

Understanding International Joint and Dual Degree Programs: Opportunities and Challenges during and after the COVID-19 Pandemic

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ABSTRACT

This empirical article examines the policies, perspectives, and practices of building and developing cross-border and transnational higher education (TNHE) programs, with special attention given to the international joint and dual degree programs in North America and Asia. Specifically, this paper reviews the historical, political, and social dimensions of two international collaborative academic degree programs between the United States and Mainland China using Indiana University-Purdue University, Indianapolis (IUPUI) and Sun Yat-set University (SYSU) as the case study. Findings suggest that IUPUI's most cited challenge with SYSU concerns alignment with general education requirements. On the other hand, SYSU's biggest challenge with IUPUI concerns language and cultural differences. This article offers five recommendations for teacher-scholars, policymakers, and advanced practitioners interested in developing, designing, and implementing dual degree programs during and after the COVID-19 pandemic. Implications for future research on and applications and practices for TNHE programs are discussed.

Keywords: comparative education, covid-19, education abroad, higher education, internationalization, student mobility, transnational education

INTRODUCTION

International higher education in the United States, and indeed worldwide, has reached a critical moment (de Wit & Altbach, 2021a) as a result of the ongoing coronavirus (COVID-19) pandemic and associated lockdowns (Ammigan et al., 2022; Bergan et al., 2021; Hudzik, 2021). The challenges are most notable with regards to student enrollment and retention, the international mobility of students and scholars, international programs and services, and the increasing reliance on information and communication technologies to connect individuals, institutions, and countries (Bista et al., 2021; Chan et al., 2021; McKeown et al., 2022). These profound challenges are due largely to the fragilities and inequalities across the digital, gender, social and educational lines, that are fundamentally reshaping higher education as a global industry during the pandemic (de Wit & Altbach, 2021b; Kommers & Bista, 2021). While the processes and outcomes of internationalization practices (e.g., teaching and learning modes, admissions,

mobility, quality assurance) have been widely examined and critiqued (e.g., promoting elitist, hegemonic, and neoliberal agendas), little research has examined the rise of cross-border and transnational higher education (TNHE) programs in the United States and abroad (Jiang, 2021; Lee & Gough, 2020). Furthermore, the number of studies to have currently explored the future of TNHE, and, more specifically, international joint and dual degree programs in the post-COVID-19 era is limited (Bamford, 2020; Ergin & Leal, 2020; Li & Haupt, 2021; Lane et al., 2021).¹

Prior to the worldwide COVID-19 pandemic, international partnerships and international collaborations had received much attention in the field of international and comparative higher education (Altbach et al., 2020; Gatewood, 2020; Lanford, 2020; Oleksiyenko et al., 2020). Historically, the expansion of TNHE in East and Southeast Asia was triggered by the 1997 Asian Financial Crisis, which forced many internationally mobile students to return to their home countries (Sutrisno, 2020). Since then, TNHE programs have represented an increasingly legitimate strategy for globally comprehensive research universities in host countries like China, Hong Kong, Malaysia, and Singapore to engage transnationally as higher education organizations (Lee & Gough, 2020). These special or unique international academic partnerships would serve as one of the following three types: 1) as student exchanges, 2) as cooperative development projects between the Global North and Global South (i.e., capacity building, local development), or 3) as international joint or dual degree programs with largely unidirectional student mobility (Kinser & Lane, 2020). In other words, TNHE has been able to provide a reliable, bona fide education, with a flexible, cost-efficient tuition. TNHE programs can help students obtain international qualifications or degrees that promote transnational learning, collaborative research, and global mobility. TNHE can also play a crucial role in enhancing international strategic planning, global learning, and institutional prestige to help institutions position themselves for a world-class status to improve their academic rankings and to increase the quality of national higher education systems and academic programs worldwide (Oleksiyenko et al., 2021). While the rise of TNHE programs has become a reflection of elitism, populism, and global politics in the era of mass higher education, the ideals and outcomes of these programs have also been questioned by teacher-scholars and advanced practitioners (American Council on Education [ACE], 2014; Bamford, 2020; Knight, 2013). Furthermore, the impact international joint and dual degree programs can have on internationalizing an academy has received less attention in higher education journals and books (ACE, 2014; Asgary & Robbert, 2010; Council of Graduate Schools, 2010; Kuder et al., 2014; Lane & Kinser, 2014; Merckx & Nolan, 2015). Because higher education institutions around the world have enacted travel bans and quarantines, as well as suspended face-to-face teaching as a result of the global pandemic, new research is needed to examine the current and future landscape of TNHE programs and, more specifically, international joint and dual degree programs (Bamford, 2020; Ergin & Leal, 2020; Haupt et al., 2021; Hou, 2020; Krusekopf, 2018; Li & Haupt, 2021; Steagall et al., 2021).

