JOURNAL OF COMPARATIVE & INTERNATIONAL HIGHER EDUCATION

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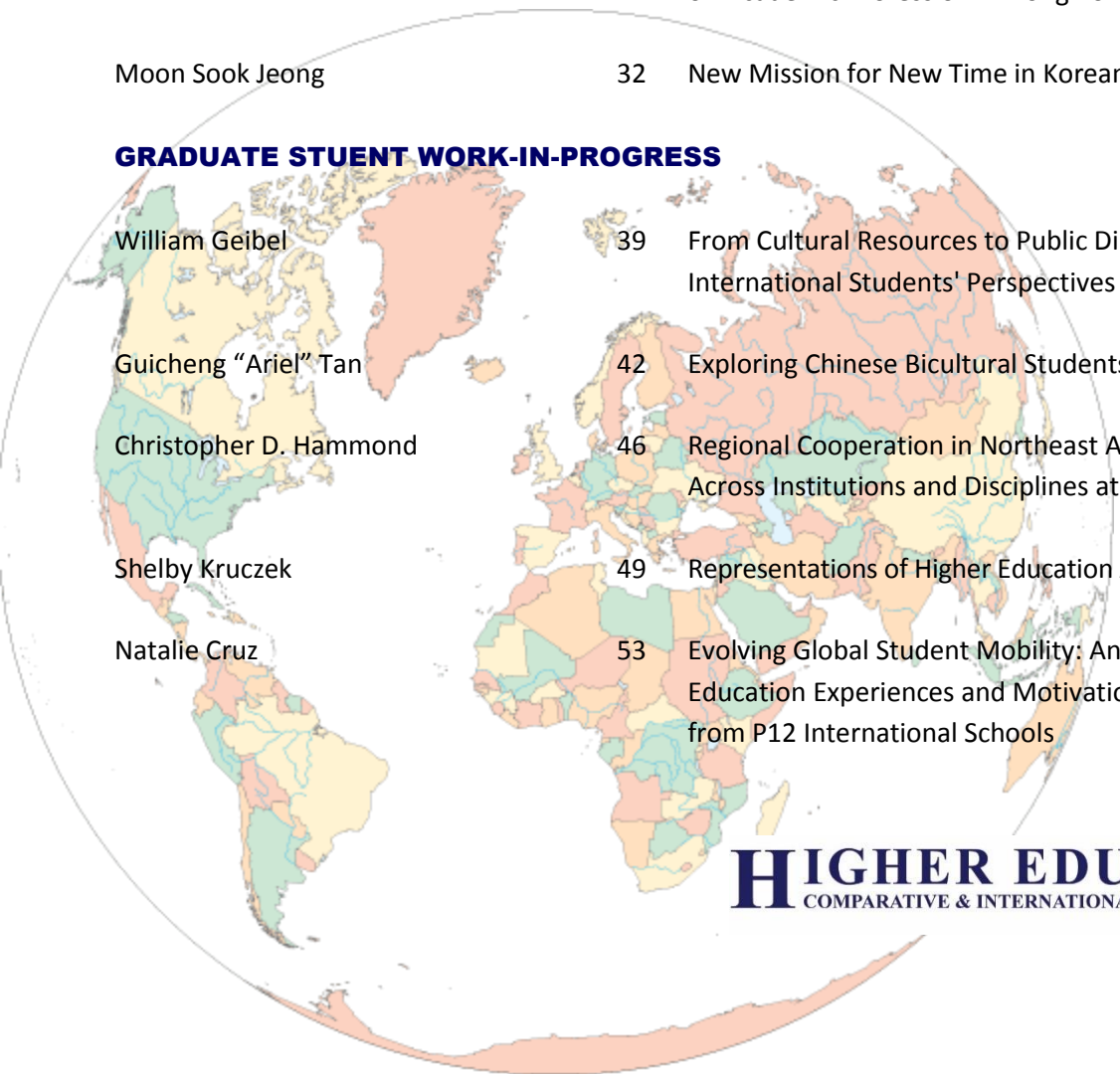
THE OFFICIAL JOURNAL OF THE HIGHER EDUCATION SIG

FEATURED ARTICLES

GRADUATE STUENT WORK-IN-PROGRESS



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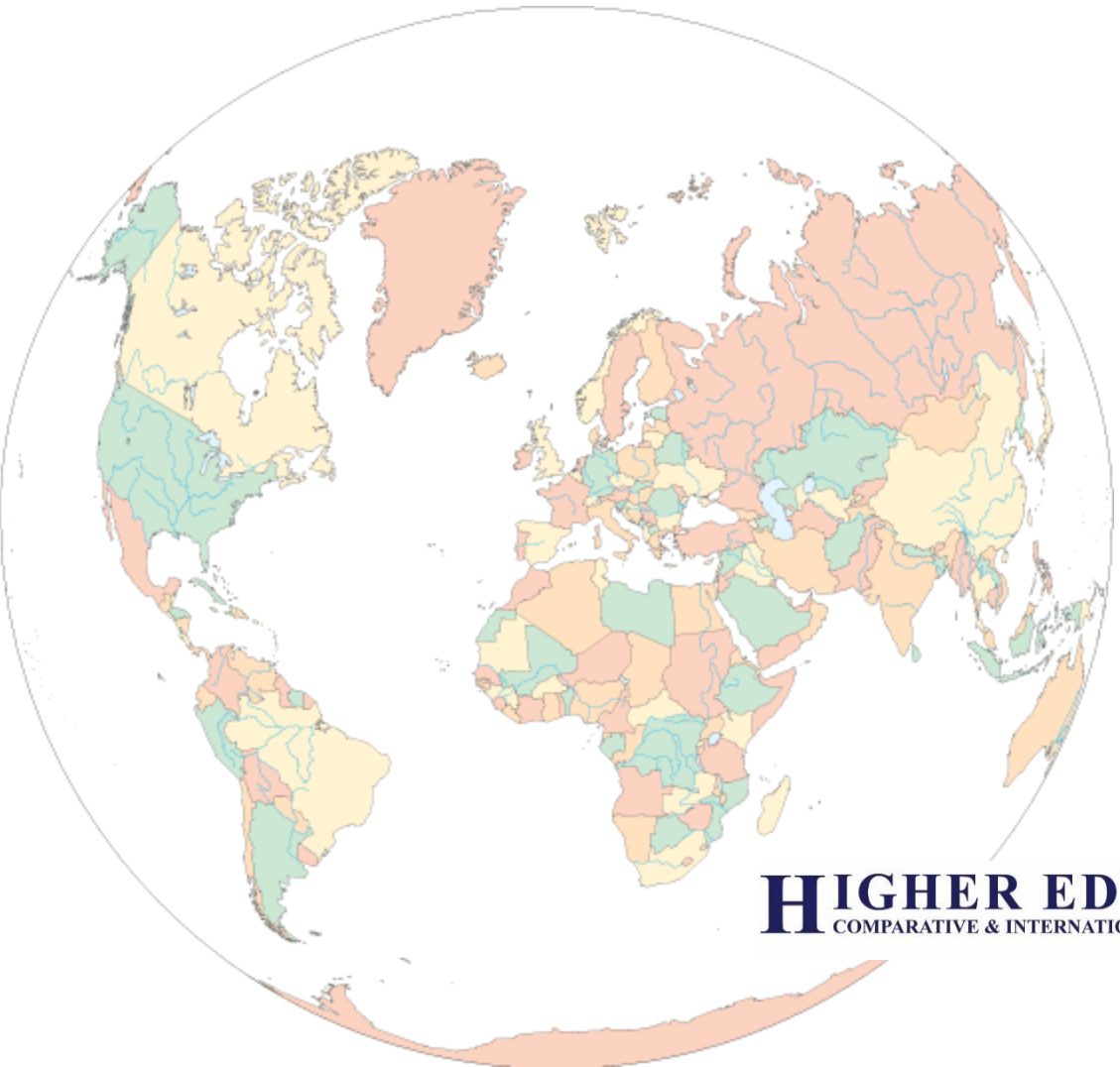

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COMPARATIVE & INTERNATIONAL EDUCATION SOCIETY

JOURNAL OF COMPARATIVE & INTERNATIONAL HIGHER EDUCATION

Philosophy for *Comparative and Int'l Higher Education*

This is the official journal of the Comparative and International Education Society's (CIES) Higher Education Special Interest Group (HESIG), which was created in 2008. HESIG serves as a networking hub for promoting scholarship opportunities, critical dialogue, and linking professionals and academics to the international aspects of higher education. Accordingly, HESIG will serve as a professional forum supporting development, analysis, and dissemination of theory-, policy-, and practice-related issues that influence higher education.

Submission and Review

The Editorial Board invites contributions dealing with the complementary fields of comparative, international, and development education and that relate to one of the areas listed in the Philosophy section above. Contributors may:

1) Submit a research article of 1,500 - 3,000 words. All articles will undergo a blind-review peer-editing process.
2) Submit a comparative report analysis of 750 - 1,000 words that examines current policies related to higher education institutional policy.
3) Submit graduate student research in-progress of 500 - 1,000 words that shares new research that will help to set the tone for current and emerging issues in the field.

Electronic submissions are accepted on an on-going basis and should be sent to jcihe.hesig@gmail.com. Manuscripts are evaluated by the editorial board—with full confidentiality on both sides—and then accepted, returned for further revisions, or rejected.

The style and format of the *Journal of Comparative & International Higher Education* follows the Chicago Manual of Style. Only endnotes are allowed. USA spelling (e.g., center, color, organize) and punctuation are preferred (single quotations within double if needed), and requires a short paragraph of bibliographical details for all contributors.

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Introduction to Winter 2018 JCIHE

Dear Readers -

I would like to welcome you to the *Journal of Comparative and International Higher Education* (JCIHE) Winter Special Issue 2018. Beginning this year, the JCIHE Winter Issue will have two special contributions. The first will be a guest editor with a targeted theme for the selected articles. The second will be the annual JCIHE Graduate Student Work-in-Progress submissions. The guest editor for Winter 2019 will be Christof Van Mol. We invite proposals for future special issue editors for 2021 and 2022. We also invite submissions for Graduate Student Work-in-Progress for 2019 which will be accepted on a rolling basis prior to Nov. 8, 2019. Finally, the editorial staff at JCIHE is pleased to share that all submissions to JCIHE will receive a DOI number and will be listed in the EBSCOHOST database.

In 2018, JCIHE received 15 submissions, of which, we accepted 12. In addition, JCIHE received 11 graduate student submissions, of which we accepted 9. Published submissions were authored by 5 men and 13 women. The graduate student issue included 4 men and 6 women. Authors represented a range of countries including Azerbaijan, Canada (2 authors), China (4 authors), Germany, Korea (2 authors), Middle East, Panama, United Kingdom, and United States (7 authors).

For the Winter Special Issue 2018, JCIHE is honored to have Hei-hang Hayes Tang (The Education University of Hong Kong) and Roger Chao, Jr. (Independent Education Development Consultant) as the inaugural Special Issue guest editors. The theme of the Special Issue is "Academic Profession, Entrepreneurial Universities and Scholarship of Application." Each article examines the application of entrepreneurialism in higher education and explores how it is impacting the academic profession by changing the notion of "scholarship." The articles in this issue describe how, in this century, "scholarship" has changed from a strictly academic application that includes research and publishing to a focus on "scholarship of application" that is demonstrated by acquiring external grants and by demonstrating applicable knowledge of the field through collaborations with industry and business, and the effects of these changes. The 2018 Special Issue includes contributions by Roger Chao Jr. (Independent Education Development Consultant), Beatrice Yan-yan Dang (HKU SPACE Po Leung Kuk Stanley Ho Community College, the University of Hong Kong), Moon Sook Jeong (Korea University of Technology and Education), and Wai-wan (Vivien) Chan (China and Junior Fellow, Society of Fellows in the Liberal Arts, Southern University of Science and Technology).

The JCIHE Winter Special Issue 2018 also includes the JCIHE annual Graduate Student Work-in-Progress issue. Contributions are made by graduate students who are currently studying in a MA, Ed.D., or Ph.D. programs at New York University, George Mason University, George Washington University, Old Dominion University, University of California at Los Angeles, University of Georgia, University of Maryland, College Park, University of Oxford, and University of Texas at Austin. The selected students for this issue highlight a range of emergent issues for the field and illustrate how their research will contribute to the field of comparative and international higher education.

The themes of collaboration, cooperation, and equity are central in the 2018 Graduate student research. This includes student and faculty voices, institutional policy, and outreach.

William Geibel: "Middle Eastern International Students Perspectives on Internationalization" which examines international students as active contributors to internationalization and explores the ways in which Middle Eastern international students use their own identities and perceptions of themselves as public diplomats to influence the relative success of campus interactions and engagement.

Guicheng "Ariel" Tan: "Exploring Chinese Bicultural Student's Adjustment to the College Process" inspects the interaction between bicultural identity integration and the college adjustment experience focusing on Chinese international students and first-generation Chinese immigrant students.

Christopher D. Hammond: "Regional Cooperation in Northeast Asia: Comparing Policy Ideas Across Institutions and Disciplines at Japanese Universities" that details policy ideas and programs aimed at fostering regional cooperation between China, Japan, and South Korea in the higher education sector.

Shelby Kruczek: "Representations of Higher Education among Adult Refugees in the US" examines experiences of adult refugees regarding equitable structures and educational pathways that support the access and participation of refugees in higher education and the workforce.

Natalie Cruz: "Evolving Global Student Mobility: An Investigation into the Higher Education Experiences and Motivations of Students and Alumni from P12 International Schools" examines the choices of international students who attend P12 international schools in China, the United Arab Emirates, India, and the Netherlands, in regard to push-pull influences that impact their choice of what university to attend.

Romina de Costa: "A Case Study of Engineering Ph.D. Students Career Decision-making Process Using a Bounded Agency Model" explores the reasons for STEM attrition at an understudied point in the academic pipeline of both male and female international students as they make career decisions following their graduate education.

Zachary W. Taylor & Ibrahim Bicak: "Institutional, Informational, International: Predicting International Student Enrollment and Rate by Online Information" which assesses the clarity and availability of international undergraduate application instructions on 355 US institutional websites.

Melissa Whatley: "Who Studies Abroad at Community Colleges" identifies characteristics of community college students at one urban community college who study abroad and compares them to characteristics of four-year students

Taylor C. Woodman: "New Destinations in Study Abroad: Examining US University Expansion Efforts in Cuba" in regard to facilitating study abroad opportunities for U**S** students. The research asks why US and Cuban faculty and university administrators are motivated to develop programming and how expansion of study abroad influences higher education policies and practices.

The editorial staff of JCIHE is please to help support the CIES Higher Education SIG in advancing JCIHE as a professional forum that supports development, analysis, and dissemination of theory-, policy-, and practice-related issues that influence higher education. I especially want to thank our Managing Editor, Nickie Smith for her support, insight, and creativity. Please visit the web-site to submit manuscripts or register as a peer reviewer.

JCIHE would also like to thank our reviewers for the Spring 2018 and Winter 2018 issues:
Karolyn Andrews, University of California, Riverside, United States
Gerardo Blanco-Ramirez, University of Massachusetts, Boston, United States
Wai-wan (Vivien) Chan, Southern University of Science and Technology, China
Roger Chao, Jr., Independent education development consultant, China
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Ligia Toutant, University of California at Los Angeles, Drexel University, and Walden University, United States

Editor in Chief,
Rosalind Latiner Raby
Winter 2018

Academic Profession, Entrepreneurial Universities and Scholarship of Application: The Imperative of Impact

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Introduction to the Special Issue

The system of higher education and the lifeworld of academic profession started to enter the "entrepreneurial turn" in the last decade of the twentieth century. Economic globalization and the emergence of knowledge economies intensify "the entrepreneurial state" (Mazzucato 2013) within universities, and the model of "entrepreneurial university" becomes a prototype for modern universities to evolve and adapt to the new reality of diminishing government revenues for higher education in some advanced post-industrial societies. As for most of the higher education systems, allocation of university resources is increasingly decided on competitive and "accountable" basis. The global trend of academic entrepreneurialism (for example Clark 1998; Tang 2014) profoundly affects the way in which higher education institutions and academic life are coordinated and organized. The form of scholarship is being re-engineered in such a way that the "scholarship of application" (SoA) becomes an imperative scholarly mission, alongside the "scholarship of discovery". The rise of higher education reform coincided with the pervasive neoliberal transformation of the traditional academy in the 1990s. One social technology for promoting SoA is the policies of knowledge transfer, which have been institutionalized and formalized in the higher education sector, especially through the role played by the intermediary of knowledge transfer unit on campus (Geuna and Muscio 2009). In some cases, the academic profession is changing with a strong focus on research and acquiring external research grants, which demands knowledge and expertise derived from the SoA, especially when academics are looking for funds from government, public organizations, industry or business.

It is argued that the advocacy of the SoA dates back to the 1860s' America (Boyer 1996). For enhancing the alignment between university activities and the US national agricultural and industrial reforms, the Land Grant Act of 1862 was enacted and the federal government donated land to each state to establish "land-grant colleges", which aimed at improving the lives of farmers and industrialists through the liberal and practical education. Subsequently, the idea of the "service mission" of American universities has been reflected by the leadership of university presidents. For example, Charles Eliot, the President of Harvard University from 1869 to 1909, considered the profession of American universities to live out the "democratic spirit of serviceableness". American universities' unrelenting commitment to service was advocated amidst the rise of academic returnees from Europe in the nineteenth century.

When the global world is entering the age of fourth industrial revolution, universities are expected to be an imperative component of any innovation system, applying basic research and innovative knowledge via the "triple-helix model" of university-industry-government interaction (Etzkowitz and Leydesdorff 1996). In the context of Europe, the renewed EU (European Union) Agenda for Higher Education focus on priorities that support the move to the SoA. It is suggested that universities must play their part in facing up to European Union's scientific and democratic challenges, as there are too few PhD holders, in comparison to the United States and Japan, who develop a career outside academia. European academic professions need to promote SoA through greater focus in doctoral programs on the application of knowledge and interaction with future employers. Universities are not always contributing as

much as they are expected to innovation in the wider economy, hence there are innovation gaps to be filled now and then.

Towards the brand new era of academic entrepreneurialism, the quality and impact of research will be measured not only by conventional academic metrics, but also by the tangible benefits the academic profession bring to the global, regional, national and local communities. In view of the imperative of impact, university education should offer every student with opportunities for holistic personal development, enhanced language competence and experience outside their locality and comfort zone, through internships, work placements, other experiential learning at community organizations, charities and commercial firms.

This special issue, co-edited by Roger Chao, Jr. and me, seeks to examine the way academic entrepreneurialism manifests itself in the changing discourses of the notion of "scholarship", its impact on the changing academic profession as well as on the world conditions beyond the academy. It particularly investigates the contexts, rationales, definitions and implications of the discursive field of the "scholarship of application". It comprises four papers which research the changing connections between higher education, society and economy. The papers address development, analysis, and dissemination of theory-, policy-, and practice-related issues that are related to the theme of entrepreneurial university and academic profession and influence the social role and impact of higher education. The four papers contain single or various country cases or institutional cases supporting higher education practices in relation to academic entrepreneurialism and SoA. The special issue, as a whole, offers some informed analysis with a focus on regional, national and institutional policies related to the SoA.

In the first paper entitled "Entrepreneurial Universities in ASEAN nations: Insights from Policy Perspective", Roger Chao, Jr. examines the regionalization process of the Association of Southeast Asian Nations (ASEAN) region, paying special attention to the massification and privatization of higher education as well as the reconfiguration of ASEAN universities into entrepreneurial universities. He argues that the notion of the entrepreneurial university denotes an important paradigmatic shift from its "ivory tower' model to an evolutionary mode that enables higher education institutions to survive and adapt in highly complex and risky environment in which they operate. The transformation processes, in the case of ASEAN, are significantly inter-related with SoA and academic capitalism. The paper suggests that universities in the ASEAN community amid their pursuit for SoA should focus on balancing their mission of scholarship of teaching and education, particularly in STEM and role of social sciences and humanities in such SoA endeavors.

Wai-wan Vivien Chan, the author of the second paper "Social Capital – A 'Super Connector' for Internationalization and Integration: The Role of Hong Kong Universities in the Development of the Greater Bay Area", argues that in the latest China's macro-economic project of constructing the "Greater Bay Area", Hong Kong's universities possess competitive advantage of playing the role of "super connector" in the integration of the regional innovation system. One advantage is the presence of international academic profession (Tang 2013) which is well connected with the world-class scientific and scholarly communities. Holding the indispensable assets of social capital and international academic professionals, Hong Kong's universities will facilitate the higher education collaboration in the Greater Bay Area and propel the economic integration of Southern China. The discussions in the paper call for more comparative and international higher education studies about the pattern of internationalization and globalization in the Chinese context.

Beatrice Y.Y. Dang's paper "Embracing Entrepreneurship: Impact of Knowledge Transfer Polices on Academic Profession in Hong Kong Higher Education" contributes to the literature which lacks empirical research about knowledge transfer and exchange in Asian academic profession (Tang 2017). The paper claims that although Hong Kong's public universities are not affected by government funding reduction for higher education, research and knowledge transfer activities are the key strategic goals to enhance international competitiveness. It describes a new form of university governance which has emerged for fostering university-industry-community collaborations.

Knowledge transfer/ exchange activities have reshaped the trajectories of knowledge production and transmission, as well as the nature of academic life.

In "New Mission for New Time for Korean Higher Education", Moon Jeong examines another East Asian case, South Korea, with reference to the changing policy discourse and practice and how they affect the transformation of educational paradigm. Facilitated by the ideological consensus between global and local policy networks, competency-based education becomes timely and relevant in response to the Fourth Industrial Revolution. Higher education of South Korea has entered a new time and embraces the new mission, given the changing economic structure and demographic decline in youth cohorts.

Taken together, this special issue aims to initiate the intellectual dialogues with regards the increasingly important topics about academic profession, entrepreneurial universities, scholarship of application and the imperative of impact. Based on the current state of the literature, I recommend some general areas for future research: public mission of university and the new missions for knowledge transfer; the role of basic research in innovation system and academic entrepreneurship; impact of academic profession in the 21st century; public accountability, internationalization, and entrepreneurial universities; as well as critical review of university evolution amid globalizing academic entrepreneurialism and academic capitalism. It is hoped that conceptual discussions and empirical scholarship offered by this special issue can create new knowledge for better understanding the way in which the public mission of higher education is being reinvented in the new century of academic entrepreneurialism, and probably through the entrepreneurial state of university governance. In critical but practical terms, further research is needed to challenge the prototype of "entrepreneurial university", for instance by presenting counter cases against higher education practices in relation to academic entrepreneurialism and SoA. More democratic discourses can better inform the art of academic leadership and the formation of policies with decent cultural sensitivity.

References

Boyer, Ernest L. 1990. *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton, NJ: Princeton University Press.

Clark, Burton R. 1998. *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Oxford: IAU Press.

Geuna, Aldo and Alessandro Muscio. 2009. "The Governance of University Knowledge Transfer: A Critical Review of the Literature." *Minerva* 47 (1): 93-114.

Leydesdorff, Loet, and Henry Etzkowitz. 1996. "Emergence of a Triple Helix of University—Industry—Government Relations." *Science and public policy* 23 (5): 279-286.

Mazzucato, Mariana. 2013. *The Entrepreneurial State: Debunking the Public vs. Private Myth in Risk and Innovation*. London: Anthem.

Tang, Hei-hang Hayes. 2013. "Scholarship Reconsidered in an Era of Entrepreneurialism: Academic Professions in Hong Kong and South Korea." *HKU Theses Online (HKUTO)* (2013).

Tang, Hei-hang Hayes. 2014. "The Scholarship of Application in the Context of Academic Entrepreneurialism: A Review of the Discursive Field." *Asian Education and Development Studies* 3 (3): 292-302.

Tang, Hei-hang Hayes. 2017. "Knowledge Exchange by the Hong Kong Academic Profession: In *The Changing Academic Profession in Hong Kong*, edited by Gerard A. Postiglione and Jisun Jung, 183-199. Cham: Springer.

Entrepreneurial Universities in ASEAN Nations: Insights from Policy Perspective

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Introduction

The combination of neo-liberalism and the massification of higher education combined with the diminished public funds for higher education contributed to the rise of academic capitalism and entrepreneurship across higher education systems and institutions across the world. In particular, the World Trade Organization's (WTO) General Agreement on Trade in Services (GATs) not only established education, including higher education, as a commodity subject to the rules of international trade, but it also contributed to the increasingly global perception of higher education as a private, rather than a public, good rationalizing that the benefits of higher education significantly accrue to the individual students rather than the public.

With the focus on human capital development and its contribution to economic development, higher education is increasingly located within the globally accepted knowledge-based economy discourse. Higher education systems worldwide have moved from elite systems to massification and even post-massification of higher education, especially in Western countries especially from the 1980s onwards (Mok 2013; Mok & Jiang 2016; Wu & Hawkins 2018). According to UNESCO UIS database (n.d.), the world higher education gross enrollment ratio significantly increased from 12.39 percent and 13.65 percent in 1980 and 1990s to 29.32 percent and 36.77 percent in 2010 and 2016 respectively.

Fiscal challenges, changes in funding mechanisms and the enhanced use of New Public Management in higher education, shifted funding of higher education to individual students and their families, supported the growth of private higher education, and promulgated the privatization of public higher education institutions. Most governments are utilizing New Public Management, which increases public accountability and transparency in the utilization of public funds, including those for higher education. Furthermore, there is an increasing trend and focus on research with economic and social applications rather than fundamental research.

The above-mentioned trends and developments highlight the changing characteristic of higher education systems and institutions towards the scholarship of application, academic capitalism and entrepreneurship (Berman 2012; Fetters et al. 2010; Tang 2014; Wong 2011). These trends also hold in the Association of Southeast Asian Nations (ASEAN) region, which aside from being influenced by globalization and its discourses, are ongoing a complex regionalization process to establish an ASEAN Community. This article seeks to understand public policy-related factors that contributes to academic capitalism and the establishment or reconfiguration of ASEAN universities into entrepreneurial universities.

