (6):274-280.
- Triventi, Moirs. 2011. "Stratification in Higher Education and Its Relationship with Social Inequality: A Comparative Study of 11 European Countries." *European Sociological Review* 29 (3): 489-502.

Latin America

- Barandiaran-Galdós, Marta, Barrenetxea Ayesta, Mirren, Cardona-Rodríguez Antonio, Mijangos del Campo, Juan José, and Jon Olaskoaga-Larrauri. 2012. "What do teachers think about quality in the Spanish university?" *Quality Assurance in Education* 20 (2): 91-109.

- Espinoza, Oscar, and Luis González. 2013. "Access to higher education in Chile: A public vs. private analysis." *Prospects* 43 (2): 199-214.
- Guzmán-Valenzuela, Carolina, and Ronald Barnett. 2013. "Academic Fragilities in a Marketised Age: The Case of Chile". *British Journal of Educational Studies* 61 (2): 203-220.

United States and Canada

- Tight, Malcolm, and Jeroen Huisman. 2013. *Theory and Method in Higher Education Research*. Vol. 9. Bradford, PA: Emerald Group Publishing Limited.
- Wolff, Edward N., William J. Baumol, and Anne Noyes Saini. 2013. "A Comparative Analysis of Education Costs and Outcomes: The United States vs. Other OECD Countries." *Economics of Education Review* 39:1-21.

Select Books by Region

Global

- Arnove, Robert F. 2013. *Comparative Education: The Dialectic of the Global and the Local*. Lanham, MD: Rowman & Littlefield Publishers.
- Benson, Carol, and Kosonen Kimmo. 2013. *Language Issues in Comparative Education: Inclusive Teaching and Learning in Non-Dominant Languages and Cultures*. Rotterdam, The Netherlands: Sense Publishers.
- Bhandari, Rajika, and Peggy Blumenthal. 2013. *International Students and Global Mobility in Higher Education*. New York: Palgrave Macmillan.
- Biseth, Heidi, and Halla B. Holmarsdottir. 2013. *Human Rights in the Field of Comparative Education*. Rotterdam, The Netherlands: Sense Publishers.
- Bray, Mark, André E. Mazawi, and Ronald G. Sultana. 2013. *Private Tutoring across the Mediterranean: Power Dynamics and Implications for Learning and Equity*. Rotterdam, The Netherlands: Sense Publishers.

- Brock, Colin. 2013. *Education around the World: A Comparative Introduction*. New York: Bloomsbury Academic.
- Caeiro, Sandra, Walter Leal Filho, Charbel Jabbour, and Ulisses M. Azeiteiro. 2013. *Sustainability Assessment Tools in Higher Education Institutions: Mapping Trends and Good Practice Around the World*: Springer International Publishing.
- Kandiko, Camille, and Mark Weyers. 2013. *The Global Student Experience: An International and Comparative Analysis*. New York: Routledge.
- Knight, Jane. 2013. *International Education Hubs: Student, Talent, Knowledge-Innovation Models*. Dordrecht, The Netherlands: Springer.
- Kovbasyuk, Olga, and Patrick Blessinger. 2013. *Meaning-Centered Education: International Perspectives and Explorations in Higher Education*. New York: Routledge.
- Land, Ray, George Gordon, and Catherine Owen. 2013. *Enhancing Quality in Higher Education: International Perspectives*. New York: Taylor and Francis.
- Marope, P. T. M., Peter J. Wells, and Ellen Hazelkorn. 2013. *Rankings and Accountability in Higher Education: Uses and Misuses*. Paris: UNESCO.
- Meyer, Heinz-Dieter, Edward P. St. Jone, Maia Chankseliani, and Lina Uribe. 2013. *Fairness in Access to Higher Education in A Global Perspective: Reconciling Excellence, Efficiency, and Justice*. Rotterdam: Sense Publishers.
- Russo, Charles J. 2013. *Handbook of Comparative Higher Education Law*. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Sachs, Judyth, and Mitch Parsell. 2013. *Peer Review of Learning and Teaching in Higher Education: International Perspectives*. Dordrecht, The Netherlands: Springer Netherlands.
- Shields, Robin. 2013. *Globalization and International Education*. New York: Bloomsbury Us.
- Shin, Jung Cheol, Akira Arimoto, William K. Cummings, and Ulrich Teichler. 2013. *Teaching and Research in Contemporary Higher Education: Systems, Activities and Rewards*. Dordrecht, The Netherlands: Springer.
- Wang, Victor C. X. 2013. *International Education and the Next-Generation Workforce: Competition in the Global Economy*. Hershey, PA: Information Science Reference.

Africa

- Chan, Stephen. 2013. *The Morality of China in Africa: The Middle Kingdom and the Dark Continent*. London, UK: Zed Books.
- International Association of Universities. 2013. *Guide to Higher Education in Africa*. 6th ed. Basingstoke, UK: Palgrave Macmillan.
- Munene, I. 2013. *Multi-campus University Systems Building the Periphery in Africa*. New York: Routledge.
- Schoole, Chika, and Jane Knight. 2013. *Internationalisation of African Higher Education: Towards Achieving the MDGs*. Rotterdam: Sense Publishers.
- Teferra, Damtew. 2013. *Funding Higher Education in Sub-Saharan Africa*. New York: Palgrave Macmillan.

Asia Pacific

- Neubauer, Deane, Jung Cheol Shin, and John N. Hawkins. 2013. *The Dynamics of Higher Education Development in East Asia*. New York; Palgrave Macmillan.

Europe

- Musselin, Christine, and Pedro N. Teixeira. 2013. *Reforming Higher Education: Public Policy Design and Implementation*. Dordrecht, The Netherlands: Springer.
- Shultz, Lynette, and Tania Kajner. 2013. *Engaged Scholarship: The Politics of Engagement and Disengagement*. Rotterdam, The Netherlands: Sense Publishers.

Latin America

Balan, Jorge. 2013. *Latin America's New Knowledge Economy: Higher Education, Government, and International Collaboration*. New York: Institute of International Education.

Beigel, Fernanda. 2013. *The Politics of Academic Autonomy in Latin America*. London: Ashgate Publishing.

United States and Canada

Smith, Larry Robert. 2013. *Higher Education: Recent Trends, Emerging Issues and Future Outlook*. Hauppauge, New York: Nova Science Publishers, Inc.