Hence, this article explores, examines, and questions the changing landscape of international joint- and dual- degree programs in the COVID-19 era. Using international collaborative degree programs between Indiana University-Purdue University, Indianapolis' (IUPUI) and Sun Yat-sen University's (SYSU) as a case study, this paper investigates the commonalities and disparities of international cross-

¹ International joint and dual degree programs are also sometimes known as collaborative degree programs or 2+2/1+1 programs.

border collaborative degree programs; the different policy formats, expected outcomes, and programmatic challenges of international joint and dual degrees; and the major governance approaches and regulatory measures that governments and policy leaders have adopted in managing the growing prominence of these unconventional education institutions and programs between the United States and China. The ultimate goal of this research is to address three questions commonly asked in the field of international higher education: 1) What does the current literature suggest the aims, goals, and purposes of international joint and dual degree programs are, 2) How do international joint and dual degree practices align with the academic missions and goals of the home campus, 3) How do the interactions among policies, procedures, and practices differ between the U.S. and China in relation to the growth of collaborative academic degree programs. Because the goals of internationalization practice in education have changed dramatically to include accessibility and affordability, this paper will have applicability and pertinence beyond the national contexts of the United States and China and includes all types of universities (e.g., public, private, research, liberal, for-profit) as well as university stakeholders interested in TNHE programs at a time when institutions are scaling back their international ventures due to the ongoing COVID-19 pandemic (Buckner, 2019).

LITERATURE REVIEW

Transnational Higher Education (TNHE)

In today's rapidly expanding international education sector, colleges and universities worldwide are providing increased opportunities for global development and engagement (Council of Graduate Schools, 2010; Hudzik, 2021; Lee & Gough, 2020). Notably, the growing number of students studying abroad, the rising number of international joint and dual degree programs, and the proliferation of international branch campuses are only a few of the initiatives reflecting the changing meanings of cross-border and transnational higher education (TNHE) (Bamford, 2020; Hou et al., 2017; Steagall et al., 2021). Knight (2007) defined cross-border education as "the movement of people, programs, providers, curricula, projects, research and services across national or regional jurisdictional borders" (p. 24). Cross-border education facilitates cooperation, cultivates soft power, provides academic exchange opportunities, and enhances public diplomacy (Lee, 2021). It provides students access for studying toward a foreign qualification without leaving their own country, which suggests that education programs and providers can cross national and regional borders.

TNHE (i.e., borderless education) refers to the movement of higher education providers and programs across national borders, which allows students to study in foreign programs without having to leave their home country (Knight & Liu, 2019). TNHE has the capacity to internationalize practices in teaching and learning, encourage inward and upward social mobility for faculty and staff, and foster knowledge transfer and exchange within and between societies (Ergin & Leal, 2020; Zapp & Lerch, 2020). The most common types of TNHE are international joint and dual degree programs, franchising, twinning, branch campuses, and research partnerships (Lee & Gough, 2020). The post-pandemic TNHE landscape has also promoted distance TNHE, in which students participate in online courses offered from an awarding institution that has no physical campus in their home country (Krusekopf, 2018; Li & Haupt, 2021; Sammour et al., 2020). All of these transnational activities have pressured higher education institutions to partner with comprehensive research universities as an effective tool to broaden course offerings, strengthen research collaboration, and raise the international visibility or institutional prestige of the university (Hou et al., 2017; Hudzik, 2021). In other words, TNHE operates as a foreign institution that delivers educational