Entrepreneurial Universities

The concept of the entrepreneurial university denotes a major shift from its idealized 'ivory tower' model, where universities are free to undertake its activities (e.g. teaching and research) in pursuit (and dissemination) of knowledge for knowledge sake. According to Burton Clark (2001), an entrepreneurial university is a university which is able to survive and adapt in highly complex and uncertain conditions of the environment in which it operates. As such, the concept of an entrepreneurial university is inter-related with academic capitalism and the scholarship of application

and increasingly located within a strong market rationale promoted by increased neo-liberalization of the world order. Academic capitalism refers to how universities (particularly but not limited to public research universities) respond to neo-liberal tendencies to treat higher education policy as a subset of economic policy (Slaughter and Rhoades 2000). It refers to how universities and faculty deal with the market and exhibit market-like behaviors.

The scholarship of application, however, is focused on relevance of knowledge produced and disseminated in universities and its applicability and impact to society (Tang 2014). This can be seen in the increased focus and funding for Science, Technology, Engineering and Mathematics (STEM) related programs and research across higher education systems, which are perceived to produce the necessary innovation required to sustain economic development and enhance competitiveness of their respective countries. It can also be seen in the debates related to the relevance of the humanities and the social sciences to economic development and the public vs. private nature of higher education.

Overall, the entrepreneurial university should be seen in terms of its ability to adapt and survive within an increasingly market environment, and in terms of its contribution to solutions to societal issues in their teaching, research and extension functions.

ASEAN Higher Education

In spite of the increased regionalization of ASEAN (and East Asian) higher education, ASEAN higher education systems (possibly with the exception of Singapore) are facing similar challenges, including massification, diversification, fiscal challenges and a stronger focus on relevance of higher education. Singapore higher education tends to be highly funded and aligned with its national development goals. Furthermore, its limited population has seen its higher education sector opening up to foreign students which forms part of its strategy to attract and retain excellent students. Privatization of higher education (and public higher education), increased focus on STEM programs, increased marketization of higher education and nationally directed research agendas focused on STEM and societal relevance are apparent across ASEAN higher education systems. Furthermore, the ASEAN regional integration project, including the establishment and ongoing consolidation of an ASEAN Community, reinforces and intensifies competition and strengthens the market rationale across different sectors, including higher education, in the ASEAN region.

In fact, Roger Chao (2016) shows that ASEAN higher education discourse has been changing from a simple to complex economic rationale, and eventually to incorporate higher education's role in ASEAN community building. This shift in ASEAN's higher education discourse has been dynamically influenced and constructed by global and regional discourses, national agendas, and influenced by regional and international organizations. Furthermore, it is influenced by their respective historical development, power asymmetries and power dynamics in a diverse ASEAN membership and complex and dynamic process of ASEAN integration.

In fact, ADB (2011) highlights that the socio-economic status of ASEAN countries influences the ASEAN higher education systems focus. Lower income countries (Cambodia, Lao PDR, Myanmar and Vietnam) tend to focus on policy reform and system expansion, increasing enrolment, and infrastructure development, while middle income countries (Indonesia, Malaysia, Philippines and Thailand) focus on quality improvement. High income countries (Brunei Darussalam, Singapore), on the other hand, tend to be more independent, focused on developing their global reputation and expanding global partnerships. In spite of the above-presented differences in focus of ASEAN member countries higher education systems, the scholarship of application and the development of entrepreneurial universities seem to cut across all ASEAN higher education systems.

Gross enrollment ratios (GER) of ASEAN Member countries higher education systems have been increasing over the past decades (table 1). Although the Philippines GER has dropped slightly over the past decades, this can be attributed to the country's fast population growth and socio-economic (and wealth

distribution) challenges. Massification of higher education has implications public provision of higher education in ASEAN member countries which can be seen in terms of the privatization of higher education (including public higher education).

Table 2 shows the development of private higher education enrollments in ASEAN member countries. In general, private higher education enrollments have been increasing with the notable exception of Brunei Darussalam. Cambodia and the Philippines reduction in private higher education enrollments should be seen as a consequence of socio-economic challenges that shifted enrollments to the public sector due to lower tuition. In the Philippines, recent policies and law that provides free tuition and allowances for students enrolled in the public higher education sector will further enhance reduction of private higher education enrollments. In Brunei Darussalam, the reduction in private higher education enrollments should be seen in terms of increased public higher education places with the establishment of the Universiti Islam Sultan Sharif Ali and the Kolei Universiti Perguruan Ugama Seri Begawan, both in 2007.

With the exception of Indonesia and Singapore, the number of private higher education institutions in ASEAN member countries has been increasing and represents between 50 percent and 97 percent of the total number of higher education institutions as of 2015-17 (see table 3). This shows government support for the growth of the private higher education sector to address the demand–supply gap in higher education provision not addressed by the public sector.

TABLE 1
GROSS ENROLLMENT RATIO OF ASEAN MEMBER COUNTRIES (PERCENT)

Country	1985*	1995*	2001**	2016**
Brunei Darussalam	n.a.	7	14	31
Cambodia	n.a.	n.a.	2	13^{-1}
Indonesia	7	11	14	28
Lao PDR	n.a.	n.a.	3	17
Malaysia	6	11	n.a.	44
Myanmar	n.a.	6	11	16^{+1}
Philippines	38	30	30	35^{+1}
Singapore	12	34	n.a.	
Thailand	20	20	39	46^{-1}
Vietnam	n.a.	4	9	28

Note: n = +/- years from base year
Source: * Lee & Healy (2006, p. 4); ** UNESCO UIS database

TABLE 2
ENROLLMENT IN ASEAN PRIVATE EDUCATION

Country	2001	2016
Brunei Darussalam	31.41^{+5}	11.04
Cambodia	71.68	65.89^{-1}
Indonesia	62.78	68.06
Lao PDR	25	29.24
Malaysia	37.63	48.11
Myanmar	n.a.	n.a.
Philippines	68.68	54.26^{+1}
Singapore	60.60^{+7}	66.02^{-3}
Thailand	18.85	17.13^{-1}
Vietnam	10.61	12.90

Note: n = +/- years from base year
Source: UNESCO UIS database

In spite of this shift in some ASEAN higher education systems, privatization of public higher education is increasingly prevalent brought about mostly by increasing fiscal challenges, a view of the private nature (and individual benefits) of higher education. Public funding for higher education in ASEAN member countries has generally been increasing (see table 4) with the exception of Malaysia

and Singapore which are compensated by the increased enrollments in their private higher education sectors (see table 2). Overall, a combination of massification of higher education and fiscal challenges has led to increased privatization of higher education.

These challenges led to the search of new modes of governance in ASEAN higher education utilizing decentralization, corporatization and privatization of higher education to address access, funding and quality issues in higher education (ADB 2012; Jamshidi, Arasteh, NavehEbrahim, Zeinabadi, and Rasmussen, 2012; Mok 2007). This is manifested by governments and individual higher education institutions having a more individualistic, competitive and entrepreneurial approach anchored on a new type of competitive contractual state settlement increasingly prominent in public management (Robertson and Dale 2000). In particular, it is seen in terms of the corporatization of public universities, public-private partnerships, implementation of student fees, and the promotion of private higher education (Songkaeo and Yeong 2016). However, the diversity of ASEAN private higher education providers ranges from poor quality to elite HEIs; non-sectarian and sectarian; and even foreign branch campuses and higher education providers.

TABLE 3
DISTRIBUTION OF HIGHER EDUCATION IN ASEAN COUNTRIES (AY 2015-17)

Country	Public		Private		Percent Private
	2010-2012	2015-2017	2010-2012	2015-2017	2015-2017
Brunei Darussalam	4	6	-	6	50
Cambodia	38	54	46	72	57
Indonesia	83	81	2,818	2,431	97
Lao PDR	22	85	31	83	49
Malaysia	20	20	500	599	97
Myanmar	171	169	-	35*	17
Philippines	220	231	1,636	1,712	88
Singapore	5	9	47	30	77
Thailand	98	66	73	455	87
Vietnam	187	64	29	305	83

Note: *Myanmar does not have an officially recognized private higher education sector. This figure represents private training centers.
Source: British Council (2018, p. 9)

TABLE 4
HIGHER EDUCATION BUDGET IN ASEAN COUNTRIES (PERCENT OF GDP)

Country	2000	2010	2016
Brunei Darussalam	n.a.	0.50	0.84
Cambodia	0.06^{-2}	0.09	0.12^{-3}
Indonesia	n.a.	0.45	0.57^{-1}
Lao PDR	0.19	0.28	0.41^{-2}
Malaysia	1.91	1.71	1.13
Myanmar	n.a.	0.15^{+1}	0.24^{+1}
Philippines	0.45	n.a.	n.a.
Singapore	n.a.	1.09	1.03^{-3}
Thailand	1.07	0.58	0.64^{-3}
Vietnam	n.a.	0.74	0.85^{-3}

Note: n = +/- years from base year
Source: UNESCO UIS Database

At the ASEAN level, the Framework Agreement on Enhancing ASEAN Economic Cooperation (1992), the ASEAN Framework Agreement on Services (1995), ASEAN Agreement on the Movement of Natural Persons (2012), and the various Mutual Recognition

Agreements (since 2005) have not only increased both competition and collaboration in ASEAN higher education, but increased the relevance of higher education to the global knowledge economy discourse. In spite of the recent focus on ASEAN Community building, Chao (2016), citing several ASEAN policy documents and the ASEAN 5-year Work Plan in Education, argued that ASEAN higher education agenda is still located within an economic rationale. Furthermore, ASEAN and its member countries see science, technology and innovation (STI) as powerful determinants and enablers of economic development and educational programs, and as a key factor in sustaining economic growth, enhancing community well-being and promoting ASEAN integration (ASEAN n.d.). This is further manifested by the existence of an ASEAN Plan of Action on Science, Technology and Innovation (2016-2020).

Research and development (R&D) expenditures in ASEAN member countries have been increasing (see table 5), while the ASEAN Gross Expenditure on Research and Development (GENR) increased from 1.78 percent to 2.1 percent in 2007 and 2013 respectively (UNESCO 2015 Science report, pp. 26-27). In particular, during the period 2000-2015, Malaysia, Thailand and Singapore R&D expenditures increased by 0.83 percent, 0.39 percent and 0.39 percent of GDP which are significantly above the world average increase (0.22 percent of GDP). As of 2014, Singapore, Malaysia and Thailand also have the most scientific publications among ASEAN member countries with 10,553, 9,998 and 6,343 respectively. However, all ASEAN member countries, aside from Brunei Darussalam which has no available data, have increased their scientific publications by 69 percent to 541 percent during the period 2005-2014 (see table 6). In fact, table 7 shows that the percentage of higher education enrollments of ASEAN member countries are significantly higher than higher education enrollments as a percentage of its population, which shows a focus on science related fields in their respective countries.

In spite of the above-mentioned ASEAN policies that influence higher education in their respective member countries, national higher education systems are influenced by global higher education discourses, particularly the knowledge-based economy and higher education as a commodity and a private good promoted by the World Trade Organization's General Agreement on Trade in Services (Chao and Horta 2017). Furthermore, ASEAN policy making, which focus on consensus building, usually build on their member states national policies and directives, which already have a significant focus on economic relevance, and privatization of higher education.

TABLE 5
RESEARCH AND DEVELOPMENT EXPENDITURES IN ASEAN COUNTRIES (PERCENT OF GDP)

Country	2000	2015	Difference
Brunei Darussalam	n.a.	n.a.	n.a.
Cambodia	n.a.	0.12	n.a.
Indonesia	0.07	0.08^{-2}	+0.01
Lao PDR	n.a.	n.a.	n.a.
Malaysia	0.47	1.30	+ 0.83
Myanmar	0.11	n.a.	n.a.
Philippines	0.11^{+1}	0.14^{-2}	+ 0.03
Singapore	1.82	2.20^{-1}	+ 0.38
Thailand	0.24	0.63	+ 0.39
Vietnam	0.19^{+11}	0.37^{-2}	+ 0.18
World	2.06	2.28	+ 0.22

Note: n = +/- years from base year
Source: World Development Indicators (accessed 19 September 2018)

TABLE 6
SCIENTIFIC PUBLICATIONS IN ASEAN MEMBER COUNTRIES

Country	2005	2014	Increase (%)
Brunei Darussalam	n.a.	n.a.	n.a.
Cambodia	54	206	281
Indonesia	554	1,476	166
Lao PDR	41	129	215
Malaysia	1,559	9,998	541
Myanmar	41	70	69
Philippines	486	913	88
Singapore	6,111	10,553	73
Thailand	2,503	6,343	153
Vietnam	570	2,298	303

Source: adapted from UNESCO (2015) UNESCO Science Report: Towards 2030, p. 704

TABLE 7
SCIENCE HIGHER EDUCATION ENROLLMENTS

Country	Year	HE Enrollment	Share of Total Population (%)	HE Enrollment (Scientific fields)	Share of Science HE Enrollments (%)
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.
Cambodia	2011	223,222	1.5	n.a.	n.a.
Indonesia	2012	6,233,984	2.5	433,473	8.1
Lao PDR	2013	137,092	2.0	6,804[-1]	5.4[-1]
Malaysia	2012	1,076,675	3.7	139,064	12.9
Myanmar	2012	634,306	1.2	148,461	23.4
Philippines	2009	2,625,385	2.9	n.a.	n.a.
Singapore	2013	255,348	4.7	36,069	14.1
Thailand	2013	2,405,109	3.6	205,897	8.2[-2]
Vietnam	2013	2,250,030	2.5	n.a.	n.a.

Source: adapted from UNESCO (2015) UNESCO Science Report: Towards 2030, p. 700

Entrepreneurial Universities in ASEAN Nations

The article has shown that massification and privatization of higher education are prevalent in ASEAN higher education systems. In general, higher education enrollment has been increasing at systemic level and at private higher education sectors in ASEAN member countries. Although ASEAN countries higher education budgets have increased, there is a general tendency to rely on the private sector to fill in the demand – supply gap in the provision of higher education services. Furthermore, changes in higher education governance in ASEAN higher education systems have increased corporatization and privatization of higher education. In spite of limited systems, such as the Philippines, recently undertaking free public higher education initiatives (Chao 2018a), places in its public higher education sector and funding are limited thus the role of the private higher education sector remains significant.

ASEAN higher education systems are also focused on promoting scientific fields. R&D expenditures across all ASEAN member countries have risen, its share of scientific field related higher education enrollments is significantly higher than higher education enrollments as a share of their respective population. Furthermore, during the period 2005-2014, scientific publications have increased between 69 percent to 541 percent representing results in increased focus on scientific fields and the changing academic profession where the publish or perish principle is increasingly being adopted. In fact, engineering is the top field of publication in Malaysia and Singapore, while life sciences and geosciences are the top fields of publications in Southeast Asia (UNECO 2015).

The scholarship of application and the development of entrepreneurial universities in ASEAN higher education systems are clearly shown in the above-mentioned developments. This is brought about by the common challenges in majority of higher education systems worldwide: massification of higher education, fiscal challenges, a shift in higher education governance, and the knowledge-based economy discourse, where higher education is seen as a key lever for economic development. The various ASEAN policies presented in this article also contributes to enhancing the scholarship of application. Although focused on enhancing ASEAN regional integration, these policies enhance competition and collaboration among ASEAN member countries, promoting and intensifying human resource development and the focus on key scientific fields.

Systemic level policies and directives, both at ASEAN and national levels, and the shifting higher

education governance focused on public accountability, new funding models in higher education, and an intensification of utility of higher education in supporting economic development drive increased compliance of ASEAN higher education institutions towards the scholarship of application and becoming entrepreneurial universities. Compliance applies mostly for publicly funded higher education institutions, and survival mostly for private higher education institutions, but it also applies to public institutions.

The increased focus on the scholarship of application and increasing the entrepreneurial nature of higher education institutions (both public and private) in ASEAN member countries adds to the ongoing debate on the public or private nature of higher education. The excessive focus on scientific related fields, as a consequence of the scholarship of application, tend to undermine the contribution of the social sciences and humanities, which is equally important in developing sustainable economies and societies. In fact, UNESCO (2015) also highlights that there is a shift from basic research to towards big science, and further adds that there is no social good that comes out of big data without citizen engagement.

There is a need to balance basic and applied research, and there is a need to enhance the importance and contribution of the social sciences and humanities in sustainable economic and social development not only in ASEAN member countries. As such, further research to answer how and what should be done to enhance and development both social sciences and humanities as a complementary element to the sciences is seriously needed. Lastly, a call to revisit higher education role beyond the scholarship of application, especially its contribution to the individual students, faculty and researchers, other higher education stakeholders and society, is increasingly becoming a necessity unless higher education should succumb to being an element of the scholarship of application. Higher education should be seen as a public good and its unbalanced focus on STEM need to be balanced with a renewed interest and support for the social sciences and humanities to effectively contribute to its societal development role (Chao 2018b).

References

Asian Development Bank (ADB). 2011. *Higher Education across Asia*, Manila: Asian Development Bank.

Asian Development Bank (ADB). 2012. *Private Higher Education across Asia: Expanding Access, Searching for Quality*. Manila: Asian Development Bank.

Association of Southeast Asian Nations (ASEAN.) n.d.. Overview: ASEAN Ministerial Meeting on Science and Technology. In *Association of Southeast Asian Nations*. Available at: https://asean.org/asean-economic-community/asean-ministerial-meeting-on-science-and-technology-ammst/overview/

Berman, Elizabeth Popp. 2012. *Creating the Market University: How Academic Science Became an Economic Engine*. Princeton, New Jersey: Princeton University Press.

British Council. 2018. *The Shape of Global Higher Education: Understanding the ASEAN Region*. London: British Council.

Chao, Roger Y. Jr. 2016. "Changing Higher Education Discourse in the Making of the ASEAN Region In *Global Regionalisms and Higher Education: Projects, Processes and Politics*, edited by Susan Robertson, Kris Olds, Roger Dale and QueAnh Dang, 124-142. Cheltenham & Northampthon: Edward Elgar.

Chao, Roger Y. Jr. 2018a. "A Shift towards Good Quality Higher Education for All". *University World News*, February 9, 2018. http://www.universityworldnews.com/article.php?story=20180206100605251

Chao, Roger Y. Jr. 2018b. "Social Sciences and Humanities Vital for Change-Makers." *University World News*, November 16, 2018. Available at: http://www.universityworldnews.com/article.php?story=20181106151855347

Clark, Burton. 2001. "The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement." *Higher Education Management*, 13 (2): 9-24.

Fetters, Micheal L., Patricia Greene, and Mark P. Rice, eds. 2010. *The Development of University-Based Entrepreneurship Ecosystems: Global Practices*. Cheltenham: Edward Elgar.

Jamshidi, Laleh, Hamidreza Arasteh, Abdolrahim NavehEbrahim, Hassanreza Zeinabadi, and Palle Damkjaer Rasmussen. 2012. "Developmental Patterns of Privatization in Higher Education: A comparative study". *Higher Education* 64 (6): 789-803.

Lee, Molly N.N., and Stephen Healy. 2006. "Higher Education in South-East Asia: An Overview", in *Higher Education in South-East Asia,* edited by Molly N.N. Lee and Stephen Healy, 1-12. Bangkok: UNESCO Asia and Pacific Regional Bureau for Education.

Mok, Ka Ho. 2007. "The Search for New Governance: Corporatisation and Privatisation of Public Universities in Malaysia and Thailand." *Asia Pacific Journal of Education* 27 (3): 271-290.

Mok, Ka Ho. 2013. "The Quest for an Entrepreneurial University in East Asia: Impact on Academics and administrators in Higher Education." *Asia Pacific Education Review* 14 (1): 11-22.

Mok, Ka Ho, and Jin Jiang. 2016. "Massification of Higher Education: Challenges for Admissions and Graduate Employment in China." Centre for Global Higher Education Working Paper Series no. 5, July 2016. London: Centre for Global Higher Education.

Robertson, Susan, and Roger Dale. 2000. "Competitive Contractualism: A New Social Settlement in New Zealand Education" in *World Yearbook of Education 2000: Education in Times of Transition*, edited by David Coulby, Robert Cowen, and Crispin Jones, 116-131. Auckland: Kogan.

Slaughter, Shiela, and Gary Rhoades. 2000. "The Neo-liberal University." *New Labor Forum* (Spring): 23-42.

Songkaeo, Thammika, and Loke Hoe Yeong. 2016. *THF Literature Review: Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context*. Singapore: The HEAD Foundation.

Tang, Hayes. 2014. "The Scholarship of Application in the Context of Academic Entrepreneurialism." *Asian Education and Development Studies*, 3 (3): 292-302.

United Nations Educational, Scientific and Cultural Organization (UNESCO). 2015. *UNESCO Science Report: Towards 2030*. Paris: UNESCO.

Wong, Poh Kam, ed. 2011. *Academic Entrepreneurship in Asia: The Role and Impact of Universities in National Innovation Systems*. Cheltenham: Edward Elgar.

Wu, Alfred M., and John N. Hawkins, eds. 2018. *Massification of Higher Education in Asia: Consequences, Policy Responses and Changing Governance*. Singapore: Springer Nature

Social Capital – A "Super Connector" for Internationalization and Integration: The Role of Hong Kong Universities in the Development of the Greater Bay Area

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Introduction

At the beginning of 2018, the Beijing government announced the state plan concerning The Greater Bay Area (GBA) integration of Guangdong Province, Hong Kong and Macau' ("Dawan district"). Since then, there have been numerous discussions among local governments, government departments, businesses and academics about this plan. With this call for "greater political and national assimilation", it is time for Hong Kong to review its position in the Greater Bay Area. What role can Hong Kong play? What are the pros and cons of this regional economic and social integration?

Deloitte (2018) recently published, "From 'World Factory' to 'World-class Metropolitan Area'"(The Whitepaper for Developing Guangdong-Hong Kong-Macau Greater Bay Area).This report points out that the Greater Bay Area has the potential to become a world-class bay area based on five major benchmarking criteria: land size, resident population, economic growth, port volume, and air traffic. The report suggests that it has the potential to outcompete the New York Bay Area, the San Francisco Bay Area, and the Tokyo Bay Area. On top of this, the Greater Bay Area can further upgrade the innovation and technology of Chinese manufacturing; and, under the Belt and Road Initiative, it can facilitate international trade, technology, and manufacturing.

The GBA development plan is a released recently guiding policy for the on-going implementation of the integration of Guangdong Province, Hong Kong and Macau. Presently, the availability of data is very limited. Therefore, the methodology of this paper only reviews secondary data from existing academic articles, newspaper reports, other reports, university websites and policy papers.

This paper analyses and discusses the role of Hong Kong universities in the development of the Greater Bay Area from the perspective of educational sociology. It proposes that the social capital of Hong Kong universities for internationalization and integration should be the main driver behind the development of the innovative knowledge economy in the Greater Bay Area.

The concept of social capital highlights the importance of using social connections and social relations in achieving goals. Social capital theory has been widely applied to the field of business studies, but not in the research of higher education in China. The concept of "institutional social capital" has been used to examine British degree programs offered in Hong Kong and their implications for young people locally (Waters and Leung 2013), but there is no research about why, how and to what extent the institutional social capital of Hong Kong universities can contribute to the development and internationalization of the new Greater Bay Area development plan in China.Universities as institutional actors are indeed motivated by their own instrumental needs to engage other actors to access their resources for the purpose of gaining better outcomes. Applying the concept of social capital will help us to deepen our understanding of the dynamic interaction between social capital embedded in Hong Kong's higher education institutions and the internationalization and development of higher education in the Greater Bay Area in mainland China. This paper is the first paper to apply the "social capital" theory to identify the possible structural opportunities

under the new political, economic and social agenda of developing and integrating the Greater Bay Area.

The Bay Area: Hub for Global Talents

There is one thing in common for world's most important bay economic zones: they are also hubs for global talents. Talent is their key to and the foundation of their knowledge economy. Higher education both plays an irreplaceable role and provides a unique platform to cultivate such talent. Take the San Francisco Bay Area as an example, there are more than twenty internationally renowned universities (including, Stanford University; the University of California University, Berkeley; and the California Institute of Technology) and a long list of top scientific research institutions (including NASA and the Solar Energy Research Centre) which nurture numerous American talents, and elites from all over the world, for the development of the high-tech and innovation-led knowledge economy in that area (Liu 2014). Many of these elites have become entrepreneurs whose innovation and vitality attract, nurture, and retain further human resources. This kickstarts a ripple effect involving multinational corporations and local and overseas students who stay close to the San Francisco delta.

Edward Glaeser, a professor of economics at Harvard, suggests that, as a hub of high-tech talents, universities are the key to the prosperity of Silicon Valley and the development of "entrepreneurial and interactive" culture ["Technology and City", Transcript from CitiesX (a MOOC course by Professor Edward ED GLAESER, Harvard University)]. Face-to-face interaction facilitates the research and development of innovation in the area, as social activities like chilling in bars and cafes facilitates brainstorming to inspire creative ideas and projects. In terms of economic efficiency, he further points out that a cluster of start-ups would outperform a few monopolistic companies.

To develop a world-class bay area, China can learn from other developed bay areas. The experiences of successful bay area economies clearly show that one of the key elements for successful development is the existence of a talent pool. Therefore, at this stage, the first and most fundamental question the Chinese government needs to address is: How can they develop a dynamic and sustainable talent hub in the Guangdong-Hong Kong-Macau Greater Bay Area? The experiences of other successful bay areas provide insights and, in particular, they identify internationally recognized higher education institutions as indispensable to educate, coach, and partner with local and global elites to facilitate talent pooling and nurturing. Thus, the next question is: to what extent do the current GBA-based universities receive international recognition in order to attract talent domestically and internationally?

In China, apart from a handful of leading institutions, most institutions are still far from being able to communicate effectively with the international academic community (Cheng 2004). Facing the pressure of globalization, the Chinese government is urging key universities in China to become world-class by launching macro plans – "Project 211" and "Project 985" –which encourage internationalization (Hayhoe and Zha 2004), restructuring and merging (Mok 2005). However, the majority of adjustments are administrative reform, changing higher education governance. There is a lack of initiative in increasing the connectivity of Chinese higher education institutions with foreign counterparts (Mok 2005). Furthermore, research on the Chinese higher education system suggests that it focuses too much on the mastery of knowledge, but neglects developing students' ability to raise and answer questions – that is, critical thinking (Anderson 2016). The cognitive orientation of the Chinese cultural tradition has formed barriers to Chinese educators both practicing and teaching critical thinking. In fact, research has found that the barriers to critical thinking education in China do not reside with the students, but with the teachers, who are reluctant to teach it (Chen 2013). This is especially obvious in the field of humanities and social sciences in which China's scholars have limited freedom to conduct research and have achieved far less international visibility, compared to the fields of engineering and the natural sciences. The above-mentioned challenges and barriers are rooted in the structural educational system in mainland China. Deeper cross-border collaboration with higher education institutions with different educational systems

will create new paths to facilitate diverse research and knowledge transfer beyond the exiting structural constraints. Under the one-country-two-system framework, Hong Kong has a different educational system and governance model. Also, the geographical closeness to other GBA-based cities makes it more convenient for Hong Kong to engage in intercity cooperation within the GBA. Hong Kong undoubtedly has a role in helping the GBA to develop into a regional hub for global talent.