programs through foreign partners (Sutrisno, 2020). While the ongoing COVID-19 pandemic has undoubtedly sparked new questions about the roles and functions of TNHE in regard to nation states and the global public good, scarcity certainly exists in the current literature on assisting teachers-scholars and advanced practitioners interested in developing these rapidly growing programs within the local, national, and international contexts (Bamford, 2020; Ergin & Leal, 2020; Haupt et al., 2021; Kompanets & Vääänen, 2019).

TNHE and Chinese Higher Education Landscapes

According to the September 2021 report conducted by the Cross Border Education Research Team (C-BERT) at the University of Albany, State University of New York (SUNY), approximately 306 international branch campuses are found to be in operation across 37 countries worldwide. Lane et al. (2021) estimates that there are more than 250 international branch campuses existed during the COVID-19 pandemic, with a student enrollment of approximately 180,000 worldwide as of June 2021. The top five exporters of international campuses are the United States (86), the United Kingdom (43), France (38), Russia (29), and Australia (20); the total number of importing countries is 83 (C-BERT, 2020). While international campuses have become a salient phenomenon in the efforts to internationalize the academy, the challenges of funding and building such programs are plentiful (Lane & Kinser, 2014; Zapp & Lerch, 2020). A few of the issues scholars have debated and criticized are the intercultural competencies of faculty members (Deardorff & Arasaratnam-Smith, 2017), cultural relevancy of a curriculum (Knight & Liu, 2019), and quality assurance of programs and services (Blanco, 2021; Hou, 2020).

Historically, the concept of cross-border and TNHE (e.g., student exchange programs, branch campuses, foreign partners, joint partnership programs, regional educational hubs) was coined in 1919 when Nicholas Murray Butler, Elihu Root, and Stephen Duggan, Sr. established the Institute of International Education (IIE) with the strong belief that the United States would be unable to acquire peace unless greater understanding of foreign nations were achieved (Goodman & Ruland, 2013). Specifically, Carl Joachim Friedrich became recognized as the first student to study abroad in the United States, when he asked IIE in the early 1920s to offer educational fellowships abroad so 13 German students could study the social and political sciences (Goodman & Ruland, 2013). Since then, Friedrich's vision has expanded with the German Academic Exchange Service (DAAD) joining forces with the IIE in 1925 to provide international exchange opportunities to nearly 100,000 students, scholars, and alumni each year (Kuder et al., 2014). Today, TNHE has become an integral part of the internationalization strategy in higher education as a result of the rising middle-class economies (Buckner, 2019; Li & Haupt, 2021). Both the DAAD and IIE are leaders in supporting and promoting the development of international education and transnational networks among institutions.

This is most notable in mainland China, where the forces of globalization, alongside the rise of nationalism and populism, have been at the forefront of the policy debate during the COVID-19 pandemic (Jiang, 2021; Yang, 2020). The recent developments in globalizing and internationalizing Chinese higher education have fueled several institutions' pursuit of transnational education activities through collaborative degree programs (also known as 'international joint and dual degree programs') offered by foreign institutions (Yu, 2020). For example, during the COVID-19 lockdown, NYU Shanghai served more than 3,000 Chinese students who were not able to reach the U.S. as originally intended (Lane et al., 2021). A recent internal survey by the College Board finds that the U.S. is still the leading educational destination

of choice among Chinese students (Blumenthal, 2021). China has invested significantly in its higher education system, moving from an elitist to a massified model (Zhang, 2021). As Min (2004) observed, higher education has experienced structural reforms ranging from governance, curriculum design, and financing to adopting strategies for developing world-class research universities. The Chinese Ministry of Education (MOE) (2010) has proposed a series of policy reform initiatives (e.g., Project 211, Project 985), for elevating its university system to a world-class status. Today, 116 institutions are classified as Project 211 and 39 universities are Project 985.