Hong Kong: The Global City with Top 100 Ranked Universities in the Greater Bay Area

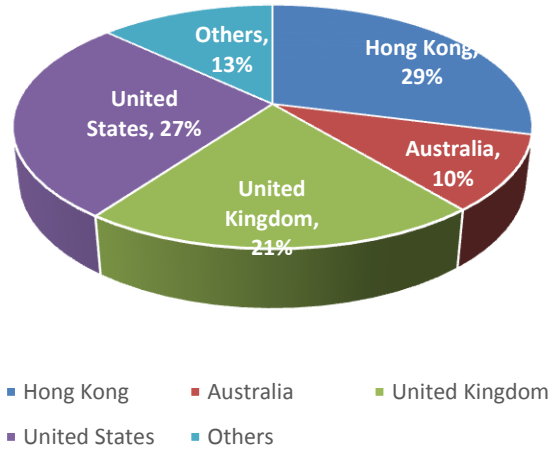
During the recent annual meetings of the National People's Congress and the National Committee of the People's Political Consultative Conference ('lianghui'), the Rector of ShenZhen University, Li Qingquan, proposed building a united university for the Greater Bay Area. This would not only strengthen the exchange and interconnectedness between higher education institutions in the region but would also aim to make full use of the respective institutional advantages from Guangdong Province, Hong Kong and Macau for higher education modernization and internationalization. Li's proposal refers to the differentiation of universities in the Greater Bay Area: Hong Kong universities are relatively more well established, followed by Guangzhou, and the rest are far behind. In this sense, Hong Kong has an absolute advantage in cultivating professionals and attracting elites to the region.

Hong Kong is regarded as having the most internationalized and autonomous academic profession in Asia. It is considered a "regional educational hub" (Cribbin 2010 2015; Mok and Bodycott 2014; 盧&伍, 2017). "An educational hub is a planned effort to build a critical mass of local and international actors strategically engaged in cross border education, training, knowledge production and innovation initiatives" (Knight 2011, p. 227). Hong Kong's universities have developed close relationships with universities on the Chinese mainland, as well as a large number of joint programs of academic cooperation and exchange with overseas universities (Postiglione and Jung 2017). It is an important part of the global "supply chain" which trains Mainland Chinese students in Hong Kong who then pursue further study in overseas countries (Shive 2010).

Furthermore, among the 'two regions and nine cities' in the developmental plan of the Greater Bay Area, most of the internationally recognized universities are located in Hong Kong. According to the QS World University Rankings (2018), there are five universities in Hong Kong (the University of Hong Kong, Hong Kong University of Science and Technology, the Chinese University of Hong Kong, City University of Hong Kong and the Hong Kong Polytechnic University) listed among the top 100 universities in the world. Other universities in the Greater Bay Area are currently not listed in the top 100 ranking. This shows that Hong Kong universities are world-class and highly recognized in terms of professors, research, capital, and university management.

The competitive advantage of Hong Kong universities is mainly due to their degree of internationalization. Most of the academics working in Hong Kong hold overseas Ph.D. Degrees (including from North America, the United Kingdom, and Australia), and quite often they have worked and taught at overseas higher education institutions (Table 1). The western academic standards and English as the medium of teaching and researching help scholars in Hong Kong to keep pace with the mainstream international science community and academia, and to publish substantial contributions in top-tier academic journals. With expansion in higher education since the 1990s and with systemic university governance, Hong Kong universities are well funded by the government through the University Grant Committee, and academics receive highly competitive salary and remuneration packages.

TABLE 1 REGION WHERE DOCTORAL DEGREE WAS EARNED 2007 (PERCENT)



Source: The Carnegie Foundation for the Advancement of Teaching, The International Survey of the Academic Profession, CAP 2007 Survey of Hong Kong

In addition to these advantages, the staff and students in Hong Kong universities enjoy a high degree of academic freedom and autonomy. Unlike the rest of China, the internet and the press in Hong Kong still have relatively high degree of freedom. The University Grant Committee provides ordinances and statues to regulate and protect rights, academic autonomy, and university governance. Above all, the universities in Hong Kong have established a good image among Asian higher education institutions. All these advantages make Hong Kong universities niches of affluent international social networks and social capital.

The Advantage of Universities in Hong Kong: Social Capital, Innovation, and Critical Thinking

In Sociology, social capital refers to resources embedded in social networks and relationships (Lin 1999). It includes not only relationships, interpersonal networks, trust relationships, but also norms and values (Coleman 1990; Portes 1998; Putnam 1993). The nature of social capital can be analysed from three dimensions: structure, relationship, and cognition. The structural dimension means that during social interaction, if an individual agent is positioned at an advantaged location, he or she can deploy personal connections to apply for a job, to receive needed information, or specific resources (Nahapiet and Ghoshal 1997). The relational dimension means that resources (such as trust) are embedded into relationships and become the governance mechanism of relationships. The cognitive dimension of social capital refers to the shared coding or paradigm which constructs the basis for understanding common goals and promoting collective action within a particular social system (Tsai and Ghoshal 1998). Social capital provides individuals and organizations with the collectively-owned capital and credentials for access to information and opportunities that facilitates the production and sharing of intellectual capital (Nahapiet and Ghoshal 1998).

The social capital of Hong Kong universities is deeply rooted in the global recognition that Hong Kong, as a global financial hub, has gained by upholding sound legal, judicial, and administrative systems throughout the last century. Hong Kong universities have provided a fertile environment for scientific research and innovation; and ensured academic freedom, academic autonomy, a free flow of information, and mobility of talents. Higher education institutions and research organizations have accumulated years of experience in cross-border cooperation which has become collective-trusted social capital. For instance, in the last decade, Hong Kong universities collaborated with Shenzhen to jointly establish new research institutes and enterprises (Table 2) which enabled Hong Kong and its universities to become a regional playmaker in science and technology and thus further accumulated social capital for Hong Kong's higher education institutions.

TABLE 2: LIST OF THE 22 STATE KEY LABORATORIES AND RESEARCH CENTERS

University	Title of the state lab or research centre	Year of establishment
The University of Hong Kong	Brain and Cognitive Sciences	2005
	Emerging Infectious Diseases	2005
	Liver Research	2010
	Synthetic Chemistry	2010
	Pharmaceutical Biotechnology	2013
City University of Hong Kong	Millimeter Waves	2008
	Marine Pollution	2009
	Precious Metals Material Engineering (RC)	2015
The Chinese University	Oncology in South China	2006
	Agrobiotechnology	2008
	Phytochemistry and Plant Resources in West China	2009
	Digestive Disease	2013
Hong Kong University of Science & Technology	Molecular Neuroscience	2009
	Advanced Displays and Optoelectronics Technologies	2013
	Tissue Restoration and Reconstruction (RC)	2015
	Control and Treatment of Heavy Metal Pollution (RC)	2015
The Hong Kong Polytechnic University	Chirosciences	2010
	Ultra-precision Machining Technology	2009
	Steel Construction (RC)	2015
	Rail Transit Electrification and Automation Engineering Technology (RC)	2015
Hong Kong Baptist University	Environmental and Biological Analysis	2013
The Hong Kong Applied Science and Technology Research Institute	Application Specific Integrated Circuit System (RC)	2012

Source: Cheung, Tony and Su, Xinqi.(2018)

In any 21st century economy, innovation is one of the key ingredients for successful cities. So, it is with developing a successful bay economy. A paper presented in the 2018 World Economic Forum Annual Meeting stated that an "innovative city" can cover a broad range of different styles, sectors and outcomes. It can refer to a city where commercial breakthroughs by world-famous multi-national companies occur, or where ground breaking research is carried out by universities and the public sector, or a place where new ideas are created by start-ups and entrepreneurs. The same paper also reported that Hong Kong is one of the "Big Seven" global cities traditionally associated with innovation, being home to multinational corporations, having a wealth of talent and clusters of world-class universities (weforum 2018).

The academic structure and social and political conditions in the other cities of the Greater Bay Area are different from Hong Kong. Academic freedom in mainland China has long been restricted, especially in the fields of humanities and social sciences. It has also been widely observed that there is a lack of critical thinking to promote open discussion of controversial issues. Meaningful and respectful dialogues in many areas in China are restricted because of a lack of free expression of different voices and positions without fear of penalty. Also, universities in the rest of the Greater Bay Area, like many universities in non-first-tier cities in mainland China, have less opportunity for overseas

student exchange, international cooperation, and cross-border research projects. Therefore, there are structural strains that hinder China's academic institutions from being internationalized.

Looking at the possible roles Hong Kong universities could play in the development of the Greater Bay Area from a sociological angle, Merton's Strain Theory (1968) can provide insight to explore the opportunities and possibilities for internationalization and innovation inducement among the universities in the entire region within the structure of global and cosmopolitan networks. Merton's strain theory refers to the structural stains that bear on an individual's otherwise "normal" behaviour when accepted norms conflict with social reality. There are five possible adaptations when the cultural goal has new means (Table 3). In Merton's view, the innovation would be nourished when cultural goals are socially accepted and there is an alternative means that can be used beyond the existing institutionalized means.

TABLE 3 ROBERT. K. MERTON (1968)'S STRAIN THEORY: FIVE MODES OF ADAPTATION

CULTURAL GOALS	INSTITUTIONALIZED MEANS		
	Accept	Reject	
Accept	Conformity	Innovation	
Reject	Ritualism	Retreatism	Through new means
		Seeking new goals	Rebellion

When higher education institutions in Guangdong Province are pursing internationalization (cultural goals) through collaboration with universities in Hong Kong, new institutionalized means in Hong Kong would be facilitated as the alternative tools to solve the administrative barriers associated with the Mainland's structural system (e.g. the strict territorial-tied research funding).This alternative means for internationalization includes creating new paths for resources sharing, new collaboration networks, research synergy, and mutual academic recognition within southern China. It also requires developing a new gateway for the Mainland Chinese universities and research institutes to connect with the world through the cultural, human, and social capital of Hong Kong institutions.

Talent Supply Chain: The Model between the Shenzen Municipal Government and Hong Kong Universities

Although the existing economic structure is manufacturing-driven in the Greater Bay Area, in the recent years, the Shenzhen municipal government has been supporting entrepreneurship in creative industries –especially the Qianhai district which has become an innovation and start-up hub. Universities in Hong Kong not only facilitate collaboration among enterprises in Qianhai, but also motivate students to seek internships, jobs, and sharing opportunities from pioneers in the digital economy. In reference to the Tokyo Bay Area, being an industrial cluster of steel, petrochemical, machine, and high-tech industries, it stands alone as the largest Japanese international financial centre, transportation hub, business centre and shopping haven. Given that the Greater Bay Area has similar resources, Hong Kong universities can provide corresponding talents and targeted education opportunities. This means that Hong Kong could become the human resources supply chain for the economic transformation of the whole Greater Bay Area.

During the Symposium on Innovation and Entrepreneurship Education in the Greater Bay Area organized by the South China University of Technology, the creation of five new platforms was suggested. These platforms – education, training, incubation transformation, international cooperation, and entrepreneurship and innovation research – would facilitate achieving new economic targets, new industrial orientation, and new technologies. They would be developed with an aim to cultivate innovative and entrepreneurial elites, science and technology talents, high-end engineers, entrepreneurs and leaders. The Symposium came up with the idea that the knowledge transfer offices of the regional higher education institutions together with start-ups in digital industries in Shenzhen, could make full use of

partnerships among enterprises, universities, and research institutes for speeding up the gap between research and application.

With world-class universities and international social networks, Hong Kong universities are in an ideal position to facilitate science and technology knowledge transfer and to advance the entrepreneurship ecosystem in Shenzhen and Guangdong Province. Hong Kong universities have established several research organizations and initiatives in Shenzhen, including Shenzhen Institute of Advanced Technology (SIAT) and the affiliated Shenzhen Institutes of Advanced Technology (SIAT), City University of Hong Kong Shenzhen Research Institute (CityU SRI), the Shenzhen Research Institute of Hong Kong University of Science and Technology, The University of Hong Kong-Shenzhen Hospital, and The University of Hong Kong Shenzhen Institute of Research and Innovation (HKU SIRI).

In 2006, the Chinese University of Hong Kong established the Shenzhen Institute of Advanced Technology (SIAT) in cooperation with the Chinese Academy of Sciences (CAS) and the Shenzhen municipal government. Through state funding, this research organization employs five hundred staff members who focus on research in emerging energy, digital cities, low-cost healthcare, and robotic services. In 2009, SIAT became the first national research institution in China to cooperate with a non-Mainland partner resulting in the Chinese University of Hong Kong, with support from the Shenzhen municipal government, establishing the Shenzhen Research Institute (CUHK SZRI). CUHK SZRI is regarded as a milestone for cooperation between Hong Kong and Shenzhen. It has set up a world-class laboratory and conducts state-commissioned research for the Pearl River Delta economic restructuring plan. This creates unprecedented opportunities for researchers in Hong Kong, especially those researching technology developments and its application. In addition, CUHK SZRI offers professional development courses and non-degree training to satisfy the local demand for courses in engineering, management, and healthcare.

City University of Hong Kong Shenzhen Research Institute (CityU SRI) also extends its applied research and talent development to Mainland China. Its professional education program comprises of 12 research and development centres, including some award-winning research centres like Biotechnology and Health Centre, Centre for Prognostics and System Health Management, Futian-CityUni Mangrove Research and Development Centre, Information and Communication Technology Centre, and Research Centre for the Oceans and Human Health.

Hong Kong University of Science and Technology established the Shenzhen Research Institute of the Hong Kong University of Science and Technology (HKUST SRI) in the Shenzhen Virtual University Park in 2001. It has become the first university among the thirty-eight universities (including Peking University and Tsinghua University) to utilize the facility. It also works as the local liaison office for Hong Kong University of Science and Technology in Shenzhen to manage projects in mainland China and coordinate the enrolment of mainland students.

The University of Hong Kong-Shenzhen Hospital (HKU SZ Hospital, also called Shenzhen Binhai hospital) is a teaching hospital located in Shenzhen. It aims to link clinical trials, scientific research, and education. HKU SZ Hospital responds to the growing public demand for quality medical services through providing medical technology, modern facilities, and state-of-the-art medical management. In cooperation with the Shenzhen municipal government and the University of Hong Kong, it targets the grooming of medical talent from among the young immigrant population in Shenzhen taking advantage of its unique geopolitical position. The University of Hong Kong established another institute in March 2011. Shenzhen Institute of Research and Innovation (HKU SIRI) was established with the mission of facilitating knowledge transfer and technology application for Mainland industries. The research staff and students of HKU SIRI can apply for research grants from Mainland institutions, including but not limited to the National Key Research and Development Program (973 Program), the National Natural Science Foundation, and the Shenzhen municipal Science, Technology, Industry, Trade and Information Technology Committee.

Hong Kong research institutions carry out research collaborating with laboratories in Shenzhen. This has resulted in knowledge transfer concerning biomedicine and biotechnology. Other examples of knowledge transfer include CUHK SZRI's work in Robotics and Automation, CityU SRI's project on Information and Communication Technology, HKUST SRI's teaching of Business Administration, and HKU SIRI's project concerning E-Commerce.

In summary, Hong Kong higher education institutions have locational advantages, interdisciplinary faculties, and international research networks. They are thus in a unique position to promote Hong Kong and Shenzhen's research and development projects. Therefore, in the quest for a solid knowledge economy and economic integration in the Greater Bay Area, Hong Kong's degree of internationalization and social capital are indispensable for pushing forward the proposed university-wide collaboration.

Hong Kong's Social Capital: A "Super Connector"

As an international financial centre, Hong Kong is a regional hub for financing and investment, it can thus promote Guangdong technology and manufacturing to the global market, and boost the market-led economic growth in the Greater Bay Area. By June 2017, Hong Kong had a total of 3,752 regional headquarters, regional offices, and offshore companies affiliated to overseas parent companies. The overseas parent companies are mainly from the United States (19 percent), followed by Japan (18 percent), and then Mainland China (9 percent) and the United Kingdom (9 percent). As one the freest economies, Hong Kong's Foreign Direct Investment, in terms of stock and investment volume, ranked second in the world, followed only by the United States (Hong Kong Trade Development Council 2017).

In addition to the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA) and the Guangdong-Hong Kong framework, Hong Kong's role in nurturing professionals and elites in the Greater Bay Area has virtually become omnipotent. Hong Kong is the East Asia base for multinational corporations which facilitate international capital flow, pool cross-cultural management experiences, and attract local and global talents. Also, as a long-standing international metropolis, its social, economic, and legal systems are internationally reputed and globally recognized. With leading telecommunication facilities and a population with fluency in English, Cantonese, and Mandarin, Hong Kong enterprises connect well with Asian and western economies. All in all, Hong Kong's social capital can become a "super connector" for the internationalization of the Greater Bay Area.

The implementation of the development plan of the Greater Bay Area has catalysed discussions in universities in Guangdong Province, Hong Kong, and Macau on how to enhance the quality of education and the effectiveness of coaching professionals through collaboration. Clearly, as a hub of higher education in the region, Hong Kong has the social capital which is indispensable not only to facilitate this collaboration, but also for the internationalization of the Greater Bay Area, and to connect inner and outer economies. That is to say: on one hand, Hong Kong's universities accumulate social capital for internationalization; and on the other hand, they connect relevant assets and networks with partner institutions and organizations, facilitate synergy of regional integration, and establish mechanisms for knowledge production and sharing within the Greater Bay Area. As such, Hong Kong's social capital is a "super connector" for internationalization and integration.

This article aims to provide a cutting-edge discussion calling for more comparative and international higher education studies about the pattern of internationalization and globalization in the context of Chinese convergence and divergence. More research on the mechanism of mutual recognition and quality assurance among Chinese cities and special administrative regions is needed for a better understanding of strategic management of Chinese higher education institutions for internationalization in the context of GBA integration. Additionally, the evaluation of intercultural competence, employability, and professional mobility cannot be neglected in this age of global academic entrepreneurialism.

References

Anderson, Jenny. 2016. "China's Education System Leaves Students Woefully Unprepared for the Real World." *Quartz*, March 2, 2016. https://qz.com/629407/chinas-education-system-leaves-students-woefully-unprepared-for-the-real-world/.

Brodin, Eva M. 2015. "Conditions for Criticality in Doctoral Education: A Creative Concern" In *The Palgrave Handbook of Critical Thinking in Higher Education*, edited by Martin Davies and Ronald Barnett, 265-82. London: Palgrave.

Chen, Jia. 2013. "On the Characteristics of a Critical Thinking Teacher." *Newsletter for Critical and Creative Thinking Education*, no. 4: 28–30.

Cheung, Tony and Xinqi Su. 2018. "Will Xi Jinping's promise of Chinese state support for Hong Kong scientists spur innovation, or stifle it?" *South China Morning Post*, May 28, 2018. https://www.scmp.com/news/hong-kong/hong-kong-economy/article/2148024/will-xi-jinpings-promise-chinese-state-support-hong

Cheng, Kai-ming. 2004. Expansion of Higher Education in China: Then what? *Harvard China Review*, 5(1): 82-86.

Coleman, James S. 1990. *The Foundation of Social Theory*. Cambridge, MA: Belknap Press of Harvard University Press.

Cribbin, John A. 2010. "The Lifelong Learning Sector and the Development of Hong Kong as a Regional Education Hub: Is Government Policy Rhetoric or Reality?" *International Education Studies* 3 (4): 46-58.

Cribbin, John A. 2015. "Hong Kong as a Regional Education Hub: Rhetoric or Reality Re-Visited?" *International Journal of Continuing Education and Lifelong Learning* 7(2): 1-24.

Deloitte. 2018. "From 'The World's Factory' to 'World Class Metropolitan Area'" "[从"世界工厂"到"世界级湾区"—粤港澳大湾区建设建议]" Deloitte, February 2018. https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/about-deloitte/deloitte-cn-cxo-greater-bay-area-whitepaper-zh-180206.pdf.

Dong, Yu. 2015. "Critical Thinking Education with Chinese Characteristics." In *The Palgrave Handbook of Critical Thinking in Higher Education*, edited by Martin Davies and Ronald Barnett, 351-68. London: Palgrave.

Hayhoe, Ruth and Zha, Qiang. 2004. "Becoming World Class: Chinese Universities Facing Globalization and Internationalization." *Harvard China Review* 5 (1): 87-92.

Hong Kong Trade and Development Council. 2017. 'Economic and Trade Information on Hong Kong'. http://hong-kong-economy-research.hktdc.com/business-news/article/Market-Environment/Economic-and-Trade-Information-on-Hong-Kong/etihk/en/1/1X48LWJT/1X09OVUL.htm.

Lin, Nan. 1999. "Building a Network Theory of Social Capital". *Connections* 22 (1): 28-51.

Liu, Yanxia. 2014. "Researches and insights of the Chinese and oversea bay areas' integration" *Urban Insight* 3: 155-163.

Lo, William Yat-wai, and Ng, Felix Sai-kit. 2017. "Goodbye to ideal? Hong Kong's Higher Education Policy and Academic Ecology in the past 20 years." In *Hong Kong in Twenty Years: The Changing Spirit*, edited by Kam-yee Law, 263-84. Hong Kong: City University of Hong Kong Press. (Chinese title: 盧一威、伍世傑：再見理想？二十年來香港高等教育政策與學術生態，輯於羅金義編，回歸20年：香港精神的變易，（263-84），香港，香港城市大學出版社。)

Manalo, Emmanuel, Takashi Kusumi, Masuo Koyasu, Yasushi Michita, and Yuko Tanaka. 2015. "Do Students from Different Cultures Think Differently about Critical and Other Thinking Skills?" In *The Palgrave Handbook of Critical Thinking in Higher Education*, edited by Martin Davies and Ronald Barnett, 299-316. London: Palgrave.

Merton, Robert King. 1968. *Social Theory and Social Structure*. New York, NY: Free Press.

Mok, Ka-ho. 2005. "Globalization and educational restructuring: University merging and changing governance in China." *Higher Education*, 50(1): 57-88.

Mok, Ka-ho, and Peter Bodycott. 2014. "*Hong Kong:*

The quest for regional education hub status." In *International Education Hubs: Student, Talent, Knowledge-Innovation Models*, edited by Jane Knight, 81-99. Springer: Netherlands.

Nahapiet, Janine, and Sumantra Ghoshal. 1997. "Social Capital, Intellectual Capital and the Creation of Value in Firms." *Academy of Management Best Paper Proceedings*: 35-39.

Nahapiet, Janine, and Sumantra Ghoshal. 1998. "Social Capital, Intellectual Capital, and the Organizational Advantage." *The Academy of Management Review*, 23 (2): 242-266.

Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology* 24 (1): 1-24.

Putnam, Robert. 1993. "The Prosperous Community: Social Capital and Public Life." *American Prospect*, 13: 35-42.

Quacquarelli Symonds. 2017. "QS World University Rankings 2018" http://rankings.betteredu.net/qs/world-university-rankings/latest/2017-2018.html.

Sharif, Naubahar, & Hayes Hei Hang Tang. 2014. "New Trends in Innovation Strategy at Chinese Universities in Hong Kong and Shenzhen." *International Journal of Technology Management, 65* (1/2/3/4): 300-318.

Tsai, Wenpin, and Sumantra Ghoshal. 1998. "Social Capital and Value Creation: The Role of Intrafirm Networks." *The Academy of Management Journal*, *41 (*4): 464-476.

Waters, Johanna, and Maggi Leung. 2013. "A Colourful University Life? Transnational Higher Education and the Spatial Dimensions of Institutional Social Capital in Hong Kong." *Population, Space and Place (Special Issue: International Student Migration)* 19 (2): 155-167.

Weforum. 2018. "These are the World's Most Innovative Cities, and Here's Why." *World Economic Forum*, January 16, 2018. https://www.weforum.org/agenda/2018/01/worlds-most-innovative-cities-jll/.

Embracing Entrepreneurship: Impact of Knowledge Transfer Policies on Academic Profession in Hong Kong Higher Education

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Introduction

Over the past 20 years, the ethos of academic entrepreneurialism has significantly influenced the Hong Kong higher education sector (Chan and Lo 2007; Mok 2005; Mok and Jiang 2018; Yang 2012). The practices of commercialization of research and teaching activities, knowledge production and transmission, and contributions to economic growth are typical entrepreneurial behaviors. As entrepreneurialism is an increasingly popular restructuring strategy for Hong Kong universities, they have begun to shift their paradigms from purely upholding the mission of research and teaching to the third mission of promoting economic and social development (Mok 2005). Knowledge transfer (KT), which involves licensing, spin-offs, consultancy, collaborative research between universities and industry, is one common strategy to achieve such goal.

While the HKSAR Government and University Grant Committee (UGC) strongly encourages universities to develop closer collaboration with the local industry and community, the scale and complexity of KT activities has increased. One major concern being raised is the assessment on academics' performance. Under such academic entrepreneurship, academic profession in Hong Kong has encountered a range of challenges such as increased demand of performativity and accountability. To some extent, while this phenomenon seems able to alter their career prospects, status and even academic autonomy, research on exploring KT activities and their impact on academics is unexplored. This article focuses on knowledge transfer polices of Hong Kong universities and attempts to examine their impact on academic profession.

Entrepreneurial University and Third Mission

Academic entrepreneurship refers to "efforts undertaken by universities to promote commercialization on campus and in surrounding regions of the university" (Siegel and Wright, 2015). Entrepreneurial universities can be characterized in two major ways. First, it involves commercialization of knowledge and research findings (Jacob, Lundqvist and Hellsmark 2003; Roessner et al. 2013) Second, it provides entrepreneurship education to teach students for acquiring the skills and competencies needed to successfully start up and grow a business, and provision of start-up support (Hofer and Potter 2010). The establishment of knowledge transfer office (KTO) is one of characteristics of entrepreneurial university. It aims to encourage academics to consider commercializing their research output and to provide support through the process (O'Gorman, Byrne and Pandya 2008). The title of KTO varies across institutions, for example, technology transfer office (TTO) and the private research organization (PRO). In general, KTO places emphasis on two key dimensions of university knowledge transfer: 1) enterprising third mission with entrepreneur approach; 2) social innovation third mission with a non-profit orientation.

Enterprising Third Mission

Jana Krčmářová (2011) states that the enterprising aspect "is based on commercializing higher education institution (HEI) services, e.g. contractual research, education, faculty use or consultations and fundraising activities, which are especially important for HEIs without greater opportunities for commercialization but suffer from a similar budget shortage." Most HEIs nowadays face the challenge of limited public funding, they have to commercialize their intellectual capabilities

in order to get more external funding from their industry and business partners (Molas-Gallart, Salter, Patel, Scott and Duran 2002). Therefore, the commercialized activities have become the foundation of entrepreneurial university. As Burton Clark (1998) defines 'entrepreneurial university' as "university that actively seeks to innovate in how it goes about its business". The entrepreneurial universities play an active role in promoting innovation, technology and knowledge transfer to enhance the possibilities for financial sustainability (Urbano and Guerrero 2013). Moreover, entrepreneurship curricula such as enrichment programmes, study tour, internship programmes has been adopted in the university education in order to equip students with entrepreneurial competence and mindset at the outset of their careers (Klofsten and Jones-Evans 2000; Mok 2005).

Social Third Mission

Turning to the second dimension is the social third mission, innovation have been intrinsic to the achievement of the UN Global Goals and received high priority of the current European Commission mandate (Madelin and Ringrose 2016). Innovation refers to transforming the knowledge produced at HEIs (for instance, providing new ideas or technologies for helping to tackle environmental problems). It does exist from various disciplines ranging from natural sciences and technological to humanities and social science. In the recent years, the concept of social innovation arouses the public interest. According to Robert Madelin and David Ringrose (2016, 193), social innovation plays a key role to overcome "…some of society's biggest challenges – including greater social justice, environmental degradation, and building more resilient societies, capable of responding to shocks without falling apart."

The social innovation of HEIs is an essential focus on the HEIs agenda because the European Commission expects HEIs to support societal development through continuing education (European Commission 2011). Universities are embarking to partner with non-profit organization or public agency to execute research in order to generate new ideas and services to tackle complex global problem through social entrepreneurship.

As Watson (2003, 25) suggests, civic engagement is one of the common practice among social third mission, it implies "strenuous, thoughtful, argumentative interaction with the non-university world in at least four spheres: setting universities' aims, purposes, and priorities; relating teaching and learning to the wider world; the back-and-forth dialogue between researchers and practitioners; and taking on wider responsibilities as neighbors and as citizens." The expectation of the role of universities has been transformed to a more diversified way in which they serve the needs of the society and community with non-financial benefit orientation and focused on civic engagement (Boland 2011). On the other hand, the interpretation of social third mission provided by Montesinos et al. (2008) focuses on the international activities in higher education such as staff exchange programmes and international projects for developing countries. While Krčmářová (2011) defines the third mission as organise services or activities to society with non-financial benefit in order to cultivate society cohesion and develop responsible citizenship. Approaches for doing so include providing students opportunities with service learning programs, community outreach activities, teaching social and global issues and conducting community-engaged research.

Knowledge Transfer Activities Supported by the HKSAR Government

Hong Kong, as an entrepreneurial state, the government aims to foster an innovative-centric entrepreneurship role in tackling the social and economic changes in the city (Mok and Jiang 2018). The government announced plans for coordinating and promoting innovation, technology and commercialization or research in local universities by the establishment of an Innovation and Technology Bureau (ITB). Innovation and technology are not only economic drivers, they can also upgrade our quality of life and enhance the efficiency of our community. Promoting innovation and technological development can provide wider employment opportunities for our young people (HKSAR Government 2015). Over the years, the HKSAR Government strives to provide a

strategic environment for innovation and technology development through five core strategies, which include providing world-class technology infrastructure; offering financial support for research and development (R&D); nurturing talents; strengthening Mainland and international collaboration in science and technology; as well as fostering a vibrant innovation culture.

To encourage the universities for developing their third mission activities, the Innovation and Technology Fund has set up the Technology Start-up Support Scheme for Universities (TSSSU) initially for three years from 2014-15, to provide financial support to six local universities including The University of Hong Kong (HKU), The Hong Kong University of Science and Technology (HKUST), The Chinese University of Hong Kong (CUHK), The Hong Kong Polytechnic University (PolyU), City University of Hong Kong (CityU) and Hong Kong Baptist University (HKBU), to assist them to start technology businesses and commercializing their research results.

In the 2017 policy address, three initiatives are directly related to the university innovation and enterprise, first, the University Grant Committee (UGC)/Research Grants Council (RGC) increase funding support for university research from $4.46 billion in 2013-14 to over $5.28 billion in 2016-17; second, a $500 million "Technology Talent Scheme" will be launched in 2018 to provide financial support for enterprise to employ postdoctoral graduates for scientific research and product development; third, a tuition waiver scheme is provided by the Education Bureau for local research postgraduate students in order to encourage local students to engage in innovative research work (HKSAR Government 2017).

Furthermore, the UGC advocates the KT activities between universities and the society in order to bring the socio-economic impact and improvements to the community and business (UGC 2018). More specifically, the UGC sees KT as an important issue having implications on the international competitiveness of the local higher education sector and capable of enriching research policies. Therefore, the notion of KT has been incorporated into some of the UGC universities' mission statements:

> *The University of Hong Kong, Asia's Global University, delivers impact through internationalisation, innovation and interdisciplinary. It attracts and nurtures global scholars through excellence in research, teaching and learning, and knowledge exchange... (The University of Hong Kong)*
>
> *To assist in the preservation, creation, application and dissemination of knowledge by teaching, research and public service in a comprehensive range of disciplines… (The Chinese University of Hong Kong)*
>
> *Be a leading university that advances and transfers knowledge, and provides the best holistic education for the benefit of Hong Kong, the nation and the world. (The Hong Kong Polytechnic University)*
>
> *Encouraging faculty and students to contribute to society through original research and knowledge transfer. (Lingnan University)*
>
> *To nurture and develop the talents of students and to create applicable knowledge in order to support social and economic advancement. (City University of Hong Kong)*

(Source: The webpages of the respective universities)

Knowledge Transfer Policies of Hong Kong Universities

With the government strong support, the KT activities become popular among the universities in Hong Kong. The universities have set up their own knowledge transfer office or centre to connect the business sector in order to increase the university-industry collaboration, entrepreneurship and technology commercialization. For example, the HKUST's office of knowledge transfer (OKT) was established in 2016 to monitor the KT activities organized by the Technology Transfer Centre (TTC), HKUST R&D Corporation Ltd

(RDC), Entrepreneurship Centre (EC) and two research centres in Mainland namely, the HKUST Shenzhen Research Institute (SRI) and Guangzhou HKUST Fok Ying Tung Research Institute (FYTRI). The OKT's mission is to provide contractual, financial and administrative support for the university's technology transfer, collaborative research and consultancy activities with the industry (HKUST, 2018). In 2016, there were eight industry-university-government collaboration projects were proposed by the HKUST-MIT research alliance Consortium.

Likewise, the Hong Kong Polytechnic University (PolyU) has set up the Institute for Enterprise (IfE) to serve as a platform for facilitating university-industry research collaborations. To promote the social innovation culture, PolyU set up the Social Innovation and Entrepreneurship Development fund (SIE fund) to promote cross-sector collaboration and to facilitate the development of social innovation ecosystem. The SIE fund aims to provide social services to people in need and promote social inclusion. In addition, the PolyU Technology and Consultancy Company Limited (PTeC) was established in 1996 in order to provide one-stop consultancy and technology transfer services to the government, business sectors and non-governmental organization. Recently, PolyU and Shenzhen University jointly set up The Greater Bay Area International Institute (GBAI) for technology and Innovation development (PolyU 2018). The above examples show that the local universities aim to increase their capacity to generate additional financial resources through various kinds of entrepreneurial activities. Moreover, with the Great Bay Area initiative, Hong Kong has the advantages in collaboration with the geographically proximate cities by making good use of their joint leading economic in order to promote innovation and sustainable development (Mok and Jiang 2018)

Discussion: Impact of Knowledge Transfer Activities on Academic Profession

Most of the United Kingdom (UK) or European universities under growing pressure to become more 'entrepreneurial' due the higher education funding cuts (Lambert 2003; Mowery and Sampat 2005; Higher Education Funding Council for England 2017). These pressures have resulted in the progressive institutionalization of research commercialization activities and other forms of governance for external engagement in KT activities (Geuna and Muscio 2010; Rossi & Rosli 2015).

Hong Kong public universities are not affected by the trend of diminishing government expenditure on higher education. Yet, research and KT activities are the key focuses in order to increase competitiveness. Therefore a new form of governance has emerged from promoting cross university-industry-community collaborations. For example, HKUST formed a Knowledge Transfer Committee to maximize its social impact through KT activities while maintaining proper governance to ensure public accountability. In order to enhance the knowledge transfer performance, HKUST designed a new budget model and appraisal system to measure the school-level performance to guide the resource allocation. The budget model is designed to count of each School/Interdisciplinary Program Office's performance based on teaching-related metrics, and the other 50 percent on research and knowledge transfer metrics. The knowledge transfer performance is now a key factor within HKUST to assess each academic unit's performance (HKUST 2018).

Similarly, the University of Hong Kong has learnt from UK universities in its Research Assessment Exercise (RAE) 2014, which gave 20 percent weighting to impact, in order to raise the awareness of researchers about the importance of achieving and corroborating impact beyond the academia. In 2016-2017 onward, KT has been added as an assessment element in the revised Performance Review and Development (PRD) process of professoriate and academic related staff, alongside teaching, research, and service/administration. For KT, reviewee should highlight the evidence of his/her meaningful contributions to the community, business/industry, or partner organizations, whether local or international. (HKU 2018). That said, researchers' previous experience of collaborative research and higher academic status have a significant and positive impact on the interactions with business sector (Geuna and Muscio 2009).

Challenges Face by Academics: Performativity and Accountability

Hong Kong higher education is going through the process of academic entrepreneurship which is affected by the notions and practices of managerialism and the market oriented approach since 1990s (Mok 2001). In other words, institutions are becoming more commercialised through the implementation of managerialism and the characteristics of managerialism is the demand for accountability, performativity, efficiency and effectiveness through the implementation of performance measurement schemes and quality assurance mechanisms. When HEIs are running in a market-driven environment, comparability and competition are more commonly found among academics (Macfarlane 2017; Tian & Lu 2017).

In addition, HEIs have adopted a corporate model in employing a larger number of part time staff which provides cost saving factors such as less benefits and more flexible hourly work charge as compared to full time staff (Park 2011). All of these bring about the question of vulnerability of the academic profession under the notion of managerialism. Some literature holds a pessimistic view on managerial culture in the higher education such as excessive evaluation on entrepreneurial research of individual academics resulted in work pressure, anxiety and job insecurity (Macfarlane 2017; Mok 2001; Tian and Lu 2017). Whereas, some argued that control and monitoring measures facilitate or enhance performance (Kolsaker 2008). HEIs are not purely forcing into private sector, but rather institutions and faculty members are actively embracing market-oriented environment (Park 2011).

Recently, KT activities have become a new scholarly mission in research polices for international competitiveness. During the process of academic entrepreneurship, agencies like government, universities and ranking system exercise the regulatory functions of setting standards and monitoring academic performances. By doing so, it has undermined academics' authority and determination. University rankings have been commercialised and represented as servicing the consumer-citizen's right-to-know (Osborne 2010). This has forced universities to shift from being 'a centre of learning' to becoming a 'business organisation with productivity targets' (Doring 2002, 140).

Moreover, academics have to tackle the problem of teaching-research balance (Park 2011). Notwithstanding that both research and teaching are supposed to take equal priority, attention has been overly inclined to scholars' research 'output' due to the fascination with social and economic impact. As discussed above, with a focus on KT, academics' research motivations at universities link to business needs. This focus has, perhaps, shifted the role of academics in the context of KT from a researcher provider or producer to a collaborator which means working 'with' industrial sectors or community (Watermeyer 2014). The change has challenged how academics use the research outputs rather than develop of what constitutes a good research study.

All these actions have led universities to design new indicators for monitoring and evaluating academics' KT engagement and performance. Nevertheless, the impacts of KT activities are difficult to quantify and observe due to its complex nature (Hughes 2011; Sorensen and Chambers 2008; Rossi and Rosli 2015). Getting involved in KT activities, according to Watermeyer (2014), academics have to build a good relationship with non-academic groups:

> …the success of partnership building often depends on the strength of character, charisma, skills of interpersonal negotiation and/or ability of the individual research to achieve rapport and a reciprocal dynamic with the non-academic community. (368)

Indeed, successful research collaborations require long-term partnership building. It is labor-intensive and time-consuming and is prohibitive for many academics whose contractual obligations are more than tied to KT activities (Watermeyer 2014).

Conclusion

With the ethos of 'from research to market', universities in Hong Kong are eager to commodify their academic research, though "selling the expertise of their

researchers" (Radder 2010, 4). The universities are seeing research and KT activities as the major income generator. Under the tide of entrepreneurship, positive connotations of introducing 'efficient' and 'effective' management style, being a 'modern' university and exhibiting 'excellence' are entailed. As a result, increased emphasis on performance assessment places focus on measureable output on research and KT activities rather than teaching. Privileged research and KT activities over teaching somewhat discourages teacher's professional development in the skill of teaching and eventually affects student learning experience. That said, the values of education, including caring and nurturing are being threatened (Lynch 2015). Academic profession are vulnerable under managerial practices. At the individual level, the increased regulation and surveillance through accountability measures imposes intensified work pressure on academics. At the institutional level, the decline in academic autonomy alters the perception that universities are a site of scholarship and learning.

References

Ball, Stephen J. 2012. "Performativity, Commodification and Commitment: An I-spy guide to the neoliberal university." *British Journal of Educational Studies* 60 (1): 17-28.

Boland, Josephine A. 2011. "Positioning Civic Engagement on the Higher Education Landscape: Insights from a civically engaged pedagogy." *Tertiary Education and Management* 17 (2): 101-115.

Cadez, Simon, Vlado Dimovskiv, and Maja Zaman Groff. 2015. "Research, Teaching and Performance Evaluation in Academia: The salience of quality." *Studies in Higher Education* 42 (8): 1455-1473.

Chan, David, and William Lo. 2007. "Running Universities as Enterprises: University Governance Changes in Hong Kong." *Asia Pacific Journal of Education* 27 (3): 305-322.

Chinese University of Hong Kong. 2018. Mission & Vision, Motto & Emblem. Available online at: http://www.cuhk.edu.hk/english/aboutus/mission.html

City University of Hong Kong. 2018. Vision and Mission. Available online at: https://www.cityu.edu.hk/cityu/about/vm.htm

Clark, Burton R. 1998. *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Oxford: IAU Press.

Doring, Allan. 2002. "Challenges to the Academic Role of Change Agent." *Journal of Further and Higher Education* 26 (2): 139-148.

Douglas, Alaster Scott. 2013. "Advice from the Professors in a University Social Sciences Department on the Teaching-Research Nexus." *Teaching in Higher Education* 18 (4): 377–388.

European Commission. 2011. *Modernisation of Higher Education in Europe: Funding and the Social Dimension*. Brussels: Education, Audiovisual and Culture Executive Agency.

Geuna, Aldo, and Alessandro Muscio. 2009. "The Governance of University Knowledge Transfer: A Critical Review of the Literature." *Minerva* 47 (1): 93-114.

Higher Education Funding Council for England. 2017. *Higher Education in England - Key Facts*. Available online at: http://webarchive.nationalarchives.gov.uk/20180322111538/http://www.hefce.ac.uk/pubs/year/2017/201720/

HKSAR Government. 2015. *So French So Innovative* [Press release]. Available online at: http://www.info.gov.hk/gia/general/201511/17/P201511170371.htm

HKSAR Government. 2017. The Policy Address 2017. Available online at: https://www.policyaddress.gov.hk/2017/eng/index.html

Hofer, Andrea-Rosalinde, and Jonathan Potter. 2010. *University Entrepreneurship Support; Policy Issues, Good Practices and Recommendations*, OECD Report. Available online at: http://www.oecd.org/education/imhe/46588578.pdf

Hong Kong Polytechnic University. 2018. *Institute of Entrepreneurship*. Available online at: https://www.polyu.edu.hk/ife/corp/en/index.php

Hong Kong Polytechnic University. 2018. *Motto, Vision and Mission*. Available online at: https://www.polyu.edu.hk/web/en/about_polyu/motto_vision_mission/index.html

Hong Kong University of Science and Technology. 2017. *Knowledge Transfer Annual Report 2016/17*. Available online at: https://www.ugc.edu.hk/doc/eng/ugc/activity/kt/HKUST16.pdf

Hong Kong University of Science and Technology. 2018. *Knowledge Transfer at HKUST*. Available online at: https://kt.ust.hk/en/overview

Hughes, Alan. 2011. "Current thinking in Impact Assessment." Presentation delivered at the Investigating Impact Conference, June 13, at the London School of Economics.

Jacob, Merle, Mats Lundqvist, and Hans Hellsmark. 2003. "Entrepreneurial Transformations in the Swedish University System: The Case of Chalmers University of Technology." *Research Policy* 32 (9): 1555-1569.

Jarvis, Darryl S.L. 2014. "Regulating Higher Education: Quality Assurance and Neo-Liberal Managerialism in Higher Education – A Critical Introduction." *Policy and Society* 33 (3): 155-166.

Klofsten, Magnus and Dylan Jones-Evans. 2000. "Comparing Academic Entrepreneurship in Europe – The Case of Sweden and Ireland." *Small Business Economics* 14 (4): 299-309.

Kolsaker, Ailsa. 2008. "Academic Professionalism in the Managerialist Era: A Study of English Universities." *Studies in Higher Education* 33 (5): 513-525

Krčmářová, Jana. 2011. "The Third Mission of Higher Education Institutions: Conceptual Framework and Application in the Czech Republic." *European Journal of Higher Education*, 1 (4): 315-331.

Lambert, Richard. 2003. *Lambert Review of Business University Collaboration*. Department of Trade and Industry: London.

Lingnan University. 2018. Vision, Mission and Core Values. Available online at: https://www.ln.edu.hk/about-lu/vision-mission-and-core-values

Lynch, Kathleen. 2015. "Control by Numbers: New Managerialism and Ranking in Higher Education." *Critical Studies in Education* 56 (2): 190–207.

Macfarlane, Bruce. 2017. "Publication and Performativity." In *The Changing Academic Profession in Hong Kong (Vol. 19, The Changing Academy – The Changing Academic Profession in International Comparative Perspective)* edited by Gerard.A. Postiglione and Jisun Jung, 97-108. Cham: Springer International Publishing.

Madelin, Robert and David Ringrose. 2016. *Opportunity Now: Europe's Mission to Innovate*. Luxembourg: The Publications Office of the European Union.

Mok, Ka Ho, and Jin Jiang. 2018. "Questing for Entrepreneurial University in Hong Kong and Shenzhen: The Promotion of Industry-University Collaboration and Entrepreneurship." In *The Sustainability of Higher Education in an Era of Post-Massification*, edited by Deane Neubauer, Ka Ho Mok, and Jin Jiang, 115-133. London: Routledge.

Mok, Ka Ho. 2005. "Fostering Entrepreneurship: Changing Role of Government and Higher Education Governance in Hong Kong." *Research Policy* 34 (4): 537-554.

Mok, Ka.Ho. 2001. "Academic Capitalisation in the New Millennium: The Marketization and Corporatisation of Higher Education in Hong Kong." *Policy & Politics* 29 (3): 299-315.

Molas-Gallart, Jordi, Ammon J. Salter, Pari Patel, Alister Scott, and Xavier Duran. 2002. *Measuring Third Stream Activities: Final Report to the Russell Group of Universities, Science and Technology Policy Research Unit*. Brighton: University of Sussex.

Montesinos, Patricio, Jose Miguel Carot, Juan-Miguel Martinez, and Francisco Mora. 2008. "Third Mission Ranking for World Class Universities: Beyond Teaching and Research." *Higher Education in Europe* 33 (2): 259-271.

Mowery, David C., and Bhaven N. Sampat. 2001. "University Patents and Patent Policy Debates in the USA, 1925-1980." *Industrial and Corporate Change* 10 (3): 781-814.

O'Gorman, Colm, Orla Byrne, and Dipti Pandya. 2008. "How Scientists Commercialise New Knowledge Via Entrepreneurship." *Journal of Technology Transfer* 33 (1): 23-43.

Osborne, Stephen P. 2010. "Delivering Public Services: Time for a New Theory?" *Public Management Review* 12 (1): 1-10.

Park, Toby. 2011. "Academic Capitalism and its Impact on the American Professoriate." *Journal of the Professoriate* 6 (1): 94-99.

Radder, Hans. 2010. "The Commodification of Academic Research." In *The Commodification of Academic Research,* edited by Hans Radder, 1-21. Pittsburgh: University of Pittsburgh Press.

Roessner, David, Jennifer Bond, Sumiye Okubo, and Mark Planting. 2013. "The Economic Impact of Licensed Commercialised Inventions Originating in University Research." *Research Policy* 42 (1): 23-24.

Rossi, Federica, and Ainurul Rosli. 2015. "Indicators of University-Industry Knowledge Transfer Performance and their Implications for Universities: Evidence from the United Kingdom." *Studies in Higher Education* 40 (10): 1-22.

Slaughter, Sheila, and Larry, Leslie. 1997. *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore: The Johns Hopkins University Press.

Sorensen, Jill A.T., and Donald A. Chambers. 2008. "Evaluating Academic Technology Transfer Performance by How Well Access to Knowledge is Facilitated – Defining an Access Metric." *Journal of Technology Transfer* 33 (5): 534-47.

Tian, Mei, and Genshu Lu. 2017. "What Price the Building of World-Class Universities? Academic Pressure Faced by Young Lecturers at a Research-Centered University in China." *Teaching in Higher Education* 22 (8): 957-974.

University Grants Committee. 2018. *Knowledge Transfer*. Hong Kong: UGC.

University of Hong Kong. 2018. Annual report 2016/17 – Recurrent Funding for Knowledge Transfer for the 2016-19 Triennium. Available online at: https://www.ugc.edu.hk/doc/eng/ugc/activity/kt/HKU16.pdf

University of Hong Kong. 2018. *Vision and Mission*. Available online at: https://www.hku.hk/about/vision.html

Urbano, David and Maribel Guerrero. 2013. "Entrepreneurial Universities: Socioeconomic Impacts of Academic Entrepreneurship in a European Region." *Economic Development Quarterly* 27 (1): 40-55.

Watermeyer, Richard. 2014. "Issues in the Articulation of 'Impact': The Response of UK Academics to 'Impact' as a New Measure of Research Assessment." *Studies in Higher Education* 39 (2): 359-377.

Watson, David. 2003. *The University in the Knowledge Society*. Available online at: https://www.oecd.org/site/imhe2006bis/37477605.pdf

New Mission for New Time in Korean Higher Education

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Introduction

In the 1990s, South Korea (Korea hereafter) was confronted with a new social environment, characterized as globalization and knowledge-based economy. In order to respond to the new environment, there have been considerable reform efforts in Korea higher education over the past two decades. Universities in Korea accordingly transformed their educational structures and contents while becoming familiar with policy buzz words such as change, reform, restructuring, and innovation. Scholarly works identified the feature of Korean higher education reform during that time as neo-liberal and this policy reform thrust was analyzed with both international and domestic pressures (Kim 2010; Jeong 2012; Yim 2012 as cited in Jeong, 2014a). As a result, neo-liberal market principles like competition, marketization, and decentralization (autonomy and accountability) were settled down in policy practice (Jeong 2014a), while creating unique locality in policy appropriations (Kang 2004; Jeong 2014b). Neo-liberalism was highlighted as the fundamental mechanism of extensive reform in Korean higher education in national funding projects which were executed as strong governance in the country (Kim 2008, Jeong 2014b). It should not be overlooked that the other powerful mechanism of reform, ideological process, significantly affected educational change in Korea (Jeong 2015).

Subsequent to an educational reform fever for globalization and knowledge-based economy, Korean higher education entered into another stage of mega-turbulence. Indeed, there was a strong tension about the sustainability of university education connected to a new social environment which is distinguished from the one in the twentieth century. Recognizing this atmosphere, I, insider of Korean higher education and a critical researcher in the field of Educational Policy Studies, feel the responsibility to answer the question, "what is a dominant policy discourse in current Korean higher education?'' based on the questions of "what is going on now in Korean higher education?" To answer the above question, I will figure out emerging policy issues in Korean higher education and look into how a dominant policy discourse is created and operated as a policy imperative in Korea. By doing so, I wish this short study reveals a policy response of Korean higher education to new social change, while providing the source of Korean case for the development of the comparative and international education.

Higher Education in Korea

As of April 2018, 3,378,393 students are enrolled for 430 higher education institutions in Korea (Korean Educational Statistics Service). Among them, four-year universities are 68 percent (293 institutions) and include special purpose universities (e. g., university of education, industrial universities, polytechnic colleges) with 64.5 percent of students (2,719,161) of all. I constrain the scope of Korean higher education to four-year universities in this paper. In speaking of Korean higher education, there are some characteristics such as foundation of western ideology and Confucian tradition, a high rate of enrollment, heavy reliance on private sources (student tuition), a historical tie with country's economic development, institutional hierarchical order among institutions and central government's control over institutional management for decades (Jeong 2015). Big challenges in current Korean higher

education are rapid demographic decline and a high unemployment rate of university graduates. Recently, Korean universities have had a difficulty in recruiting students for their admission quotas because of country's low fertility (The Korean Times 2015; Yonezawa and Kim 2008). Another issue is youth unemployment. Contrast to a high rate of university enrollment (71 percent in 2015, Ministry of education), university graduates in Korea hardly are able to find jobs and contribute to the country's unemployment rate (3.7 percent in Aug. 2018) which was different from previous years (Lee 2018) when Korean higher education largely contributed to a national economic growth by providing labor force in its society and enabled individuals' social mobility.