Project 211 and Project 985 were established to increase international competition and global competitiveness in China's most elite research universities, with special attention being given to the top 39 comprehensive research universities. The goal of accomplishing such a policy agenda was further realized by establishing the *National Outline for Medium- and Long-Term Education Reform and Development 2010-2020*, wherein MOE outlined the need to develop universities "at or near a world-class level... and have significantly enhance international competitiveness by 2020" (MOE, 2010, p. 5). This prompted the Chinese government to create a new project called 'World Class 2.0' for forming hubs for international collaboration with overseas universities (Cao & Yang, 2019). In other words, China has launched several policy initiatives as part of the nation's pursuit of economic liberalization and its desire to pursue neoliberal economic reforms (Jiang, 2021; Zhang, 2021). While China's main competitors (i.e., India, Singapore, Taiwan, South Korea, Japan, and Vietnam) have invested in large and differentiated higher education systems, one of the most significant policy initiatives has been the rise of international joint and dual degree programs (i.e., collaborative academic degrees) (Bamford, 2020; Chan, 2012; Haupt et al., 2021; Hou, 2020; Hou et al., 2016; Nguyen et al., 2021).

International Joint and Dual Degree Programs

Before the global COVID-19 pandemic, local governments had pressured higher education leaders to establish a global strategy for their institutions due to reductions in state funding that cause them to seek out additional revenue and talent to achieve comprehensive internationalization (Council of Graduate Schools, 2010; Kuder et al., 2014; Lane & Kinser, 2014; Zapp & Lerch, 2020). ACE (2021) defines comprehensive internationalization as "a strategic, coordinated framework that integrates policies, programs, initiatives, and individuals to make colleges and universities more globally oriented and internationally connected" (p. 1). Faculty members and campus leaders sought to foster comprehensive internationalization by facilitating transnational education, specifically international joint and dual degrees, as a vehicle for fostering international mobility (student, faculty, and staff) and for moving beyond academic-level collaborations (Bamford, 2020; Steagall et al., 2021). Joint degree programs are stand-alone programs where the student remains enrolled at two institutions in different countries (Knight, 2011). Students who complete joint degrees receive a single diploma or credential issued by the host institution (ACE, 2014). For example, at IUPUI, joint degrees would "involve collaboration by an IU academic unit and a partner institution to offer a degree program that neither would have the resources to offer without combining expertise and instruction; upon completion of a joint degree program, both institutions' names appear on the diploma" (IU Global, 2021). However, students who enroll in dual degrees receive two separate credentials from the two partner institutions involved in an existing degree program (Hou, 2020). One should note that the term "joint/dual degree programs" should not be confused with student exchange programs or virtual exchange, as these programs are study-abroad rather than degree-seeking programs (Kinser & Lane, 2020).

In general, international joint and dual degrees have a variety of goals and purposes (Chevallier, 2013; Council of Graduate Schools, 2010; Kuder et al., 2014; Knight, 2011; 2013; 2015; Krusekopf, 2018; Lafleur, 2018; Lane & Kinser, 2014). Goodman and Rulan (2013) highlighted these programs' intentions as cultivating strong global partnerships, attracting top talents, and promoting mobility of students. Goodman and Rulan believe that collaborative degree programs play an important role in the internationalization strategies of higher education where both undergraduate and graduate students seek to differentiate their learning pathways and broaden their minds and skills for a global marketplace. Figure 1 summarizes the purpose and function of international joint and dual degree programs in the global landscape of higher education.