New Mission for New Time

The Fourth Industrial Revolution

Korean higher education currently identifies a new social environment that follows globalization and knowledge-based economy. This environment is newly conceptualized in an economic community. Being equivalently regarded as Industry 4.0 in Germany, Schuwab, who is the executive chairman of the World Economic Forum officially coined the term, "the Fourth Industrial Revolution" to describe the characteristics of current society. According to Klaus Schuwab (2016), the twenty-first century is "revolutionary" in terms of its unprecedented impact, scale and speed that bring significant changes of economic, and social systems with disruptive technologies. This Revolution is the "Fourth" in human history and is the most powerful industrial transformation compared to the other three. The first revolution was around the early nineteenth century which was triggered by the steam engine. The second revolution was around the early twentieth century which was triggered by mass production. The third revolution in the late twentieth century was triggered by digital advancement (computing to internet). In the current, the Fourth revolution, a key feature is a transcendent connectivity among people and organizations by technology advance and the potential of management excellence in all aspects of society. This digitization society influences education in a way that a new paradigm of learning is required to individuals, so that educational institutions are endeavored to provide those pedagogical process for their students and society further. Academia seriously pays attention to the Fourth Industrial Revolution and expresses the opinion that higher education should respond to this revolutionary time and consider innovative changes to educate the next generation (Baik 2017; Gleason 2018; Hirota 2017; Jho 2017; Xing and Marwala 2017). In Korean context, therefore, it is a societal condition that universities are faced with regarding to curriculum management and graduate employment that leads them to survive in the competition of financial source (both student recruitment and national subsidies).

Competency-Based Education

A new mission has been given to Korean higher education for the new time. In recent years, specific themes have arisen in educational policies in Korea for the necessity of individual capacity building. Those are creativity, convergence education (*Yunghap* or *Yungbokhap Kyoyuk* in Korean, contextually similar to integrated or interdisciplinary studies in other countries' educational practice), critical thinking skill, communication skill, community leadership and so on. Educational policy makers in Korea diagnose those skills or abilities as individuals' capacities to be equipped with in the future society and they are accommodated as must-do elements for teaching and learning in educational practice. These emerging themes are defined as 'competency' in policy discourse of Korean higher education and appear at each university level policies. In DeSeCo (Definition and Selection of Competencies) project initiated by the Organization of Economic Cooperation and Development (OECD), "competence, -ies" was broadly conceptualized as "the ability to meet demands of a high degree of complexity, and implies complex action systems" differed from the concepts of knowledge (understood body of information) and skills (ability to use knowledge) in the premise of learning process within the set of planned system contrast to innate characteristics (Rychen and Salganik 2010, 8-9).

In Korea, the concept of competency was generally understood as a skill to achieve given tasks successful in work place (So 2006), but later extended to "a comprehensive skill to lead one's life successful through the ability to do something rather than the ability to accumulate knowledge" (So 2009). Regarding to the learning system, competency-based education in higher education focuses on the curriculum development to improve personal achievement (Park, 2008). In this regard, university education in Korea is desired to be guided from "what one knows" to "what one can do" for competency-based education. As a breakthrough of the Fourth Industrial Revolution, competency-based education has become a hot issue for both national and university policy makers in Korea and imprinted in educational policy documents as an (urgent) imperative to Korean higher education. That is, a policy paradigm of higher education in Korea is being shifted with the rationale of the Fourth Industrial Revolution.

Policy Discourse

Persuasion

A policy goal setting for this new social environment, needless to say, comes with an ideological process and national funding projects. Similar to the era of globalization and knowledge-based economy, educational policy makers in Korea took up the discourse of the Fourth Industrial Revolution from a global policy network (i.e., World Economic Forum) and a political arena of the country (i.e., president election in 2017) seriously justified this new phenomenon as a national alert. For example, a current ruling party presented a pledge for country's educational system that prepares for the era of the Fourth Industrial Revolution, and the other president candidate (Ahn) made an electoral pledge as "Let's prepare for the ground of the Fourth Industrial Revolution" and education was its first strategy (the Central Election Management Committee)". Since then, the clear feature of this technology-advanced social environment is engraved in educational stakeholders' minds.

Not much different from the Fourth Industrial Revolution, the idea of competency became critical to Korean education developed by the ideological process between global and local policy network. The discourse of competency was initiated by a global policy network, the OECD that performed the DeSeCo project and reported future individuals' core competencies in 2003. Core competencies of this project are using tools interactively, interacting in heterogeneous groups, and acting autonomously. Taking the OECD idea seriously, the Korean government announced the visions and strategies of future education through the Presidential Committee on Educational Innovation in 2007 and emphasized a paradigm shift in education from knowledge transfer to competency enhancement. This national level discussion was moved to K-12 level educational curriculum in 2009 and finally reflected to the Revision of National Curriculum with six core competencies in 2015. Those six are self-management competency, knowledge/information processing competency, creative thinking competency, aesthetic-emotional competency, communication competency, and civic competency. At a higher education level, competency-based education was empowered with the rationale of educational quality improvement that leads to the solution of youth unemployment and the uncertainty in the Fourth Industrial Revolution.

Governance

In the arising policy discourse, competency is legitimized by university evaluation methods which are powerful tools to drive institutional restructuring with huge financial support. National funding programs in Korean higher education have largely supported for graduate research, university specialization (currently eight programs belong to this category) and industry-university cooperation. National subsidies are distributed to universities over the country and the assessment criteria of these funding implicitly and explicitly evaluate competency-based curriculum as an important index of university restructuring. Among them, there is a specific national funding project that has promoted students' competency development to universities directly, called Advancement of College Education (ACE). This project was implemented during 2010-2016 for 32 universities and continued as a follow-up project, ACE+. This project targets undergraduate programs and includes the improvement

of competency in teaching and learning for its evaluation criteria with institutional autonomy.

Another example is the University Basic Competency Evaluation (*daehak kibon yeokryang jindan*) – one of influential university evaluations associated with a national budget distribution to Korea higher education. The evaluation system was called "University Restructuring Evaluation" in 2015 and again performed by the central government (Ministry of Education) in 2018 for universities and colleges in South Korea (special purposed universities such as normal university, religion or arts school and some of merging planned universities excluded) to enhance university competitiveness in Korea by a rigorous selection process with various criteria. The lowest ranked universities have financial restrictions from the government and finally have damage to student recruitment. The Evaluation clearly indicates that this evaluation is initiated to prepare for the advent of the Fourth Industrial Revolution, demographic change and finally pursues university competitiveness of Korean higher education through educational quality improvement (Centre for University Basic Competency Evaluation). Consequently, most universities in Korea create core competencies for their own educational vision and goals while considering university curriculum organization for students' competency enhancement. In the time of student shortage, Korean universities choose to rely on national subsidies for their financial sources.

It is noteworthy that a nation-wide competency assessment tool (Korea Collegiate Essential Skills Assessment, K-CESA) has been provided since 2010 for university students' self-assessment of essential workplace skills, so that each university utilizes the assessment result for their curriculum development and career guide. K-CESA assesses six job essential skills: communication, comprehensive reasons, resource, information, technology handling, global readiness, self-management, and interpersonal relationship. Moreover, Korea joined the OECD's international comparison system of competency evaluation that allows member countries' peer-review of general skill strand. The system, called the Assessment of Higher Education Learning Outcomes (AHELO) measures problem solving skills, critical thinking skills, analytical reasoning, written communication, and so on. In addition to national subsidies, these assessment instruments systematically help competency-based education to be rooted in Korean higher education.

Rational and Reality

There is ongoing controversy over the new mission. One may suggest that competency-based education is a new compass for future talent nurturing in higher education and the key to improve both university and individuals' competitiveness domestically and internationally. For instance, competencies like creativity and interdisciplinary/integrative education are cultivated when university curriculum is re-organized by innovating traditional classification of university education (e.g., creation of linkage by two or more academic disciplines or projects) and its evaluation (e.g., curve grading to absolute grading or ABC grading to competency-based grading). Introducing the case of competency-based education at some US universities, Rhew (2018) suggests that competency-based education may help Korean universities by bringing an opportunity of educational innovation in the era of the Fourth Industrial Revolution.

On the contrary, there is a concern about a theoretical background on competency-based education due to its vocational ground (or job performance) rather than educational needs (Kim & Kim 2017) and has a basis on neoliberal ideology (Hu 2016; Son and Jo 2016). It is important that this experimental policy should not be overflow in speed in educational practice. In their empirical study, Kim and Lee (2012) emphasized a long-term monitoring plan on students' learning outcome and well-structured curriculum for competency development. Competency-based university education has not fully accommodated to a university level yet and nobody is sure whether it is even applicable to current academic disciplines or not, creating space for 'self-learning possibility'. Rather, competency-education may mislead students to be subjugated to specific goal intended curriculum (Kim 2018).

Conclusion

Borrowing this space, I introduced an emerging policy discourse of Korean higher education in a newly identified social environment and briefly discussed how this policy discourse is reflected in policy practice as an important indicator for educational paradigm change in Korea. The Fourth Industrial Revolution replaces globalization and knowledge-based economy and competency-based education and takes the place of neoliberalism in Korean higher education. In other words, the Fourth Industrial Revolution is being accepted as "taken-for-granted" and "unavoidable" social environment to educational stakeholders in Korea accompanied by the ideological consensus between global and local policy network. Demographic decline is undeniable fact that promotes university quality improvement so that university can fill their student quotas and finally survive. Beyond a controversy over theoretical backgrounds and practical viability, the discourse of competency has been "soft-landed" in an identified social environment of Korean higher education. That is, Korean higher education embraces the challenges (competency-based education) in corresponding to the new social environment, the Fourth Industrial Revolution and demographic decrease.

Here, some other thoughts remain to be considered. Educational policy should keep the balance between a technology-advanced environment (even it is overarching) and other social impacts that influence Korean society and its education (e. g., cultural dynamics). For new mission in Korean higher education - competency-based education, what should be considered more for policy implementation at this stage? To what extent this policy discourse can be carried out in policy practice. For any of educational policy discourse and its underpinned rationale, educational concern should go first. In other words, the consideration of "educational" return to both individuals and society must be the basis of policy discourse. Competencies like creativity, critical thinking, comprehensive understanding on multi-disciplinary sources, communication skills should help individuals genuinely grow (beyond a survival in job competition) as a human being in a highly technology advanced society and further assist the society to be prospered. For policy implementation, policy practice should keep its "locality". That is to say, each university in Korea should keep its own educational values when interact with the upper-level policy discourse even in the condition that universities have no other options to survive in a demographic decline. It is because the future of university education in Korea depends on not macro-level policy makers, but policy practice.

References

The Centre for University Basic Competency. n.d. Accessed November 30, 2018. http://uce.kedi.re.kr/index.do

Gleason, Nancy, ed. 2018. *Higher Education in the Era of the Fourth Industrial Revolution*. Singapore: Palgrave Macmillan.

The Central Election Management Committee. n.d. Accessed November 30, 2018. http://policy.nec.go.kr/

Hirota, D. 2017. "Educational Challenges to Respond to the Fourth Industrial Revolution: Japanese Case." Keynote speech presented at 2017 Conference of Korean Educational Research Association, Chungnam University (Daejeon).

Hur, Young Ju. 2016. "A Study in the Direction and Strategies for the Reorganization of the Liberal Arts Curriculum Based on the NCS Professional Basic Ability." *Korean Journal of General Education* 3 (10): 425-462.

Jho, Hunkoog. 2017. "The Changes of Higher Education and the Tasks of General Education according to the Fourth Industrial Revolution." *Korean Journal of General Education* 11 (2): 53-89.

Kang, Tae-jung. 2004. "A Critique of the Neo-Liberalistic Conception of Higher Education Reform in Korea*." The Research Institute of Korean Educational Issue* 19: 41-57.

Kim, Min-jung. 2018. "*Critical Reflection and Consideration of Alternative possibility on Competency-based University Education*." Paper

presented at 2018 Spring Nation-wide Academic Conference: Curriculum Organization and Management. Seoul, Korea: Yonsei University, the Korea Association of General Education, Korea national institute for General Education, and Korean Association for Logic.

Kim, Hyeyoung and Sook-Jeong Lee. 2012. Diagnosis and Direction of the Competence-Based Educational Model: Based on the Courses and Effects. *Korean Journal of General Education* 6 (4): 11-40.

Kim, Dae-jung and So Young Kim. 2017. *Understanding and Issues on Core Competency and Competency-based Curriculum in Higher Education* 2 (1): 23-45. The Korea Association for Core Competency Education. Sejong: Republic of Korea.

Kim, Terri. 2008. Higher Education Reforms in South Korea: Public-private Problems in Internationalizing and Incorporating Universities. *Policy Futures in Education* 6 (5): 558–568.

Korean Educational Statistics Services. n.d. Accessed February 2, 2018. https://kess.kedi.re.kr/index, http://www.moe.go.kr/sub/info.do?m=040603&s=moe

Jeong, Jin-hee. 2012. "Neoliberal Education Policies and the Changes of Universities in South Korea." Doctoral dissertation. Jinjoo, Republic of Korea: Kyungsang University.

Jeong, Moon Sook. 2014a. "A Counter-hegemonic State to Neoliberalism: The Case of Recent Korean Higher Education Reforms." *Comparative & International Higher Education* 6: 64-68.

Jeong, Moon Sook. 2014b. "The Role of the State in Neoliberal Reforms of Korean Higher Education. In *A Comparative Analysis of Higher Education Systems*, edited by Moon Sook Jeong, 111–122. Rotterdam: Sense Publishers.

Jeong, Moon Sook. 2015. "Localization of Global Discourse and the Breakdown of the Washington Consensus (WC): A Case Study of Korean Higher Education Reform (1993-2012)". Doctoral dissertation, University of Alberta.

Lee, Claire. 2018. "Youth unemployment reaches 19-year high in South Korea." *Korea Herald*, August 22, 2018. http://www.koreaherald.com/view.php?ud=20180822000767

Ministry of Education. n.d. Accessed November 30, 2018. http://english.moe.go.kr/sub/info.do?m=020105&s=english

The Organization of Economic Cooperation and Development (OECD). 2018. "*Country Statistical profile: Korea 2018*". https://www.oecd-ilibrary.org/docserver/csp-kor-table-2018-4-en.pdf?expires=1543647685&id=id&accname=guest&checksum=4C2009DC5D93DB290621656EEC0BC6D8

Paek, Seung-soo. 2017. Search for Direction of Liberal Arts Education in the era of the Fourth Industrial Revolution. *Korean Journal of General Education* 11 (2): 13-51.

Park, Min-jung. 2008. A New Approach to Curriculum Development in Higher Education. *Curriculum Study* 26 (4): 173-197.

Penprase, Brayan Edward. 2018. "The Fourth Industrial Revolution and Higher Education." In *Higher Education in the Era of the Fourth Industrial Revolution*, edited by Nancy Gleason, 207-29. Singapore: Palgrave Macmillan.

Rhew, Tae-ho. (2018). *Academic Report without Score*. Seoul: Kyunghee University Publishing.

Rychen, Dominique Simone, and Laura Hersh Salganik 2010. "*A Contribution of the OED Program Definition and Selection of Competencies: Theoretical and Conceptual Foundations*," INES GENERAL ASSEMBLY 2000. Accessed November, 20, 2018. http://www.orientamentoirreer.it/sites/default/files/materiali/2000%20deseco%20contributo.pdf

Schwab, Klaus. 2016. *The Fourth Industrial Revolution*. Geneva: World Economic Forum.

So, Kyung Hee. 2009. Curricular-historical Base and Its Liberal Nature of Competence-based Education. *Curriculum Study* 27 (1): 1-20.

Son, Minho, and Hyun-young Jo. (2016). The Post-functionalist Curriculum Model and a Metaphor of Identity: A Design for a Competence-based Curriculum. *Curriculum Study* 32 (2): 141-160.

Xing, Bo, and Tshilidzi Marwala 2017. Implications of the Fourth Industrial Age on Higher Education. *The Thinker*, 73(third quarter). https://ssrn.com/abstract=3225331

Yoon, Min-sik. 2015. "University Enrollment Decreases for First Time." *The Korea Times*, August 27, 2015. http://www.koreaherald.com/view.php?ud=20150827001089

Yonezawa, Akiyoshi, and Terri Kim. 2008. "The Future of Higher Education in the Context of a Shrinking Student Population: Policy Challenges for Japan and Korea." in *Higher Education to 2030 (Vol.1): Demography*. Paris: OECD Publishing. doi: https://dx.doi.org/10.1787/9789264040663-8-en

From Cultural Resources to Public Diplomats: Middle Eastern International Students' Perspectives on Internationalization

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Introduction

Over the last two decades, nearly all major US universities have initiated processes of internationalization in an effort to respond to the growing influence of globalization and to remain leaders in the vastly competitive space of higher education. As part of this competitive race, many universities have turned to recruiting and admitting a growing number of international students, particularly from "developing" regions of the world, such as the Middle East (Glass, Wongtrirat, and Buus 2015; IIE 2015). For these global universities, the motivation for increasing the enrollment of international students is not just economical, but also signifies progress towards the goal of educating the next generation of global-citizens – equally as prepared to compete in the global marketplace as to play a role in shaping a more peaceful and understanding world (Altbach and Knight 2007; Rhoads 2005).

As the number of international students in the US has increased, so too have the expectations for them to be public diplomats: individuals who play a role in facilitating and improving international understanding by educating others about their country or society through informal interactions (Mathews-Aydinli 2016). Yet, these expectations are rarely communicated directly to international students (Urban and Palmer 2014). As a result, the individuality and agency of these students has been overshadowed and replaced by a conceptualization of international students as cultural resources, whose presence alone indicates successful internationalization (Pandit 2013; Larsen 2016). This conceptualization overlooks the complexity and hinders the potential of international student contributions to US campuses by ignoring the importance of recognizing these students as "active subjects and interpreters of their own mobility, rather than viewing them as objects of study" (Larsen 2016). This approach is reflected in research on international students, the majority of which explores the experiences of these students *within* their campus environments, rather than their role and contributions as part of larger internationalization efforts (Vasilopoulos 2016).

Research Questions and Methodology

Under the belief that international students *are* active contributors to internationalization, my study seeks to illuminate the ways in which these students' own identities and perceptions of themselves as public diplomats influence the relative success of these programs. Thus, my research questions are as follows:

1) In the context of internationalization, how do Middle Eastern international students understand and make meaning of their presence on US campuses?

2) How does the way in which students understand their own identity influence their campus interactions and engagement?

Given the lasting influence of 9/11 and the continued rise of Islamophobic sentiments and policies in the US, I have chosen to focus specifically on Middle Eastern international students due to the uniquely significant opportunity they represent for public diplomacy.

Therefore, to answer these research questions, I will pursue a qualitative study consisting of focus group and individual interviews with a total of 24-39 Middle

Eastern international, undergraduate students studying at a public, west-coast university. Since the very definition of the Middle East is contested, I define the Middle East in broad terms, and will recruit participants from Muslim-majority countries across the MENA region, including Pakistan, Turkey, and Iran. Upon recruiting my participants, I will utilize focus groups interviews to allow for a greater number of students to share their perspectives while subsequently conducting individual interviews to facilitate a deeper investigation into the experiences and perspectives of the participants.

Theoretical Framework

To analyze the relationship between international students and public diplomacy, my theoretical framework is based upon three foundational contributions. First, I use citizen diplomacy to illustrate the role that individuals play in international relations. As many scholars have pointed out, international education programs can and do improve intercultural understanding among participations (Lima 2007; Mathews-Aydinli 2016), which can in-turn make a useful contribution "at the level of foreign policy implementation, [where] better understanding creates an enabling environment as cross-cultural friction is reduced" (Scott-Smith 2008). However, scholarship on citizen diplomacy has failed to address how the underlying identities and perceptions of international students may influence their behavior, and thus their contributions to internationalization.

Given this shortcoming of citizen diplomacy, I use a social identity approach (SIA) to demonstrate the ways in which international students' identities are socially constructed and influenced by their university environment, as well as how their identity ultimately informs their attitudes, behaviors, and interactions with others at the university (Platow, Mavor and Bizumic 2017). SIA provides a critical link, one that is often missing in the literature on international education, that explains the significance that students' own identities and perceptions have on the outcomes of international student programs.

Lastly, I integrate the notion of Otherness, to illuminate the collective experiences of Middle Eastern students studying in the West (Said 1978). Said's perspective on power and positionality underscores the critical nature of this research and acknowledges the historic and current presence of inequalities and stereotypes, held within US culture, that informs and frames the experiences of Middle Eastern students.

Significance

As Mathews-Aydinli (2016) points out, at a time when student mobility "is at its highest and there is a growing acknowledgement of the potential for such exchanges to contribute to intercultural understanding, and, thus, public diplomacy, research on the topic is limited." This reality is perhaps most significant for Middle Eastern students, whose presence on US campuses is of particular consequence given the historic and current geo-political and public opinion tensions that define the US-Middle East relationship. In such an environment, it is not enough for universities to be content with bringing students together and assuming that positive outcomes will result. In order to improve the outcomes of international student programs, and realize their full potential, international students' perspectives must begin to be included in the design of internationalization initiatives. As such, this research not only advances knowledge on international students, and Middle Eastern students in particular, but provides guidance to administrators and policy makers on program design and development. Ultimately, I advocate for an approach that will improve international student programs by appreciating international students as active, rather than passive, contributors to internationalization.

References

Altbach, Philip G., and Jane Knight. 2007. "The Internationalization of Higher Education: Motivations and Realities." *Journal of Studies in International Education* 11(3-4): 290-305.

Glass, Chris R., Rachawan Wongtrirat, and Stephanie Buus. 2015. *International Student Engagement: Strategies for Creating Inclusive, Connected, and Purposeful Campus Environments*. Sterling: NY: Stylus Publishing, LLC.

Institute for International Education (IIE). 2017. "Open Doors Data Portal." https://www.iie.org/Research-and-Insights/Open-Doors/Data

Larsen, Marianne A. 2016. *Internationalization of Higher Education: An Analysis Through Spatial, Network, and Mobilities Theories*. New York: NY: Springer.

De Lima, Antônio F. 2007. "The Role of International Educational Exchanges in Public Diplomacy." *Place Branding and Public Diplomacy* 3 (3): 234-251.

Mathews-Aydinli, Julie, ed. 2016. *International Education Exchanges and Intercultural Understanding: Promoting Peace and Global Relations*. New York: NY: Springer.

Platow, Michael J., Kenneth I. Mavor, and Boris Bizumic. 2017. *Self and Social Identity In Educational Contexts*. New York: NY: Routledge.

Pandit, Kavita. 2007. "The Importance of International Students on our Campuses." *Yearbook of the Association of Pacific Coast Geographers* 69: 156-159.

Rhodes, Gary, & Pisano, Rebecca. 2015. "Internationalization Models: UCLA in the World," *Southern California Consortium on International Studies*. http://soccis.org/campus-model-ucla.php

Said, E. 1978. *Orientalism*. New York: Vintage Books.

Saldaña, J. 2009. *The Coding Manual for Qualitative Researchers*. Thousand Oaks: CA: Sage.

Scott-Smith, Giles. 2008. "Mapping the Undefinable: Some thoughts on the relevance of exchange programs within international relations theory." *The Annals of the American Academy of Political and Social Science* 616 (1): 173-195.

Urban, Ewa L., and Louann Bierlein Palmer. 2014. "International Students as a Resource for Internationalization of Higher Education." *Journal of Studies in International Education* 18 (4): 305-324.

Vasilopoulos, Gene. 2016. "A Critical Review of International Students' Adjustment Research from a Deleuzian Perspective." *Journal of International Students* 6 (1): 283-307.

Exploring Chinese Bicultural Students' College Adjustment Process

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Introduction

Chinese international students and immigrant students experience college adjustment differently from their peers and among each other. By inspecting the interaction between bicultural identity integration and the college adjustment experience, the present quantitative study explores ways in which biculturalism, acculturation stress, and social capitals influences and reflects the needs of different Chinese students. Research has used "Chinese internationals" as a generalized term for both international students and first-generation immigrants. Despite their shared ethnic background, Chinese international students and immigrant students are two unique student bodies with distinct needs.

Previous research illustrates that immigrant students have more family support, fewer employment barriers, and more desire to acculturate in the US compared to international students (Tsai, Ying and Lee 2000; Ye 2006). This comparison points out differences among Chinese internationals' personal, academic, and professional motivations during college, thus implying the different needs of these two groups. In terms of identity development, studies have found that Chinese immigrant students face potential identity crisis when navigating between two cultures and express an ambiguous concept of home and multilayered identities during acculturation (Kwan and Sodowsky 1997; Liu 2017). When considering current studies on Chinese students' college experiences (Ching, Renes, McMurrow, Simpson, and Anthony 2017), there is a lack of side-by-side comparisons between levels of cultural integration and college transition for this student population. This brings forth the question of how Chinese international and immigrant students adjust to college differently, and whether biculturalism plays a role throughout this process.

Theoretical Framework

Bicultural Identity Integration (BII) theory, a recently developed biculturalism framework, contains two independent psychological constructs: internally perceived cultural conflicts and externally perceived cultural distance (Benet-Martinez and Haritatos 2005). This theory explores personal experiences when navigating identity-related concepts through interviews with Chinese bicultural individuals who lived in both China and the US for at least five years. BII represents an intersectional effort that could be applicable when looking at the development of Chinese college students in the US. Because of the limited identity development frameworks for bicultural students in the current academia (Patton, Renn, Guido, and Quay 2016), this study hopes to examine Chinese international and immigrant student's college adjustment process using a bicultural integration framework.

Acculturative stress is included as a part of the study due to its important impact on bicultural individuals. For most Asian international students, acculturative stress can hinder their academic performance and social interactions with others (Han, Pistole and Caldwell 2015; Wei, Heppner, Mallen, Ku, Liao, and Wu 2007). In contrast, acculturative stress for Chinese immigrant youths is complicated by the navigation among cultural identities and family dynamic. A recent study challenged the unilateral perceptive of US immigration and identified Chinese immigrant youth's desire to transition between countries and identities (Liu 2017), which could amplify the frequency of acculturative stress

experienced by Chinese immigrant students through constant cultural switching. Moreover, a study focused on Canadian Chinese immigrant families pointed out the spillover effects of parental acculturative stress which reduced positive parenting for Chinese immigrant youth (Miao, Costigan and MacDonald 2018). Since levels of cultural integration appear to be an acculturative variation for Chinese international and immigrant students, this study includes acculturative stress as a research component in examining biculturalism in college adjustment.

Within the realm of acculturation, social capitals persist as both challenging and mediating factors towards students' adjustments in the US. As people acculturate in a new environment, the type of social support received from social capitals can reduce stress and provide a coping mechanism for individuals (Wills and Shinar 2000). For Chinese international students, perceived social network mediates their acculturative stress levels (Lee, Koeske and Sales 2004; Ye 2006). It is believed that an increase in one's social network can lead to positive social interactions, which buffers acculturative stress during the adjustment period. Because social capitals play an important role in one's adjustment to a new culture, this study includes social capital as a part of the research question to better understand the relationship between bicultural integration and college adjustment.

Method

Based on Benet-Martínez's BII's framework, the extent to which an individual perceives two cultures as complimentary or conflicting (Benet-Martinez and Haritatos 2005), this study hypothesizes the following: 1) Chinese students with high BII scores will score higher on their college adjustment scale compare to Chinese students with low BII scores, 2) BII scores will mediate the levels in which social capital and acculturation influence college adjustment, and 3) Chinese students with high BII scores will have a higher level of social capital and a lower level of acculturative stress compare to Chinese students with low BII scores.

The target population for this study is students identified as Chinese international students or first-generation immigrant students who have lived at least for 5 years in both China and the US (Benet-Martinez and Haritatos 2005). Participants will complete a survey composed of the following questionnaires and existing Likert scales: Bicultural Identity Integration Scale (Benet-Martinez and Haritatos 2005), Social Capital Scale (Ellison, Steinfield, and Lampe 2008), Riverside Acculturation Stress Inventory (Benet-Martinez and Haritatos 2005), and College Adjustment Questionnaire (O'Donnell, Shirley, Park, Nolen, Gibbons, and Rosén 2018). This study includes these scales to measure the following variables respectively: level of BII, acculturation stress, social capital, and college adjustment.

Results and Implications

The study is currently in the data collection phase. It seeks to answer questions about ways in which bicultural identity influences Chinese students' college adjustments and how does the level of bicultural identity integration mediate acculturative stress and social capital for their college adjustments.

From a practitioner perspective, understanding how biculturalism influences students' adjustments can yield into programs and services improvements. For instance, many international student centers only provide administrative and transactional services such as visa processing for international students or study abroad advising for domestic students (Open Doors® 2016 Report on International Educational Exchange 2016). If this study reveals the need for identity exploration and campus climate navigation, international offices can better identify opportunities to collaborate with multicultural affairs and provide support for immigrant students.

In multicultural initiatives, many practices follow an outdated Asian American Identity Development Model that did not capture the comprehensive Asian Americans narratives, let alone bicultural voices (Kim 1981). This study can provide helpful reflections starting with Chinese students with international backgrounds (immigrants or international students),

adding academic insights and improvements for the Asian racial and ethnic identity development.

Lastly, this study sheds lights on the lack of awareness for bicultural students. Findings from this study can raise concerns about policy initiatives such as including "bicultural" as student demographic descriptions in campus climate surveys to capture their perspectives. Institutions can use reflections on how bicultural students adjust to colleges to re-evaluate and address their previous assumptions about student groups.

References

Benet-Martinez, Veronica, and Jana Haritatos. 2005. "Bicultural Identity Integration (BII): Components and Psychosocial Antecedents." *Journal of Personality* 73 (4): 1015–50. https://doi.org/10.1111/j.1467-6494.2005.00337.x.

Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. 2007. "The Benefits of Facebook 'Friends:' Social Capital and College Students' Use of Online Social Network Sites." *Journal of Computer-Mediated Communication* 12 (4): 1143–68. https://doi.org/10.1111/j.1083-6101.2007.00367.x.

Han, Suejung, M. Carole Pistole, and Jarred M. Caldwell. 2017. "Acculturative Stress, Parental and Professor Attachment, and College Adjustment in Asian International Students." *Journal of Multicultural Counseling and Development* 45 (2): 111–26. https://doi.org/10.1002/jmcd.12068.

Institute for International Education. 2016. "Open Doors® 2016 Report on International Educational Exchange." Washington, D.C.: National Press Club.

Kim, Jean. 1981. "Processes of Asian American Identity Development: A Study of Japanese American Women's Perceptions of Their Struggle to Achieve Positive Identities as Americans of Asian Ancestry." Dissertation. University of Massachusetts Amherst.

Kwan, Kwong-Liem Karl, and Gargi Roysircar Sodowsky. 1997. "Internal and External Ethnic Identity and Their Correlates: A Study of Chinese American Immigrants." *Journal of Multicultural Counseling and Development* 25 (1): 51–67. https://doi.org/10.1002/j.2161-1912.1997.tb00315.x.

Liu, Xiangyan. 2017. "Redefining "Immigrants" Through Diaspora: Educational Experience of 1.5-Generation Chinese Youth in Cupertino." *Diaspora, Indigenous, and Minority Education* 11 (4): 177-89. doi:10.1080/15595692.2016.1264384.

Miao, Sheena W., Catherine L. Costigan, and Stuart W. S. Macdonald. 2018. "Spillover of Stress to Chinese Canadian Immigrants' Parenting: Impact of Acculturation and Parent–child Stressors." *Asian American Journal of Psychology* 9 (3): 190-99. doi:10.1037/aap0000105.

O'Donnell, Maeve B., Lauren A. Shirley, Stacey S. Park, Julian P. Nolen, Alyssa M. Gibbons, and Lee A. Rosén. 2018. "The College Adjustment Questionnaire: A Measure of Students' Educational, Relational, and Psychological Adjustment to the College Environment." *Journal of College Student Development* 59 (1): 116–21. https://doi.org/10.1353/csd.2018.0009.

Patton, Lori D., Kristen A. Renn, Florence M. Guido, and Quay. 2016. *Student Development in College: Theory, Research, and Practice, 3rd Edition*. John Wiley & Sons.

Sodowsky, Gargi Roysircar, and Edward Wai Ming Lai. 1997. "Asian Immigrant Variables and Structural Models of Cross-Cultural Distress." In *Immigration and the Family: Research and Policy on U.S. Immigrants*, 1st ed., edited by Alan Booth, Ann C. Crouter, and Nancy Landale, 211–34. Penn State University Family Issues Symposia Series. Hillsdale, NJ: Routledge.

Tsai, Jeanne L, Yu-Wen Ying, and Peter Allen Lee. 2001. "The Meaning of 'Being Chinese' and 'Being American' Variation among Chinese American Young Adults. Journal of Cross-Cultural Psychology, 31(3), 302-332." *Cultural Diversity and Ethnic Minority Psychology* 7 (3): 284–97.

Wei, Meifen, P. Paul Heppner, Michael J. Mallen, Tsun-Yao Ku, Kelly Yu-Hsin Liao, and Tsui-Feng Wu. 2007. "Acculturative Stress, Perfectionism, Years in the United States, and Depression among

Chinese International Students." *Journal of Counseling Psychology* 54 (4): 385–94. https://doi.org/10.1037/0022-0167.54.4.385.

Wills, Thomas A., and Ori Shinar. 2000. "Measuring Perceived and Received Social Support." *Social Support Measurement and Intervention*, 86–135. https://doi.org/10.1093/med:psych/9780195126709.003.0004.

Ye, Jiali. 2006. "An Examination of Acculturative Stress, Interpersonal Social Support, and Use of Online Ethnic Social Groups among Chinese International Students." *Howard Journal of Communications* 17 (1): 1–20. https://doi.org/10.1080/10646170500487764.

Yuerong, Ching, L. Renes Susan, Mcmurrow Samantha, Simpson Joni, and T. Strange Anthony. 2017. "Challenges Facing Chinese International Students Studying in the United States." *Educational Research and Reviews* 2 (8): 473–82. https://doi.org/10.5897/err2016.3106.

Regional Cooperation in Northeast Asia: Comparing Policy Ideas across Institutions and Disciplines at Japanese Universities

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Introduction

My current research is a qualitative study of policy ideas and programs aimed at fostering regional cooperation between China, Japan and South Korea in the higher education sector. While sharing rich and interconnected cultural histories spanning millennia, the three countries have experienced a range of political and diplomatic tensions in the more recent past. Efforts have been made in the last several decades, however, to promote forms of regional cooperation across a variety of sectors in the political, economic and socio-cultural arenas (TCS 2017). The aims of this research project are to understand the ideas shaping Northeast Asian regional cooperation in the higher education (HE) sector from the perspective of Japan, and to investigate the ways policy ideas are translated into practice across different institutional and disciplinary contexts in Japanese universities. This takes in an investigation of the conditions under which those ideas are implemented and any limits, barriers and resistances to them.

The research takes the form of an interpretive study underpinned by a social constructivist epistemology. Adopting a discursive institutionalist approach (see Schmidt 2008, 2010) the study aims to investigate the ways cognitive and normative ideas about HE regional cooperation (and not others) emerge and become institutionalized, as well as how they are contested, re-appropriated and translated by actors into practice. To investigate these issues, two government-initiated regional collaboration programs have been selected, one representing higher education's societal role as a producer of research-based knowledge, and the other representing its social function as a site for teaching and learning. The program addressing the former role is the A3 Foresight program, a funding scheme for scientists to engage in regional research collaboration. The program addressing the latter role is CAMPUS Asia, a regional exchange program for students at top universities in the three countries. Through contextualized case studies involving thematic analysis of documents and over 60 semi-structured interviews with program participants, an attempt is being made to construct nuanced and informed answers to the following research questions:

1. What are the ideas shaping Northeast Asian regional cooperation in the higher education sector at Japanese universities? How do these ideas compare across institutional and disciplinary contexts? How do they compare with policy ideas at the government level?
2. What factors can account for the emergence of these ideas (as opposed to others)?
3. Under what conditions and how are these ideas translated into practice across different institutions and disciplines? What facilitates the translation into practice and are there limits, barriers or resistances?

Literature Review

In addition to Northeast Asia, similar efforts at forming higher education regions have been identified around the world. The most notable example is the European Higher Education Area (EHEA) and its program for regional mobility ERASMUS+, but other initiatives have emerged in Africa, Latin America, and Southeast Asia (Chou and Ravinet 2017). According to Chou and Ravinet (2017), this emerging phenomenon

of higher education regionalism is one of several manifestations of higher education policy-making taking place in complex multi-level settings that have been relatively unexamined in academia. Some studies of CAMPUS Asia have been undertaken (Breaden 2018; Kyung 2015) and regionalization of East Asian higher education has been addressed in the literature (Byun and Um 2014; Kuroda 2009, 2016b; Kuroda, Yuki, and Kang 2010). While much of this work has provided valuable insights, the research proposed in this study will aim to address gaps in the literature by contributing an in-depth, nuanced picture of HE regionalism from the perspective of Japan through the application of theories and concepts from International Relations described above (Schmidt 2008, 2010).

In this respect the study will aim to contribute new and valuable knowledge to the social science literature by bridging the fields of Higher Education Studies, International Relations and the interdisciplinary field of Comparative Regionalism. It is hoped the knowledge generated will also have societal relevance by highlighting the potential value of HE regional collaboration programs in fostering peaceful and cooperative relations between China, Japan, and South Korea.

Case Selection

The two 'top-down' government-initiated programs for HE regionalism selected for this study are the A3 Foresight Program and CAMPUS Asia. These programs are briefly described below.

The CAMPUS Asia Program

CAMPUS Asia is a program for educational exchange among students at top universities in China, Japan and South Korea, and is funded by the governments of the three countries. According to the National Institution for Academic Degrees and University Evaluation (NIAD), the aim of CAMPUS Asia is to promote "exchange and cooperation with quality assurance among universities in Japan, China and Korea, in order to strengthen the competitiveness of universities and nurture the next generation of outstanding talent in Asia" (NAID n.d.). The idea for the program can be traced to the second Japan-China-Korea Trilateral Summit held in October 2009, when then Japanese Prime Minister Yukio Hatoyama was advancing his vision of creating an East Asian Community. The first pilot version of the program was launched in 2011. At the time of this writing the program is now in its second phase and has expanded so that 17 Japanese universities are participating with counterparts in China and Korea. Programs at each university are situated in different disciplines including architecture, medicine, law, art, business and policy studies, while others are interdisciplinary and open to students university-wide. Efforts are now being made at various levels to expand the program to ASEAN countries.

The A3 Foresight Program

A3 Foresight is a funding scheme for collaborative research run jointly between the Japan Society for the Promotion of Science (JSPS), the National Natural Science Foundation of China (NSFC) and the National Research Foundation of Korea (NRF). The program aims "to create world-class research hubs within the Asian region, which by advancing world-class research will contribute to the solution of common regional problems, while fostering new generations of talented young researchers" (JSPS 2015). Since 2005, a number of projects have been funded for five-year intervals in a range of scientific fields, including chemistry, biology, physics and engineering. As of this writing, 16 projects are considered to be 'completed', and 10 projects are currently underway.

Methods of Data Collection and Analysis

Data collection and analysis involves thematic analysis of documents and semi-structured interviews with government officials, program administrators, senior leadership, researchers and academics involved in program planning and implementation. Where possible students are also being interviewed who have either graduated from or are current participants in one of the two programs. To date, approximately 60 interviews have been conducted with a range of actors, and a wealth of documentary data has been collected in Japanese and English. The project is now in the data analysis stage. Analysis and interpretation of the data involves thematic coding of interview transcripts and documents using both inductive and deductive methods,

including the application of an analytic framework informed by discursive institutionalist theory (Schmidt 2008; 2010). Additionally, comparative analysis across institutions, programs, disciplines and individual actors is being conducted. The themes and comparisons are made using a grounded approach that attempts to acknowledge the biases and role of the researcher in the co-construction of the findings. Emergent themes will be combined with interpretations of participant narratives in an attempt to address the research questions. While some preliminary findings have begun to emerge, it is as yet unclear if there will be points of convergence across institutions, disciplines and actors indicative of a common set of ideas of regional cooperation in Northeast Asia from the perspective of Japan, or whether institutional, disciplinary, or individual-level factors will highlight the contrasts and unique characteristics of these varied contexts.

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References

Breaden, Jeremy. 2018. *Articulating Asia in Japanese Higher Education*. 1st ed. London: Routledge.

Byun, Kiyong, and Sangheon Um. 2014. "The Regionalization of Higher Education in Northeast Asia." In *Emerging International Dimensions in East Asian Higher Education*, edited by Akiyoshi Yonezawa, Yuto Kitamura, Arthur Meerman, and Kazuo Kuroda, 121–43. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-017-8822-9_7.

Chou, Meng-Hsuan, and Pauline Ravinet. 2017. "Higher Education Regionalism in Europe and Southeast Asia: Comparing Policy Ideas." *Policy and Society* 36 (January): 1–17.

JSPS. 2015. "JSPS A3 Foresight Program FY2017 CALL FOR PROPOSALS < Molecular Imaging-Based Precision Medicine >." Japan Society for the Promotion of Science. https://www.jsps.go.jp/english/e-foresight/data/Callforproposals.pdf.

Kuroda, Kazuo. 2009. "Possibilities and Challenges in Constructing a New Regional Collaborative Educational Framework in Asia." *GIARI Working Paper*.http://www.waseda-giari.jp/sysimg/imgs/wp2009-E01_Kuroda.pdf.

Kuroda, Kazuo. 2016. "Regionalization of Higher Education in Asia." In *The Palgrave Handbook of Asia Pacific Higher Education*, edited by Christopher S. Collins, Molly M.N. Lee, John N Hawkins, and Deane E Neubauer. New York: NY: Palgrave Macmillan.

Kuroda, Kazuo, Takako Yuki, and Kyuwon Kang. 2010. "Cross-Border Higher Education for Regional Integration: Analysis of the JICA-RI Survey on Leading Universities in East Asia." 26. *Analysis of Cross-Border Higher Education for Regional Integration and Labor Market in East Asia*. https://www.jica.go.jp/jica-ri/publication/workingpaper/cross-border_higher_education_for_regional_integrationanalysis_of_the_jica-ri_survey_on_leading_univ.html.

Kyung, Eun Young. 2015. "Challenges and Possibilities of Regional Collaboration in East Asian Higher Education." PhD Thesis. University of Melbourne.

NAID. n.d. "Concept and Overview: Campus Asia Initiative." Accessed April 16, 2017. http://www.niad.ac.jp/english/campusasia/concept.html

Schmidt, Vivien A. 2008. "Discursive Institutionalism: The Explanatory Power of Ideas and Discourse." *Annual Review of Political Science* 11 (1): 303–26. doi.org/10.1146/annurev.polisci.11.060606.135342.

Schmidt, Vivien A. 2010. "Reconciling Ideas and Institutions through Discursive Institutionalism." In *Ideas and Politics in Social Science Research*, edited by D. Beland and R.H. Cox, 45–66. Oxford: Oxford University Press.

TCS. 2017. "FY2016 Trilateral Cooperation Secretariat Annual Report." http://www.tcs-asia.org/bbs/board.php?bo_table=publication

Representations of Higher Education Among Adult Refugees in the US

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Introduction

Recent estimates reveal there are 22.5 million refugees and 65.6 million forcibly displaced persons worldwide, and these numbers are growing (United Nations High Commissioner for Refugees 2017). Over half of all refugees in the world have fled varied forms of conflict or persecution in Syria, Afghanistan, and South Sudan (United Nations High Commissioner for Refugees 2017). While these statistics of the global refugee crisis are seemingly ubiquitous, the implications in local contexts are of paramount concern. The divided burden and responsibility to establish processes and designate resources to accommodate, support, and integrate these individuals into local communities are challenging and exigent (Berti 2015, 44).

According to the Center for Immigration Studies, the United States admitted 22,491 refugees during the 2018 fiscal year, representing a historical low since the start of the US refugee resettlement program (Rush 2018). The politicized rhetoric around the issue of US immigration and recent immigration policy has exacerbated the problem of higher education for refugees in the country, yet the stakes remain high. The importance and urgency of providing equitable structures and educational pathways that support the access and participation of refugees in higher education and the workforce cannot be overstated (Loo and Ortiz 2016).

Background

Transitions to Work and Education

Realistically, effective refugee integration into the labor market and higher education across the country remains an interdisciplinary problem (Disiderio 2016, 8). Many refugees arrive with previous education and work experience that do not aptly translate into the strata of the workforce (Capps, Newland, Fratzke, Groves, Auclair, Fix, and McHugh 2015, 357). While adult refugees tend to find jobs quickly, their incomes are relatively modest compared to other immigrant populations (Disiderio 2016, 8). Herein lies the weighty discrepancy in the recognition and evaluation of professional credentials for refugee and asylum-seeking populations, which often prohibits, complicates, and lengthens the process of securing gainful employment (Capps et al. 2015, 357).

Barriers to Higher Education

Complex socioeconomic and structural disadvantages encumber and can even preclude the educational trajectories of adult refugees seeking to pursue a formal postsecondary degree. In addition to common factors, such as post-traumatic stress, financial hardship, and disrupted education, persons with refugee backgrounds in the United States often face numerous other challenges in their resettlement and adjustment processes, which complicate the pathways to educational attainment and subsequent occupational mobility (Bajwa et al. 2017; Lenette 2016; Earnest, Joyce, de Mori, and Silvagni 2010). Given the lack of financial aid through the US government and slim financial support through higher education institutions, simply affording the tuition cost of a college degree is daunting (Gittleson and Usher 2017). This is a microcosm of the global landscape of higher education for refugees and at-risk migrants. In fact, a mere "1% of refugees worldwide have access to postsecondary education as compared to global enrollment rates of 34%" (Phan 2018, 1).

In addition to a sense of *moral obligation*, Lenette (2016) argues tertiary institutions and stakeholders ought to capitalize on the *socioeconomic impetus* of

higher education for refugees as a means to their greater livelihood and contribution to society (1312-13). This rationale calls first for an increased awareness of the unique needs and current experiences of refugee students and prospective students among educators and administrators. Secondly, it is imperative to re-evaluate pathways, systems, and structures of access and support for refugees in order to promote holistic student success and positive graduate outcomes (1312-13).

Problem Statement

My research project will address this critical gap through the exploration of first-hand narratives of persons with refugee status, or non-citizens who self-identify as refugees or asylum seekers in the geographic context of the Washington, D.C. Metro area. The qualitative study will seek to address the following questions:

1. What are the experiences of adult refugees regarding higher education and educational attainment?
2. What are the perceptions held by adult refugees regarding access to and participation in higher education?
3. What is the impact of existing policies and models of educational support for adult refugees, particularly in the D.C. Metro area?

Literature Review

While an increasingly significant issue in the fields of higher education and comparative international education, literature on adult refugees' experiences in the United States is quite limited. To date, the majority of research and reporting on refugees in international education focuses on transitions and pathways for students from K-12 to advanced education. Yet these students' narratives cannot be detached from their family units and their parents' educational experiences. Thus, the little attention specifically on older adults with refugee backgrounds who have been permanently resettled, with or without families present, underlies a cavity in the research.

The academic literature on higher education for refugees is largely concentrated on educational support services in high admission countries, notably Canada, Australia, and the United Kingdom. These findings can be versatile for institutional contexts in the United States whose admissions systems might identify students with refugee backgrounds. However, while a few US higher education institutions serve as the vanguard for supporting refugee students, there is staggering fragmentation in information, access support, and infrastructure for refugee applicants across the landscape of higher education in the United States (Phan 2018). Few studies and reports have focused on higher education for adults with a refugee background, let alone in the scope of community college education (Tuliao, Hatch, and Torraco 2017, 17). In fact, "what little research there is relating to refugees in community college…has been largely tangential to other related immigrant groups" such as undocumented immigrants (Tuliao, Hatch, and Torraco 2017, 17).

Lenette (2016) points clearly to these gaps in knowledge and practice for refugee support when she explains that "access to university alone then is nowhere near enough to achieve meaningful social, cultural and economic outcomes for refugee students" (1312). A growing number of domestic organizations, coalitions, and programs have risen to the occasion to address this issue, for example, information-sharing mechanisms through University Alliance for Refugees and At-Risk Migrants (UARRM). However, there is still a clear need for scholarship and advocacy for this underserved student population in higher education.

Methods

Participants in the study will include adults who self-identify as refugees, not excluding individuals who identify as asylum seekers or forcibly displaced. Adult refugee students enrolled in postsecondary education at the community college level will be recruited, as well as non-students or prospective students in the D.C. Metro region. Given the focus on educational transitions, attitudes, and aspirations, the personal narratives of adult students and non-students alike will be valuable to

the study. Additionally, participants selected for the study will meet predetermined criteria, including age (25 years or older), location of residence (in the D.C. Metro region), and length of stay in the United States (5 years or less).

Individuals associated with a local nonprofit, with whom contact has already been established, will be recruited for interviews and interpretative focus groups, and referrals will be obtained through snowball sampling until saturation in the data is reached. Open-ended questions using semi-structured interview protocols will be designed to capture the breadth and depth of each participant's experiences, and both participant responses and observations will be recorded and transcribed. Codes and the coding scheme for the data analysis will draw largely from the guiding theoretical model for the study, and themes that emerge through coding will be examined in depth. Bronfenbrenner's (1995) ecological systems model serves as the guiding conceptual framework for the proposed qualitative study and analysis (as cited in Evans, Forney, Guido, Patton, and Renn 2010, 160-167). Through a narrative inquiry rooted in an ethnographic approach, the study will also serve as a critical exercise for participants to reflexively engage with the topic, while (de)constructing their own sense-making processes in relation to contextual or societal norms (Cohen and Crabtree 2006; Crossman 2017; Garfinkel 1967, as cited in Wroe 2012). In order to frame these participant experiences, I will also investigate the anecdotal impact of existing policies and models of access and support at the community college level.

Conclusion

As a form of narrative inquiry, the qualitative findings are predicted to present a richer, more nuanced understanding of adult refugees and their attitudes towards higher education during significant stages of their transition and integration into US society. Relevant to the work and interests of college leaders, policymakers, international education administrators, student affairs personnel, and other stakeholders, I expect the experiential findings and implications to potentially benefit the wider scope of research on refugee education, higher education policies and practices for refugee-status persons, and community and collaborative endeavors, in order to effectively support the integration and livelihood of these individuals and their families.

References

Bajwa, Jaswant K., Sidonia Couto, Sean Kidd, Roula Markoulakis, Mulugeta Abai, and Kwame McKenzie. 2017. "Refugees, Higher Education, and Informational Barriers." *Refuge* 33 (2): 56-65.

Berti, Benedetta. 2015. "The Syrian Refugee Crisis: Regional and Human Security Implications." *Strategic Assessment* 17 (4) (January): 41-52. http://www.inss.org.il/he/wp-content/uploads/sites/2/systemfiles/SystemFiles/adkan17_4ENG_7_Berti.pdf

Bronfenbrenner, Urie. 1995. "The Bioecological Model from a Life Course Perspective: Reflections of a Participant Observer." In *Examining Lives in Context: Perspectives on the Ecology of Human Development*, 599-618. Washington, DC: American Psychological Association, 1995.

Capps, Randy, Kathleen Newland, Susan Fratzke, Susannah Groves, Greg Auclair, Michael Fix, and Margie McHugh. 2015. "Integrating Refugees in the United States: The Successes and Challenges of Resettlement in a Global Context." *Statistical Journal of the IAOS* 31 (3): 341-367. https://doi.org/10.3233/SJI-150918

Cohen, Deborah, and Benjamin Crabtree. 2006. "Phenomenology and Ethnomethodology." *Qualitative Research Guidelines Project* (2006). Retrieved at: http://www.qualres.org/HomePhen-3590.html

Crossman, Ashley. 2017. "What is Ethnomethodology in Sociology? Disrupting Social Norms to Understand Social Order." *Thought Co* (March 2017). Retrieved at: https://www.thoughtco.com/what-is-ethnomethodology-3026553

Disiderio, Maria Vincenza. 2016. "Integrating Refugees into Host Country Labor Markets: Challenges and Policy Options". *Migration Policy Institute.* https://www.migrationpolicy.org/research/integrating-refugees-host-country-labor-markets-challenges-and-policy-options

Earnest, Jaya, Andrew Joyce, Gabriella de Mori, and Genevieve Silvagni. 2010. Are Universities Responding to the Needs of Students from Refugee Backgrounds?" *Australian Journal of Education,* 54 (2): 155-174.