Figure 1

Purpose And Function Of International Joint And Dual Degree Programs

Purpose and Function of International Joint and Dual Degree Programs		
<i>Academic</i>	<i>Economic</i>	<i>Political</i>
To raise institutional recognition and prestige	To acquire human capital (revenue for institution)	To promote global citizenship and social justice
To enhance quality of education	To meet the demand of the globally competitive knowledge-based economy	To achieve international visibility and reputation in university league tables
To foster academic excellence	To meet the demand of national economy	To promote national identity, culture and values
To develop intercultural and international awareness	To meet the demand of regional (Asian) economy	To foster regional collaboration and cooperation in East Asia and the Pacific

Source: American Council on Education, 2014

As shown in Figure 1, international joint and dual degree programs serve three primary purposes: academic, economic, and political. In the academic realm in particular, international joint and dual degrees enhance the quality of teaching and learning, promote academic excellence, and develop intercultural competencies and awareness. In economic terms, international joint and dual degrees meet the demand of the knowledge-based economy, while in terms of politics, they promote national identity and foster collaboration and cooperation with developed and transitional economies. In other words, these programs can raise economic development and increase social cohesion. Furthermore, international joint and dual degrees foster upward social mobility as well as promote self-resilience, personal growth, and global citizenship (Culver et al., 2012; Haupt et al., 2021; Yamutuale, 2017). While this list is not all-inclusive, international joint and dual degrees are inevitably on the rise around the world (Bamford, 2020; Krusekopf, 2018).

Statistically speaking, Brenn-White and van Rest (2012) estimated that approximately 6,462 joint degree programs exist in Europe. Obst et al. (2011) has estimated that about 100 international joint and dual degrees exist in the United States, while ACE (2014) has estimated about 62 international joint and dual degrees to be present in mainland China. While no accurate data is found on the exact number of international joint and dual degree programs around the world, many collaborative degree programs exist in Europe as a result of the European Higher Education Area (EHEA) program which seeks to foster the harmonization of the European higher education system (Curaj et al., 2015; Kompanets & Väättänen, 2019; Obst & Kuder, 2012; Steagall et al., 2021; Zheng et al., 2017).

Globally, more international dual degree programs are found than international joint degree programs (see Table 1).

Table 1

Percentage Of International Joint And Dual Degree Programs By Degree Type

Types	Percentage
Joint Degree Programs	33%
Dual Degree Programs	84%
Joint and/or Dual Degree Programs in Planning Stage or Under Consideration	68%

Source: American Council on Education, 2014

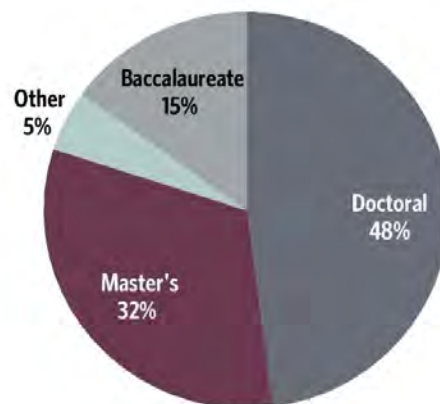
The large percentage of dual degree programs worldwide likely resulted from the flexibility given to establishing such programs in the host country. Dual degrees are highly flexible because course equivalencies and program requirements do not necessarily need to be aligned with the partnered institutions, due to international dual degrees being awarded individually rather than jointly (Asgary & Robbert, 2010; Bamford, 2020). On the other hand, international joint degrees are quite the opposite because they require additional financial resources and institutional agreements (Kinser & Lane, 2020; Knight, 2011; Obst & Kuder, 2012).