Evans, Nancy J., Deanna S. Forney, Florence M. Guido, Lori D. Patton, and Kristen A. Renn. 2010. *Student Development in College: Theory, Research, and Practice* (2nd ed.). San Francisco: CA: Jossey-Bass.

Garfinkel, Harold. 1967. *Studies in Ethnomethodology.* Englewood Cliffs, NJ: Prentice Hall.

Gittleson, Kim, and Bruce Usher. 2017. "Higher Education for Refugees." *Stanford Social Innovation Review.* https://ssir.org/articles/entry/higher_education_for_refugees

Lenette, Caroline. 2016. "University Students from Refugee Backgrounds: Why Should We Care?" *Higher Education & Research Development,* 35(6): 1311-1315. https://doi.org/10.1080/07294360.2016.1190524

Loo, Bryce, and Alejandro Ortiz. 2016. "Providing Pathways for Refugees: Practical Tips for Credential Assessment." *World Education News and Reviews* (April 2016). https://wenr.wes.org/2016/04/providing-pathways-for-refugees-practical-tips-for-credential-assessment

Phan, Trang A. 2018. "When One Door Closes, Another Opens: Community Colleges as Gateways to Higher Education for Refugee Students." *Community College Journal of Research and Practice.* https://doi.org/10.1080/10668926.2018.1429966

Rush, Nayla. 2018. "Refugee Resettlement Admissions in FY 2018." *Center for Immigration Studies*. https://cis.org/Rush/Refugee-Resettlement-Admissions-FY-2018

Tuliao, Minerva, Deryl K. Hatch, and Richard J. Torraco. 2017. "Refugee Students in Community Colleges: How Colleges Can Respond to an Emerging Demographic Challenge." *Journal of Applied Research in the Community College,* 24 (1): 15-26.

"United Nations High Commissioners for Refugees." 2017. *Figures at a Glance* (2017). http://www.unhcr.org/en-us/figures-at-a-glance.html

Wroe, Lauren E. 2013. "A Study of Asylum Seeker/Refugee Advocacy: Paradoxes of Helping in a Climate of Hostility." Master's thesis, The University of Manchester.

Evolving Global Student Mobility: An Investigation into the Higher Education Experiences and Motivations of Students and Alumni from P12 International Schools

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Introduction

There are 5.1 million students in P12 international schools, up 6.7 percent in the past five years. (ISC Research 2018). Graduates from these schools often go on to study in another country other than where they graduated, and universities around the world are taking notice and beginning to recruit these bright, culturally competent individuals (Findlay et al. 2012; Schulman and Le 2018). Although researchers have extensively examined the mobility of international undergraduate and graduate students attending universities worldwide, less is known about the mobility patterns of the large and expanding international high school student population of globally mobile students. This study will fill a needed gap in the literature by examining the experiences of international students from P12 international schools related to their university choice.

The primary purpose of this project is to understand this fast growing subset of globally mobile students by analyzing their mobility patterns and "push-pull" factors in their selection of universities. Current research on international students' experiences tends to focus on Anglophone countries like the United States, United Kingdom, Australia, and Canada (Ammigan and Jones 2018). Therefore, a secondary goal of this study is to add to the small but growing body of research that examines international student experiences outside major receiving countries (Chiang 2015; Perez-Encinas and Ammigan 2016; Zhang and Brunton 2007). The expectation is that because students at international schools come from a plethora of countries worldwide, they will likely choose to attend a diversity of schools around the world (ISC Research 2018; Jamaludin, Sam, and Sandal 2018). For the purposes of this study, an international school is defined as such if they offer " a curriculum to any combination of pre-school, primary or secondary students, wholly or partly in English outside an English-speaking country, or, if a school is in a country where English is one of the official languages, it offers an English-medium curriculum other than the country's national curriculum and the school is international in its orientation." (ISC Research 2018, under "What does ISC consider to be an international school?")

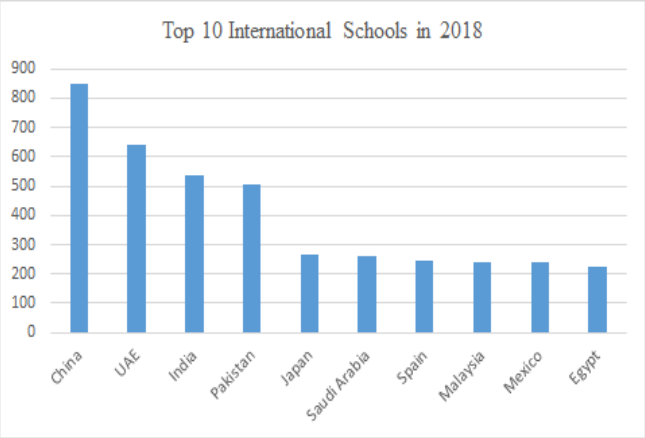
The Importance of Students at International Schools for International Higher Education

Over 250 million people now live outside of their home country (United Nations 2017), so it is not surprising that the number of international schools have continued to grow. P12 international schools have grown by 5.6 percent in the last five years, bringing the total to 9,605 English-speaking schools (ISC Research 2018). With the increase in the number of international schools and students and a changing international higher education landscape, there is an opportunity for higher education institutions (HEIs) to better understand the "push-pull" factors that drive the mobility patterns of these students. Countries like China and Malaysia that have traditionally sent students abroad for tertiary degrees are now building their HEI capacity to receive the next generation of international students (Sa and Sabzalieva 2018). This will impact the market in a large way. The impetus to understand the changing patterns

of mobility should be preeminent for HEIs worldwide if they hope to attract more international students.

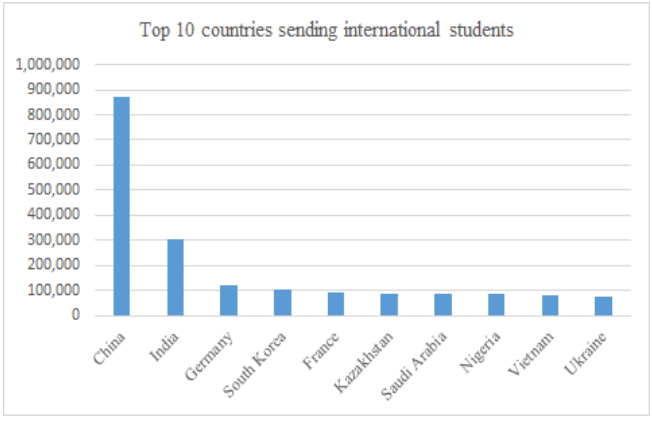
Understanding the motivations of students from international schools will continue to grow in importance. To this end, there appears to be a connection between the preponderance of international schools and global student mobility. India and China represent two of the top three countries with the most P12 international schools, and students from these countries also comprise the largest percentages of globally mobile students studying at HEIs (UNESCO 2018). See Figure 1 for the top 10 countries with P12 international school and Figure 2 for the top 10 countries that send globally mobile students for higher education. There is no known publicized aggregate data to analyze the higher education mobility patterns of students from P12 international schools. However, this study will provide great insights into reasons why these students choose a particular HEI. Additionally, consulting research, having personal conversations with knowledgeable individuals, and triangulating global student mobility and international school location data can provide a good estimate of where these students may study. It is more important now than ever to understand and anticipate the new directions and motivations of the growing international student market.

FIGURE 1 TOP 10 INTERNATIONAL SCHOOLS IN 2018



ISC Research. "Global report."
https://www.iscresearch.com/services/global-report

FIGURE 2 TOP 10 COUNTRIES SENDING INTERNATIONAL HIGHER EDUCATION STUDENTS IN 2017



United Nations Educational, Scientific, and Cultural Organization. "Outbound internationally mobile students by host region."
http://data.uis.unesco.org/Index.aspx?DataSetCode=EDULIT_DS& popupcustomise=true&lang=en#

Students studying in P12 international schools typically show higher levels of intercultural sensitivity and understanding, and many students graduate with an International Baccalaureate degree which means they have obtained a high level of academic achievement (Straffon 2003). From personal experiences interacting with students from international schools, they typically can choose any location and type of HEI they want. Many students may choose to go back to their country of citizenship, while many others will decide to study in a new country (Findlay et al. 2012; ISC Research 2018). International schools were originally created for expat families sojourning abroad for professional purposes, but the student population at P12 international schools has diversified quite dramatically (ISC Research, 2018). International schools used to enroll 80 percent expat and 20 percent local students, but the situation has completed reversed and now 80 percent of students at international schools are local (ISC Research 2018). International schools are viewed as stepping stones for families that want to offer a global education and future transnational professional experience for their children (Keeling, Anne 2018 Personal conversation with author, September 19). Particularly for local families, these schools give their children a window into the outside

world and access to a collection of world knowledge and connections with the global elite without leaving their home country (Bunnel 2007).

As an overall group, students that attend these international schools are members of a transcendent classification of high schools, where the country they are located in is less important than the students they serve and the values they espouse (Findlay et al. 2012; ISC Research 2018). Students that attend these types of elite schools typically go on to study at prestigious or strong HEIs, and then have international or transnational careers (Findlay et al. 2012). When a local family chooses an international school experience, they also offer their son or daughter a chance to catapult into this transnational group that is difficult to access without significant international experience. As a result, not only do the expat children experience an early form of intercultural competence and global citizenship, but the local students that study in international schools are also primed to achieve these competencies, and then in turn study abroad (Bunnel 2007; ISC Research 2018). However, local students at international schools are not as often seen as viable enrollees by many HEIs, but this narrative needs to change. There seems to be great opportunity for more communication between HEIs and international school students. This will likely benefit the international student enrollment of HEIs, and students themselves will also benefit from learning more about a diversity of institutions to meet their personal and professional goals.

Research Methods and Takeaways

Globally mobile student numbers have rapidly increased in the last 25 years, tripling from 1.3 million in 1990 to over 5 million in 2017 (UNESCO 2018). Among this population, students at P12 international schools represent a growing subset. However, more research is needed to understand the "push-pull" factors that impact their university choice, as well as their university experience. This study will be a mixed-method design to examine the experiences of students and alumni from P12 international schools. The following research questions will be examined in this study:

1) What are the university "push/pull" factors and other motivations in choosing a higher education institution for students in P12 international schools?
2) What are the acculturative processes, university "push-pull" factors, and intercultural learning of international school alumni that study at a higher education institution?

This research study is guided by the international students' decision-making process model (Cubillo, Sánchez, and Cerviño 2006). This model views international students' university choice through purchase intention with five guiding aspects: personal reasons, country image effect, institution image, city effect, and programme evaluation. There are 19 other sub-factors that comprise the five major factors (Cubillo, Sánchez, and Cerviño 2006). Students from international schools likely will place emphasis on different factors when they consider which university to attend than a traditional international student coming from their home country. As an example, international school counselors seem to play a heightened role in the university decision-making process of students from international schools (ISC Research 2018). This model should provide a strong basis to explore the motivations of students from international schools.

To examine research question one, approximately 3,500-5,000 current students will be surveyed from a variety of international schools throughout different world regions, including China, the United Arab Emirates, India, and the Netherlands. These countries were chosen because substantial number of students' study at international schools in these countries, and because they are all culturally different from one another. To investigate research question two, the researcher will use an exploratory phenomenological framework to examine 30-40 students' acculturative processes, university "push-pull" factors, and intercultural learning through semi-structured interviews. This study will contribute to the well-established research about international students' experiences but will provide a unique aspect by

examining students who graduated from international secondary schools.

The survey of current international school students and interview questions for international school alumni will incorporate the five major factors of the international students' decision-making process model (Cubillo, Sánchez, and Cerviño 2006). The results from this study will provide insight into students' "push-pull" factors and the shifting trends of global student mobility. It will allow international schools to better advise and prepare their current students for higher education. It will also provide tertiary institutions with insights on unique successes and challenges that students from international schools may experience. With a better understanding of these students' experiences and needs, both students and higher education professionals should be able to ensure a better match and opportunity for a successful university experience and professional career.

References

Ammigan, Ravichandran, and Elspeth Jones. 2018. "Improving the Student Experience: Learning From a Comparative Study of International Student Satisfaction." *Journal of Studies in Higher Education* 22(4): 283-301.

Bunnell, Tristan. 2011. "The International Education Industry: An Introductory Framework for Conceptualizing the Potential Scale of an 'Alliance'." *Journal of Research in International Education* 6(3): 349-367.

Chiang, Shiao-Yun. 2015. "Cultural Adaptation as a Sense-Making Experience: International Students in China." *International Migration and Integration* 16: 397-413.

Findlay, Allan M., Russell King, Fiona M. Smith, Alistair Geddes, Ronald Skeldon. 2012. "World Class? An Investigation of Globalisation, Difference, and International Student Mobility." *Transactions of the Institute of British Geographers* 37 (1): 118-131.

ISC Research. 2018. "Global report." ISC Research. https://www.iscresearch.com/services/global-report.

Jamaludin, Nor L., David L. Sam, and Gro M. Sandal. 2018. "Destination Motivation, Cultural Orientation, and Adaptation: International Students' Destination-Loyalty Intention." *Journal of International Students* 8 (1): 38-65.

Perez-Encinas, Adriana, and Ravichandran Ammigan. 2016. "Support Services at Spanish and U.S. Institutions: A Driver for International Student Satisfaction." *Journal of International Students* 6: 984-998.

Sa, Creso M., and Emma Sabzalieva. 2018. "The Politics of the Great Brain Race: Public Policy and International Student Recruitment in Australia, Canada, England, and the USA." *Higher Education* 75 (2): 251-253.

Schulmann, Paul, and Cindy Le. 2018. "Navigating a New Paradigm for International Student Recruitment." World Education Services. https://knowledge.wes.org/research-report-new-paradigm-student-recruitment.html.

Straffon, David A. 2003. "Assessing the Intercultural Sensitivity of High School Students Attending an International School." *International Journal of Intercultural Relations* 27: 487-501.

United Nations. 2017. "The International Migration Report 2017 (Highlights)." United Nations. https://www.un.org/development/desa/publications/international-migration-report-2017.html.

United Nations Educational, Scientific, and Cultural Organization. 2018. "Outbound internationally mobile students by host region." UNESCO Institute for Statistics. http://data.uis.unesco.org/Index.aspx?DataSetCode=EDULIT_DS&popupcustomise=true&lang=en#

Zhang, Zhiheng, and Brunton, Margaret. (2007). "Differences in Living and Learning: Chinese International Students in New Zealand." *Journal of Studies in Higher Education* 11: 124-140.

A Case Study of Engineering PhD Students' Career Decision-Making Processes using a Bounded Agency Model

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As an increasingly competitive, globalized economy continues to reshape higher education in the 21st century, scholars, institutions and national governments are calling for a more diverse academic workforce, particularly in science, technology, engineering and mathematics (STEM) disciplines (Beasley and Fischer 2012; Blickenstaff 2017; C. Hill, Corbett, and St Rose 2010; Ramsey, Betz, and Sekaquaptewa 2013). This focus on making STEM more inclusive has often centered on the recruitment, retention and advancement of women professors, who continue to be underrepresented in these fields (Beasley and Fischer 2012; Blickenstaff 2017; C. Hill, Corbett, and St Rose 2010; Whitten, Foster, and Duncombe 2003). However, recent research reveals that the representation of women in STEM fields in US academic institutions continues to decrease sharply as one moves up the academic career ladder (Ehrenberg 2010; Griffith 2010; Beede et al. 2011; Beasley and Fischer 2012; P. W. Hill, Holmes, and McQuillan 2014; Leslie et al. 2015). This phenomenon, often termed the "leaky pipeline" for women in STEM, is described as both persistent and pervasive.

There are more similarities than differences across industrialized regions. Many of the patterns seen in the United States are also seen in other Anglophone countries such as in the UK, as well as in the European Union (EU) in general. In fact, many western European countries lag behind the US in terms of the percentage of female doctoral recipients in the sciences, and the pay gap between men and women scientists is bigger in the EU than in the US (Shen 2013). Concern over gender equality in universities in the EU has seen considerable growth in the last few decades (Rees 2007). Statistics showing that women constituted over 50 percent of undergraduates but made up only 14 perent of professorships in the region raised alarm among policy makers in the region, resulting in a push to recruit and retain more women into institutions of higher learning, particularly within the science disciplines (Rees 2007). A similar pattern was revealed in Switzerland, with the erosion of women at the higher levels of the academic career ladder (Widmer et al. 2008). Despite the increasing numbers of women, especially at the undergraduate level in Germany, the horizontal segregation of female students into the languages, humanities, medicine, and biological sciences acts as a barrier to equality; women are still greatly underrepresented in the sciences and technical disciplines (Müller 2007). While the contexts are different, these statistics ring familiar in relation to the US higher education context as well.

The bulk of research on STEM attrition has focused on K-12 education and on college major selection at the bachelor's level. There are also studies on career transitions within academia, focusing on the tenure process and gender differences in promotion rates (Canizares 2009). However, few studies have focused on graduate and postgraduate educational experiences, or on career transitions following graduate education. Moreover, the theoretical frameworks commonly used in the literature on graduate education address the experiences of individuals in a way that emphasizes individual choice and agency. These frameworks do not adequately integrate an analysis of structural elements tied to the attributes of the university as an organization, thus omitting the role of the university itself in bounding or limiting individual agency and choice.

The purpose of this in-depth, qualitative case study is to explore reasons for STEM attrition at an understudied point in the academic pipeline, by examining how men and women PhD students in engineering disciplines in a large, public, research institution in the USA make career decisions following their graduate education. More specifically, this study seeks to explore gender differences in engineering PhD students' career decisions through a bounded agency model. This framework allows for an acknowledgement of the role of structural conditions in limiting individuals' perceptions of their feasible alternatives, leading to a fuller understanding of the ways in which the university as an organization impacts the behaviors and choices of PhD students nearing the end of their programs. This bounded agency approach is able to better integrate an understanding of structural and organizational factors pertaining to the university as an institution and its effects on individual agency and decision-making. In order to illuminate potential gender differences, this study involves a sample consisting of both male and female participants, so that comparisons may be drawn.

The theoretical framework guiding this study draws heavily from *Men and Women of the Corporation* (Kanter 1977). In her work, Kanter conceptualized the fates and trajectories of men and women within an organizational context as being inextricably linked with organizational structures. In applying this framework to my study, I similarly assume the university to be an organization within which structures of opportunity and power shape the choices, dilemmas and decision-making of individual men and women. This assumption allows for an examination of the complex relationship between individuals and the university as an organization, leading to a fuller understanding of the ways in which the university impacts the behaviors and choices of people within it.

Although this study examines the career decision-making processes of engineering PhD students in the context of a large, public research institution in the United States, this has relevance for institutions of higher learning worldwide. The US has long been the destination of choice for students around the world who choose to study outside of their own country, such that many nations conform closely to the US model for research institutions (de Wit 2001; Bok 2013). The American system has been further strengthened due to the adoption of English as the common scientific language since the mid-twentieth century, and the US dominance of the Internet (Altbach 2011). Better understanding how engineering PhD students in the US experience their graduate education, and the structural and organizational factors affecting their career decisions can lead to insights on diversifying the professoriate in engineering and perhaps other STEM disciplines in similar institutions elsewhere. Although one must be cautious in assuming that any findings have universal application, this study can lend insight as to the effects of policies promoting gender diversity in STEM, including the limitations of current efforts to feminize the STEM professoriate. Additionally, a better understanding of how engineering PhD students approach their career decisions and approach their job search at the end of their graduate programs can have implications for engineering PhD students' career development and for university career services both in the US and beyond.

This research seeks to propose a new model for understanding engineering PhD graduates' approach to career decision-making. This bounded agency model combines structural and organizational factors with individual level factors in illuminating how students' agentic choice in career decision-making is bounded by both structural and dispositional barriers affecting their decision to pursue any given career path. A feminist gender analysis of the data will also allow for the highlighting of differences between men and women's decision-making patterns, demonstrating how structural and dispositional barriers may be considered and weighed differently by men and women engineering PhDs. An understanding of these differences can have important implications for graduate education in male-dominated disciplines such as engineering, and for efforts to diversify the professoriate.

References

Altbach, Philip G. 2011. "Patterns of Higher Education Development." In *American Higher Education in the Twenty-First Century*, edited by Philip G. Altbach, Patricia J. Gumport, and Robert O. Berdahl, 2nd ed., 15–36. Baltimore, MD: The Johns Hopkins University Press.

Beasley, Maya A., and Mary J. Fischer. 2012. "Why They Leave: The Impact of Stereotype Threat on the Attrition of Women and Minorities from Science, Math and Engineering Majors." *Social Psychology of Education* 15 (4): 427–48. doi:10.1007/s11218-012-9185-3.

Beede, D. N., T. A. Julian, D. Langdon, G. McKittrick, B. Khan, and M. E. Doms. 2011. "Women in STEM: A Gender Gap to Innovation."

Blickenstaff, Jacob Clark. 2017. "Women and Science Careers: Leaky Pipeline or Gender Filter?" 0253 (July). doi:10.1080/09540250500145072.

Bok, Derek. 2013. "Introduction." In *Higher Education in America*, Revised Ed, 9–27. Princeton, NJ.: Princeton University Press.

Canizares, Claude R. 2009. "Gender Differences at Critical Transitions in the Careers of Science, Engineering and Mathematics Faculty." In *Meeting the Challenges of an Increasingly Diverse Workforce: Women in Astronomy and Space Science*, edited by Anne L. Kinney, Diana Khachadourian, Pamela S. Millar, and Colleen N. Hartman, 35–42. College Park, MD. doi:10.1016/s0399-8320(09)73155-0.

Ehrenberg, Ronald G. 2010. "Analyzing the Factors That Influence Persistence Rates in STEM Field, Majors: Introduction to the Symposium." *Economics of Education Review* 29 (6). Elsevier Ltd: 888–91. doi:10.1016/j.econedurev.2010.06.012.

Griffith, Amanda L. 2010. "Persistence of Women and Minorities in STEM Field Majors: Is It the School That Matters?" *Economics of Education Review* 29 (6). Elsevier Ltd: 911–22. doi:10.1016/j.econedurev.2010.06.010.

Hill, Catherine, Christianne Corbett, and Andresse St Rose. 2010. *Why So Few? Women in Science, Technology, Engineering, and Mathematics*. *Association of University Women*. doi:10.1002/sce.21007.

Hill, P. W., M. A. Holmes, and J. McQuillan. 2014. "The New STEM Faculty Profile: Balancing Family and Dual Careers." In *Advances in Gender Research, Volume 19: Gender Transformation in the Academy*, edited by Vasilikie Demos, Catherine White Berheide, and Marcia Texler Segal, 3–20. Bingley, UK: Emerald Group.

Kanter, Rosabeth Moss. 1977. *Men and Women of the Corporation*. New York, NY: Basic Books.

Leslie, Sarah-Jane, Andrei Cimpian, Meredith Meyer, and Edward Freeland. 2015. "Academic Disciplines." *Science* 347 (6219): 23–34. doi:10.1081/E-EWS.

Müller, Ursula. 2007. "Between Change and Resistance: Gender Structures and Gender Cultures in German Institutions of Higher Education." In *Women, Universities, and Change: Gender Equality in the European Union and the United States*, edited by Mary Ann Danowitz Sagaria, 23–41. New York, NY.

Ramsey, Laura R., Diana E. Betz, and Denise Sekaquaptewa. 2013. "The Effects of an Academic Environment Intervention on Science Identification among Women in STEM." *Social Psychology of Education* 16 (3): 377–97. doi:10.1007/s11218-013-9218-6.

Rees, Teresa. 2007. "Pushing the Gender Equality Agenda Forward in the European Union." In *Women, Universities, and Change: Gender Equality in the European Union and the United States*, edited by Mary Ann Danowitz Sagaria, 7–21. New York, NY: Palgrave Macmillan.

Shen, Helen. 2013. "Mind the Gender Gap." *Nature* 495 (7439): 22–24. doi:10.1111/j.1742-1241.2011.02659.x.

Whitten, Barbara L., Suzanne R. Foster, and Margaret L. Duncombe. 2003. "What Works for Women in Undergraduate Physics?" *ADVANCE Library Collection*, 295. doi:10.1063/1.1620834.

Widmer, Maya, Regula Julia Leemann, Heidi Stutz, and

Katrin Schonfisch. 2008. “Cooling Out? Gender and Research in Switzerland.” In *Gender Equality Programs in Higher Education: International Perspectives*, edited by S. Grenz, B. Kortendiek, M. Kriszio, and A. Löther. VS Verlag Für Sozialwissenschaften.

Wit, J.W. M. de. 2001. “Internationalisation of Higher Education in the United States of America and Europe.”

Institutional, Informational, International: Predicting International Student Enrollment and Rate by Online Information

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Introduction

According to the most recent *Open Doors* (Institute for International Education, 2018) data, international student application to and enrollment in United States (US) institutions of higher education fell for the second year in a row in 2017-2018. Redden (2018) recently called attention to how international students may be deterred from US institutions due to political or social conditions, rendering life in the US less appealing than in previous years. However, extant research has hypothesized several reasons why international students may not be applying to and enrolling in US institutions beyond political or social conditions.

A recent study by Huang and Bilal (2017) found international students often faced hurdles in navigating institutional websites focused on international students. According to their work, international students were confused by a lack of international student information on institutional websites, often having to rely on peers to understand how to apply and enroll in US institutions. Regarding international graduate student admissions materials on institutional websites, Taylor's (2017) study found international graduate application instructions were written above the 15th-grade English reading comprehension level. However, these institutions only required international graduate students to demonstrate a 12th-grade English reading comprehension level as evidenced by minimum TOEFL scores for unconditional admission. This finding indicated that a reading comprehension gap existed between minimum reading ability evidenced by TOEFL scores and the reading ability necessary to comprehend international admissions materials.