Most developing and developed countries that seek to establish international joint degree programs are prevented from creating them due to the legal restrictions and regulations set forth by their respective Ministries of Education. For example, Indonesia and Malaysia have a legal restriction that prohibits institutions of higher education from offering joint degrees (Haupt et al., 2021; Yuki, 2013). In Thailand, all universities must follow strict guidelines for academic cooperation between Thai Higher Education Institution and Foreign Higher Education Institutions. On the other hand, joint degrees at IUPUI are considered new degrees and must be approved by the Board of Trustees. Because of their complexity and the time commitment required for their development and approval, joint degrees are rarely considered by IU academic units (IU Global, 2021). Hence, international dual degree programs are far easier to establish than international joint degrees.

Aside from the quantity of joint and dual degree programs, a large number of international collaborative degree programs, particularly in mainland China, are granted at the doctoral degree level, rather than at the master's and bachelor's degree levels (see Figure 3).

Figure 2

Percentage Of International Joint And Dual Degree Programs In China By Degree-Level Type



Source: American Council on Education, 2014

As shown in Figure 3, 80% of international joint and dual degree programs in mainland China are at the graduate level, 48% are doctoral degree level programs, and 32% are at the master's degree level. Undergraduate programs make up only 15% of the joint and dual degree programs in mainland China. These graduate and professional programs can help learners acquire a new foreign language, provide them with the opportunity to reside in a developing or developed country for a long period time, and open international employment opportunities that are not readily available in traditional higher education programs (Asgary & Robbert, 2010; Bamford, 2020; Council of Graduate Schools, 2010).

From a faculty and administrator perspective, international dual and joint degree programs are a global strategy for strengthening the institutional relationships with partners abroad, increasing mobility rates, developing globally competent learners, and advancing campus internationalization strategies for continuous multidimensional partnerships (Bamford, 2020; Kinser & Lane, 2020; Lafleur, 2018; Steagall et al., 2021). In addition to deepening relationships with partners overseas, these programs help the home campuses increase graduates' employability, promote knowledge mobilization and transfer, and raise institutional revenue and growth for all constituencies (Culver et al., 2012; Haupt et al., 2021; Lane et al., 2021; Nguyen et al., 2021; Zhang, 2021). Dr. Nina Lemmens, former director of the German Academic Exchange Service (DAAD) office in New York, is quoted as having once said:

International joint and dual degree programs are popular because once they are set up, they give all parties a good sense of security: the two involved universities have gone through an intense procedure of administrative scrutiny and decision-making and can be sure that everybody involved in the university is now positive about the commitment. The students know exactly what they are buying into and don't have to undergo the sometimes very difficult process of credit acknowledgment on their own (West, 2015).

In other words, international collaborative academic degree programs strengthen the relationships between the host and sending countries and serve as a strong marketing tool for attracting foreign talent (Kinser & Lane, 2020; Kuder et al., 2014; Obst & Kuder, 2012). The benefits of these programs from the different standpoints of the home and partner institutions are summarized below (Figure 3).

Figure 3

Benefits Of International Joint And Dual Degree Programs: Home and Partner Institution

Home Institution	Partner Institution
Internationalization of departments/units	Internationalization of departments/units
Research collaboration and opportunity	Research collaboration and opportunity
Enrollment increase	Enrollment increase
Recognition and prestige	Recognition and prestige
English preparation of international students	Foreign language preparation of U.S. students
Broadening course offerings	Broadening course offerings
Increase diversity among students	Increase diversity among students

Source: American Council on Education, 2014

CASE STUDY

The Dual Degree Programs Partnership for IUPUI and SYSU

This paper uses Indiana University-Purdue University, Indianapolis (IUPUI), and Sun Yat-sen University (SYSU) as the case study for understanding the historical, political, and social dimensions of

international dual degree programs between the United States and mainland China. Indiana University's partnership with SYSU was started in 2007 when IUPUI first initiated an alliance with SYSU. Today, more than 400 SYSU students and 200 SYSU scholars from China study and/or work at the IUPUI campus each year (IUPUI Office of International Affairs, 2021). IUPUI-SYSU has offered several transnational higher education courses and programs that include collaborative research projects, dual degree programs, facilitated transfer arrangements, and student exchanges. IUPUI-SYSU also had plans to initiate a joint master's degree program in Philanthropic Studies, but plans were immediately scratched due to the on-going worldwide coronavirus pandemic. The following section provides an overview of the two institutions.

Indiana University-Purdue University Indianapolis (IUPUI)

IUPUI was founded in 1969 when Indiana University and Purdue University joined forces to create a leading urban research institution dedicated for education, research, health and life sciences, and community engagement (IUPUI, 2014). Indianapolis Mayor Richard Lugar, one of the most influential leaders in establishing IUPUI, firmly believed that a world-class city must have a university that serves the city, state, and beyond. IUPUI's first mission was to "serve the citizens of this State and Nation with excellence in teaching, diversity in research, and full application towards the solving of community problems" (IUPUI, 2014, p. 3). Since its founding, IUPUI has achieved remarkable growth in terms of student enrollment, diversity, access, governance, curriculum, and academic standards. IUPUI has also recently tripled its number of international students from 606 foreign students in 1999 to 1,850 foreign students in 2020 (IU Office of International Affairs, 2020).

Today, IUPUI offers degrees in Global and International Studies, has developed an international videoconferencing facility for overseas communication, and has worked on the *Global Cities Initiatives: A Joint Project of Brookings and JP Morgan Chase* on international trade and economic development (O'Meara & Peck, 2019). IUPUI is one of the few institutions by the American Council on Education (ACE) that has completed the 2012-2014 ACE Internationalization Laboratory and has received the prestigious 2009 Andrew Heiskell Award from the Institute of International Education (IIE) (IUPUI, 2014). As of today, IUPUI has five main international partnerships: 1) Sun Yat-sen University in Guangzhou, China; 2) Trisakti University in Jakarta, Indonesia; 3) EM Strasbourg Business School in Strasbourg, France; 4) Moi University in Eldoret, Kenya; and 5) University of the State of Hidalgo in Pachuca, Mexico. Among those programs, IUPUI offers three types of international joint and dual degree programs: 1) dual undergraduate degree (2 + 2) (2 years in China and 2 years in U.S.), 2) dual master's degree (1 + 1), and 3) joint degrees (IU Global, 2021). Approximately 95 percent of its transnational degree programs are dual degrees, with only two joint degrees active: 1) global MBA degree between the Indiana University Kelley School of Business and University of Manchester,² and 2) M.S. degree in finance between Indiana University Kelley School of Business and Tsinghua University.³ The university's current chancellor is Nasser H. Paydar, who has been widely credited and praised as the first higher education leader to launch the Indiana University China Office in 2015, as part of the IU Global Gateway Network. The gateway offices support scholarly research and teaching, conferences and workshops, study abroad programs,

² The Kelley–Manchester Global MBA Program offers students the opportunity to earn two MBAs, one from the Kelley School in the United States, and one from the Alliance Manchester Business School in the United Kingdom. The joint MBA program provides students with professional development and a global literacy that enables them to succeed in today's complex and interconnected business world.

³ Tsinghua University in China and the Kelley School of Business offer a joint MS in Finance. The program is taught in both Chinese and English, focusing on global financial rules and regulations.

distance learning initiatives, executive and corporate programs, and alumni events (IUPUI Office of International Affairs, 2021).

Sun Yat-sen University (SYSU)

SYSU was founded in 1924 by Dr. Sun Yat-sen in the Guangdong Province of China. Dr. Yat-sen was the first president and founding father of the Republic of China and believed that a great university must have a vibrant community of teaching and scholarship characterized by its revolutionary spirit. Today, SYSU is a comprehensive research university with an enrollment of over 50,000 undergraduate and graduate students in its five campuses in Guangzhou, Shenzhen, and Zhuhai. SYSU's mission is "to advance knowledge and educate students in arts, science, technology, and other academic areas that will best serve the nation and the world in the 21st century" (SYSU Website, 2021). The University adheres to the socialist orientation of higher education, focusing on the fundamental task of nurturing virtue and talents. SYSU is the only university to have established a Center on Philanthropy in Mainland China in partnership with the Indiana University Lilly Family School of Philanthropy. SYSU is a member of Project 985 and Project 211 and has been consistently ranked in the top 10 universities in mainland China⁴.