As a result, US institutions of higher education may not be effectively communicating with prospective international students, potentially contributing to the decline of international student applications and enrollments. Therefore, to build upon Huang and Bilal (2017) and Taylor's (2017) previous work, this exploratory study is guided by one primary research question:

> Controlling for the length, readability level, and translation of international student websites, what is the relationship between international student rate or enrollment and the online availability of minimum TOEFL score for unconditional admission?

Ultimately, this study's findings may inform professionals working in international education offices at US institutions regarding the clear communication of basic admissions standards, such as minimum TOEFL score. As basic admissions standards such as these do influence where international students apply and are admitted, it is important to understand whether the presence of this basic information is associated with greater international student enrollments or rates.

Method

Population and Sample

To establish a sample, the research team employed the Integrated Postsecondary Education Data System (IPEDS) and targeted all public and private non-profit four-year institutions of higher education in the US, producing in a total population of 2,327 institutions that admitted at least one international undergraduate student in 2016-2017. The team then employed a

random number generator set to the parameters of 1 to 2,327 to winnow the population to a sample size of 335 institutions, reflecting a 95 percent confidence level. A database of all institutions in this study can be provided by the research team upon request.

Data Collection

All data from this study was gathered from two sources: 2016 IPEDS data and institutional .edu web data, current as of February 10, 2018. Once the research team established the sample, the team used IPEDS to locate 2016-2017 international student rates and total international student enrollment. Then, the team employed the Google Advanced Search tool to locate each institution's website and the institution's minimum TOEFL score for unconditional admission for international students. Finally, the team used Readability Studio to calculate the length, readability level, and translation akin to Taylor's (2017) study.

Data Analysis

To best represent the data and answer this study's research questions, the research team employed two regression models, one for international student rate and another for enrollment. Within the multiple regression, we included online-content variables such as readability level of website content (READ), length of application instructions (LENGTH), availability of content translated into languages other than English (TRANS), online availability of minimum TOEFL scores for unconditional admission (bTOEFL), and minimum TOEFL score published on institutional websites (minTOEFL). These website variables emerged from research work focused on institutional website information for prospective international students, as these variables may influence whether a prospective international student applies to or enrolls in a certain institution. Institutional variables—derived from IPEDS—included in the separate multiple regression models were international student rate and overall international student enrollment.

In the first stage of analysis, we compared international student rates (RATE) and enrollments (ENROLL) to online-content variables, expressed by the formulae below:

$$Y(RATE)_i = \beta_0 + \beta_1(READ_i) + \beta_2\ (LENGTH_i) + \beta_3\ (TRANS_i) + \beta_4\ (bTOEFL_i) + e$$

$$Y(ENROLL)_i = \beta_0 + \beta_1(READ_i) + \beta_2\ (LENGTH_i) + \beta_3\ (TRANS_i) + \beta_4\ (bTOEFL_i) + e$$

The second stage of analysis included the 260 institutions that did publish minimum TOEFL scores on their institutional websites. The research team compared international student rates (RATE) and international student enrollments (ENROLL) to minimum TOEFL scores for unconditional admission published in online international application instructions, expressed by the formulae below:

$$Y(RATE)_i = \beta_0 + \beta_1(READ_i) + \beta_2\ (LENGTH_i) + \beta_3\ (TRANS_i) + \beta_4\ (minTOEFL_i) + e$$

$$Y(ENROLL)_i = \beta_0 + \beta_1(READ_i) + \beta_2\ (LENGTH_i) + \beta_3\ (TRANS_i) + \beta_4\ (minTOEFL_i) + e$$

Findings

Results in Table 1 suggest there is no relationship between the grade-level readability of application instructions, the length of the instructions, or the translation of instructions and international student rate or enrollment. However, a relationship exists between international student enrollment and institutions publishing minimum TOEFL scores as part of their international undergraduate application instructions.

Results in Table 2 suggest there is a relationship between minimum TOEFL scores for unconditional admission and international student rate (0.000) and enrollment (0.031). In this sub-sample of institutions that did publish minimum TOEFL scores, findings also suggest there is no relationship between the grade-level readability of application instructions, the length of the instructions, or the translation of instructions and international student rate or enrollment.

TABLE 1

RELATIONSHIP BETWEEN INTERNATIONAL STUDENT RATE AND INTERNATIONAL STUDENT ENROLLMENT AND ONLINE-CONTENT VARIABLES, BY AVAILABILITY OF MINIMUM TOEFL SCORES ON INSTITUTIONAL WEBSITES (N=332)

International student rate	Coef. (Std. Err.)	t	P>[t]	95% Conf. Int.
Readability level	0.001 (0.002)	0.38	0.709	-0.003, 0.005
Length (in words)	6.93e-06 (0.001)	0.17	0.868	-0.001, 0.001
Translation	0.003 (0.013)	0.22	0.826	-0.023, 0.029
Availability of TOEFL scores online	-0.013 (0.008)	-1.52	0.128	-0.029, 0.004
International student enrollment	**Coef. (Std. Err.)**	**t**	**P>[t]**	**95% Conf. Int.**
Readability level	5.35 (15.004)	0.36	0.722	-24.164, 34.869
Length (in words)	0.217 (0.311)	0.70	0.486	-0.395, 0.829
Translation	92.915 (97.372)	0.95	0.341	-98.643, 28.473
Availability of TOEFL scores online	142.575 (62.564)	2.28	0.023*	19.496, 265.655

*$p < 0.05$

TABLE 2

RELATIONSHIP BETWEEN INTERNATIONAL STUDENT RATE AND ENROLLMENT AND ONLINE-CONTENT VARIABLES, BY MINIMUM TOEFL SCORES FOR UNCONDITIONAL ADMISSION (N=260)^

International student rate	Coef. (Std. Err.)	t	P>[t]	95% Conf. Int.
Readability level	-0.001 (0.002)	-0.17	0.867	-0.005, 0.004
Length (in words)	0.001 (0.001)	0.40	0.688	-0.001, 0.001
Translation	-0.006 (0.013)	-0.43	0.670	-0.032, 0.020
Minimum TOEFL score for unconditional admission	0.001 (0.001)	3.94	0.000***	-0.029, 0.004
International student enrollment	**Coef. (Std. Err.)**	**t**	**P>[t]**	**95% Conf. Int.**
Readability level	-0.07 (19.133)	-0.04	0.971	-38.386, 36.972
Length (in words)	0.190 (0.388)	0.49	0.624	-0.573, 0.953
Translation	74.976 (115.703)	0.56	0.518	-152.88, 302.83
Minimum TOEFL score for unconditional admission	6.606 (3.050)	2.17	0.031*	0.599, 12.613

^*Note: 72 institutions did not publish minimum TOEFL scores for unconditional admission on their institutional websites.*

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion and Conclusion

As international undergraduate student enrollment in US institutions has witnessed its sharpest decline in a decade, US institutions should ensure that institutional websites include all critical information and are easy to navigate for a wide variety of international students. Although this study did not find readability level, length, or translation of application instructions were related to international student rate or enrollment, institutional admissions officers should explore ways to clarify, bolster, and differentiate website content for a wide audience to promote a more equitable and accessible path to US higher education for international students.

For instance, by embracing simpler international student material and translating that material into the native languages of international students, the institution itself could appear more international student-friendly, inclusive, and willing to embrace a diverse, global population. Moreover, simple and translated international student information may prove more economically-inclusive of low-income international students who cannot afford an international education agent or similar services to help them navigate the US higher education system and find a US institution of good fit. If a low-income international student is better able to navigate many international student processes on their own or with limited assistance—such as exploring institutions, applying for a Visa, or procuring housing in the United States—these students may be able to attain a US education and improve their socioeconomic status. Ultimately, as an exploratory study, future research should explore what information is most important to international students and whether that information is present in online settings.

Hearkening back to Huang and Bilal's (2017) study, international students may feel an institutional website lacks information necessary to apply to a US institution of higher education. As a result, institutions of higher education across the US and beyond should examine their own websites and ask, "Does our website include all of the information necessary for international students to apply to our institution?" Although this study focused primarily on admissions instructions readability, translation, and presence of minimum TOEFL scores, there are numerous other pieces of institutional information that international students may find necessary in order to make the most informed decision possible. This study did not capture housing information, tuition policies, mandatory and additional fee structures, and international student organizations or clubs as factors that may influence where an international student applies and enrolls. From here, future research could address these factors—in both quantitative and qualitative studies—to learn what is most important to international students and whether that information is included on institutional websites.

In all, institutions should engage with their own international student population and learn about what information is necessary and most informative for international students during the search process and application process. Here, institutions could improve their website, and thus, improve international student access, resulting in a more inclusive experience for international students.

References

Huang, Li-Min, and Dania Bilal. 2017. "'Not What I Thought!' Information Seeking Behaviors of International Students During the Application for Graduate Study in the USA." *Proceedings of the Association for Information Science and Technology* 54 (1): 709-11. https://doi.org/10.1002/pra2.2017.14505401125.

Institute of International Education. 2018. "International Student Enrollment Trends." https://www.iie.org/Research-and-Insights/Open-Doors/Data/ International-Students/Enrollment.

Redden, Elizabeth. 2018. "New International Enrollments Decline Again." https://www.insidehighered.com/news/2018/11/13/new-international-student-enrollments-continue-decline-us-universities.

Taylor, Zachary W. 2017. "Speaking in Tongues: Can International Graduate Students Read International

Graduate Admissions Materials?" *International Journal of Higher Education* 6 (3): 99-107. https://doi.org/10.5430/ijhe.v6n3p99.

Who Studies Abroad at US Community Colleges?

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Introduction

In the United States, public two-year institutions, or community colleges, enroll approximately 40 percent of all postsecondary students (AACC 2018; NCES 2018). These institutions originated with the purpose of serving local communities (Vaughan 1995) and often offer multiple pathways to student success, including continuing adult education, short-term certificate programs, and Associate's degrees (González Canché 2018). Community colleges frequently serve as a point-of-entry to higher education for underserved student groups, such as first-generation, ethnic minority, low-income, and academically under-prepared students (Brand, Pfeffer, and Goldrick-Rab 2014). Given this demographic, it is not surprising that community college students participate in education abroad opportunities at disproportionately low rates given both the cost and social norms surrounding who studies abroad. In 2015-16, these students represented only around 1.7 percent of US students participating in study abroad programs (IIE 2017). During this same academic year, approximately 30 percent of public, two-year institutions reported that their students had the opportunity to participate in education abroad experiences. This percentage contrasts sharply with public four-year institutions, of which 80 percent reported that study abroad was an opportunity available to their students (author's calculations using IPEDS). This article discusses in-progress research that seeks to identify characteristics of community college students who study abroad.

Community College Students' Capital Resources

Social stratification theory suggests that individuals are able to access different amounts and types of capital resources due to uneven social structures. In addition to economic capital, Bourdieu (1986) suggests that individuals also depend on both cultural and social capitals for social advancement. Cultural capital is defined as informal interpersonal skills, habits, manners, linguistic competencies, and lifestyle preferences of a given group (Berger 2000), while social capital is comprised of social relationships and the resources available through them (Portes 1998). Prior research has demonstrated that students' capital resources inform their decisions surrounding study abroad. This research, involving students enrolled at four-year institutions, suggests that resources such as financial aid (economic), participation in extracurricular activities (cultural), and peer support (social) are significant predictors of (intent to) study abroad (Salisbury, Umbach, Paulsen, and Pascarella 2009; Simon and Ainsworth 2012; Whatley 2018). The study presented here expands this research to the community college sector and includes capital resource-related characteristics that may be especially important to community college students, such as whether a student completed high school by taking a general education development (GED) exam rather than course completion and whether a student is enrolled part-time rather than full-time.

Method

The data that inform this study were provided by an urban community college located in the US Southeast. This community college offers a range of degree opportunities to students, including certificates and technical degrees, as well as a wide variety of

Associate's degrees and transfer options. Students who intend to transfer to the four-year sector are able to take advantage of articulation agreements between this institution and the state's primary four-year institution. Study abroad opportunities are offered to students during two of the three terms that comprise the academic year and are primarily short-term programs. Students have the opportunity to travel to a variety of countries and programs are not concentrated in a single region of the world.

Data represent enrollments starting in the 2009-10 academic year through 2016-17 (95,265 observations representing 48,352 students over time). Students who were enrolled for multiple terms are represented multiple times. While some individual student information, such as race/ethnicity, did not change over time, other characteristics, such as need-based aid eligibility or academic achievement (grade point average, GPA) did. An event history analysis allowed for the incorporation of this temporal variation into statistical models that predicted study abroad participation (Box-Steffensmeier and Jones 2004). This analytic feature is important, as many variables that have been shown in prior research to predict study abroad participation (e.g., academic achievement) do not remain the same over time. Restricting such variables to be time-constant obscures their time-varying effects and has the potential to lead to biased conclusions (DesJardins 2003). Event history analysis was developed with this potential source of bias in mind to model the relationship between time-varying predictors and the occurrence of an event (in this case, study abroad participation) (Box-Steffensmeier and Jones 2004). These statistical models estimate the hazard rate of an event occurring over time by observing individuals as they pass from one state (e.g., a non-participant in study abroad) to another (e.g., a study abroad participant) (DesJardins 2003).

Preliminary Findings

Preliminary findings suggest that among students' temporally stable characteristics, race/ethnicity, gender, and residency status were significant predictors of study abroad participation. More specifically, while Asians, Blacks, Hispanics, Whites, and students representing multiple ethnicities were equally as likely to study abroad, students belonging to an "Other" race/ethnicity group were approximately 200 percent more likely to study abroad. In contrast, male students experienced a 40 percent reduction in the likelihood of study abroad participation compared to female students. Students who were classified as in-state residents were approximately 260 percent more likely to study abroad. Students who took the GED exam to complete high school were equally as likely to study abroad as those who completed high school through traditional means.

Turning to characteristics that varied over time, age was associated with a decreased likelihood of study abroad participation, although the decrease associated with an additional year in age was small (0.5 percent). Students who were eligible for need-based financial aid also experienced a decreased likelihood of study abroad participation although, again, the decrease was small (3 percent). In contrast, a GPA increase of one point corresponded to a larger increase in study abroad likelihood (8.6 percent). Compared to students not seeking a degree, students with a specific degree goal were generally more likely to study abroad. Students studying Fine Arts/Humanities, Business, and Social Sciences experienced the highest increases in study abroad likelihood.

Implications

This investigation's results indicated that study abroad patterns among students attending this particular community college are not entirely dissimilar to those of four-year students examined in previous research. For example, male students were significantly less likely to study abroad compared to females, and the higher a student's GPA, the more likely he/she was to participate. On the other hand, results concerning race/ethnicity are promising in that only one group, students belonging to the "Other" category, were significantly different from White students, and these students were more, not less, likely to study abroad. This pattern differs from results from the four-year

sector, where underrepresented racial minorities are less likely to (intend to) study abroad (e.g., Salisbury, Paulsen, and Pascarella 2011; Simon and Ainsworth 2012). Although these results are limited to a single institution, they support the idea that community colleges such as this one represents a place where underrepresented racial minorities can access education abroad opportunities. This possibility is especially evidenced by the fact that at this particular institution, students belonging to underrepresented racial minority groups were just as likely to study abroad as White students. One possible explanation for this finding is that the education abroad administrative structures of community colleges are more amenable to these students, who are often navigating unfamiliar higher education institutional bureaucracy (Simon and Ainsworth 2012).

References

AACC (American Association of Community Colleges). 2018. *2018 Fact Sheet*. Washington, DC: AACC. https://www.aacc.nche.edu/wp-content/uploads/2018/04/2018-Fast-Facts.pdf

Berger, Joseph B. 2000. "Optimizing Capital, Social Reproduction, and Undergraduate Persistence." In *Reworking the Student Departure Puzzle*, edited by John M. Braxton, 95-124. Nashville, TN: Vanderbilt University Press.

Bourdieu, Pierre. 1986. "The Forms of Capital." In *Handbook of Theory and Research for the Sociology of Education*, edited by John G. Richardson, 46-58. New York: NY: Greenwood.

Box-Steffensmeier, Janet M., and Bradford S. Jones. 2004. *Event History Modeling: A Guide for Social Scientists.* New York, NY: Cambridge University Press.

Brand, Jennie E., Fabian T. Pfeffer, and Sara Goldrick-Rab. 2014. "The Community College Effect Revisited: The Importance of Attending to Heterogeneity and Complex Counterfactuals." *Sociological Science* 1: 448-465.

DesJardins, Stephen L. 2003. "Event History Methods: Conceptual Issues and an Application to Student Departure from College. In *Higher Education: Handbook of Theory and Research, Vol. XVIII*, edited by John C. Smart, 421-472. The Netherlands: Kluwer Academic Publishers.

González Canché, Manuel S. 2018. "Reassessing the Two-year Sector's Role in the Amelioration of a Persistent Socioeconomic Gap: A Proposed Framework for the Study of Community College Effects in the Big and Geocoded Data and Quasi-experimental Era." In *Higher Education: Handbook of Theory and Research*, edited by Michael B. Paulsen, 175-238. Berlin: Springer.

IIE (Institute of International Education). 2017. *Open Doors Report on International Educational Exchange*. New York: IIE. https://www.iie.org/opendoors

Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Contemporary Sociology." *Annual Review of Sociology* 24: 1-24.

NCES (National Center for Education Statistics). *Digest of Education Statistics*. Washington, DC: NCES. https://nces.ed.gov/programs/digest/

Salisbury, Mark H., Michael B. Paulsen, and Ernest T. Pascarella. 2011. "Why Do All the Study Abroad Students Look Alike? Applying an Integrated Student Choice Model to Explore Differences in the Factors that Influence White and Minority Students' Intent to Study Abroad." *Research in Higher Education* 52(2): 123-150.

Salisbury, Mark H., Paul. D. Umbach, Michael B. Paulsen, and Ernest T. Pascarella. 2009. "Going Global: Understanding the Choice Process of the Intent to Study Abroad." *Research in Higher Education* 50(2): 119-143.

Simon, Jennifer, and James W. Ainsworth. 2012. "Race and Socioeconomic Status Differences in Study Abroad Participation: The Role of Habitus, Social Networks, and Cultural Capital. *ISRN Education*, 2012.

Vaughan, George B. 1995. *The Community College Story: A Tale of American Innovation*. Washington, DC: The American Association of Community Colleges.

Whatley, Melissa. 2018. "Toward an Understanding of Peer Influence on Undergraduate Study Abroad Participation: A Pilot Study." *Frontiers: The Interdisciplinary Journal of Study Abroad* 30(3): 51-71.

New Destinations in Study Abroad: Examining US University Expansion Efforts in Cuba

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Introduction

Study abroad has become increasingly popular at US high education institutions, commonly serving as a vehicle for enhancing the university's internationalization efforts. In 2005, 27 percent of US higher education institutions did not send any students abroad, and yet, by the end of the decade study abroad programming expanded to almost all institutions (Stearns 2009). Since then, study abroad has only continued to grow, as the Institute for International Education (2017) reported 325,339 US students studied abroad for academic credit in 2016-2017, an increase of 3.8 percent over the previous year and an increase of over 100,000 student participants since 2005-2006 (Institute for International Education 2007). As study abroad becomes central in the university environment, research studies provide evidence of its importance and relevance to the American college experience.

Notably, as study abroad participation continues to grow, programming moves away from traditional locations (e.g. Western Europe, Australia, and New Zealand) to build the programming infrastructure with study abroad in less traditional locations (e.g. Caribbean, sub-Saharan Africa, East Asia). However, there is a lack of empirical evidence identifying the motivations for these exchanges. Michael Woolf (2006) critiqued the expansion of study abroad programs by examining a decrease in area and regional studies courses and the reduction of language courses on the university campus, thus calling into question the motivation of developing programs in these areas. Increasing the sites of students but reducing curricular connections to the host community further supports the colonial critiques of scholars. Anthony Ogden (2008) furthers this critique, by providing insight into concerns regarding programming elements in these nontraditional areas that he likens to a colonial settler's veranda. Students in this colonial-like setting are provided resources (e.g. luxury housing, 24/7 internet access, etc.) beyond the standard of living of the local population. They enjoy the comforts of their study abroad programming while only passively engaging with the local population and, thus, viewing the community from afar (Ogden 2008). Subsequently, the failure to create programming in solidarity with the local community creates tensions between study abroad programs and their hosts.

Research Study Context

In this study, the researcher aims to address the expansion of study abroad programming specifically to the nontraditional location of Cuba. Cuba is of particular importance as it has long been a challenging and complex research location for American scholars and the context of academic exchange in Cuba is rapidly changing. In the academic year 2015/16, US students studying abroad in Cuba reached over 3,700. However, even with this increasing activity, there is still suspicion of and contention around studying in Cuba. Some study abroad programming leaders believe that spies loom within their programs and that Cuban informants or counterparts only provide top-down party lines (Kolivras and Scarpaci 2009). Others deem the US and Cuban academic environment too sensitive of a political landscape to transverse, making many scholars hesitant to engage (Clarke 2007; Bell 2013).

With the recent increase in US academic travel to Cuba after nearly a decade of decline, much of the institutional memory for setting up reciprocal exchange has been lost (Reinosa 2011). An increasingly market-driven approach seems to have emerged, at least for many, if not all, of the US institutions. For example, US educational advocacy organizations are charging Americans for exclusive access to meet with Cuban government officials (Institute for International Education, 2017b) and to advocate for all forms of travel to Cuba (NAFSA 2017). Others see this as a market opportunity and are eager to sign inter-institutional memorandums of understanding, as study abroad third-party provider organizations hurry to establish their program sites (Solloway 2016). The motivations behind the increase in academic exchanges and the extent to which neoliberal ideology, or resistance, are impacting these activities is still under researched.

To understand the influence of neoliberal policies in developing a market-driven approach to the university internationalization strategy, I use Slaughter and Rhoades' academic capitalism theory. They define academic capitalism as a phenomenon where US higher education institutions are forced to turn their efforts to entrepreneurship by selling research and other goods and leveraging resources from students (Slaughter and Rhoades 2004). This research study is thus grounded upon academic capitalism theory, establishing that this environment exists and is pervasive across US institutions. The research aims to use academic capitalism theory to address the current literature providing an empirical understanding of US - Cuban academic exchange at a critical time in US - Cuban relations by answering two central research questions:

- Why are US and Cuban faculty and university administrators currently motivated to develop study abroad programming between the US and Cuban universities?
- How does the expansion of study abroad programming between the US and Cuba influence higher education policies and practices?

Methods

In this study, qualitative case study methods were used to critically examine study abroad programming between the United States and Cuba before, during and after the Obama Administration's announcement changing diplomatic relations between the US and Cuba on December 17, 2014. Case study research is distinct in that it focuses the study within the bounds of an event, time or topic (Stake 1978). The boundaries of my case are not limited to a single study abroad program but instead take a broad approach in defining my case as the topic of study abroad programming between the US and Cuba. In examining this phenomenon, I bound the study to university and program provider faculty and educational administrators who have primary oversight of facilitating these exchanges. Of particular interest are the faculty and educational administrators that engage in semester length study abroad programming both prior to, during, and following December 17, 2014, The perspectives of 12 of the main actors in the field, including educational administrators and faculty from US universities, Cuban universities, and study abroad program providers, were captured through in-depth interviews in Havana and Washington, DC to provide a more comprehensive view of study abroad implementation in Cuba. In addition to these interviews, documents supporting these exchanges (brochures, course syllabi, MOUs, etc.) were collected.

Implications for the Field

Internationalization and study abroad programming will remain a central focus for the future of many institutions. It is the hope that this research will provide a reflection of current study abroad practices from both the US and the host (i.e. Cuban) perspective in an effort to better understand the motives and purposes of these exchanges to aid in reciprocity efforts of these programs. Additionally, this study aims to further previous empirical studies by conducting an examination of the role of study abroad programming in transmitting or diffusing ideas (i.e. market-driven approach) that impact university policy and practice.

Lastly, comparative studies like this provide alternatives to dominant assumptions in US higher education policy and open a deeper scholarly debate on the future on global higher education systems.

References

Bell, Karen. 2013. "Doing Qualitative Fieldwork in Cuba: Social Research in politically Sensitive Locations." *International Journal of Social Research Methodology*. 16 (2):109– 124.

Clarke, Ruth. 2007. "Emerging Interaction of Political Processes: The Effect on a Study Abroad Program in Cuba. *Journal of Teaching In International Business.* 18(2/3): 61-82.

Institute for International Education. (IIE). 2007. *Open Doors: Fast Facts.* https://www.iie.org/en/Research-and-Insights/Open-Doors/Data/US-Study-Abroad.

IIE. 2017a. *Open Doors: Fast facts.* https://www.iie.org/en/Research-and-Insights/Open-Doors/Data/US-Study-Abroad.

IIE. 2017b. *IIE Cuba higher education initiative.* https://www.iie.org/Programs/International-Academic-Partnership-Program/Cuba-Delegation.

Kolivras, Korine and Joseph Scarpaci. 2009. Between Corporatism and Socialism: Navigating the Waters of international Education in the Dominican Republic and Cuba. *Journal of Geography,* 108: 121-131.

NAFSA: Association of International Educators. 2017. *NAFSA: Cuba Engagement Initiative. http://www.nafsa.org/Programs_and_Events/Cuba_Engagement_Initiative/.*

Ogden, Anthony. 2008. "The View from the Veranda: Understanding Today's Colonial Students." *Frontiers: The Interdisciplinary Journal of Study Abroad*, 15: 2–20.

Reinosa, Milagros. 2011. "Cuba and the United States: New Opportunities for Academic Diplomacy." *LASA Forum*. 42 (2): 4-6.

Slaughter, Shelia and Gary Rhoades. 2004. *Academic Capitalism and the New Economy: Markets, State, and Higher Education.* Baltimore, MD: The Johns Hopkins University Press.

Solloway, Ellie. 2016. Cuba as an emerging market for exchange. http://www.globaltiesus.org/news/exchangematters/467-cuba-as-an-emerging-market-for-exchange.

Stake, Robert. 1978. The case study method in social inquiry. *Educational Researcher, 7(2), 5-8.*

Stearns, Peter. 2009. *Educating Global Citizens in Colleges and Universities: Challenges and Opportunities*. New York: NY: Routledge.

Woolf, Michael. 2006. "Come and See the Poor People: The Pursuit of Exotica." *Frontiers: The Interdisciplinary Journal of Study Abroad*, 13: 135–146.