IUPUI-SYSU: Overview of International Dual Degree Programs

IUPUI-SYSU currently offers six dual degree programs and no joint degree programs. Specifically, all six of the dual degree programs between IUPUI and SYSU are at the undergraduate level held at the Indianapolis campus. The six dual degree programs are: 1) B.S. in business, 2) B.S. in media arts and sciences, 3) B.S. in public affairs, 4) B.S. in mechanical engineering, 5) B.S. in mathematics, and 6) B.S. in computer science. The Indiana University system has a total of 23 dual degree programs and no joint degree programs. Of the 23 dual degrees, six of the dual degree programs are held at SYSU in partnership with IUPUI. The other 17 dual degree programs are at the flagship campus of Indiana University Bloomington. Of the 23 dual degree programs at Indiana University, 22 should importantly be noted as bring from Asia and only one from Europe. Additionally, of the 23 dual degree programs, 17 are at the graduate-level, and 6 are at the undergraduate level. All six of the undergraduate dual degree programs are at SYSU. In turn, SYSU offers about 24 international joint and dual degree programs.⁵ Of the 24-joint and dual degrees, eight are with the United States and twelve are with the European Union.

DISCUSSION

Perspectives, Issues, and Opportunities

The IUPUI-SYSU collaborative academic degree program serves as an excellent model other institutions around the world could consider when establishing and creating international dual degree programs during the COVID-19 era. IUPUI-SYSU is considered one of the first dual degree programs

⁴ See, for instance, the Academic Ranking of World Universities: <http://www.shanghairanking.com/World-University-Rankings-2020/China.html>. Also see Times Higher Education Rankings: <https://www.timeshighereducation.com/student/best-universities/best-universities-china>

⁵ The 24 cross-border collaborative academic degree programs are with the following university partners (in no specific order): Carnegie Mellon University, Johns Hopkins University, Northern Illinois University, Indiana University-Purdue University Indianapolis, Oklahoma State University, University of Cincinnati, University of Virginia, Vermont Law School, Lancaster University, University of Strasbourg, Griffith University, University of Surrey, University of Birmingham, University of Waterloo, Karlsruhe Institute of Technology, ETH Zurich, Grenoble Institute of Technology, Institute Mines-Telecom, Chimie ParisTech, Rotterdam School of Management, University of Technology Sydney, University of Alberta, Lingnan University, and the Chinese University of Hong Kong.

between the United States and Mainland China prior to the great economic recession in 2009. IUPUI enrolls a large proportion of international students, with a total of 1,850 foreign students during the 2019-2020 academic year (IUPUI Office of International Affairs, 2020). Its flagship campus, Indiana University Bloomington, enrolled 6,331 international students and was ranked with the top 35 receiving institutions among doctoral-granting universities in the United States (Institute of International Education, 2020). Similarly, SYSU enrolled 4,183 foreign students around the world during the 2019-2020 academic year (*U.S. News Report*, 2021). While the program is strong in terms of policy structure and enrollment, one of the challenges facing the dual programs is the incorporation of the IUPUI General Education Core. The IUPUI ACE Internationalization Laboratory Report (ACE, 2014) states that the “Development of 2+2 agreements with international institutions have become more challenging since the curricula must be designed to incorporate the IUPUI General Education Core” (p. 169). This result is not surprising as the survey by ACE (2014) indicated that general education requirements are one of the biggest challenges U.S. institutions face when working with foreign institutions.

In addition to general education policy requirements, IUPUI has also experienced academic challenges and issues pertaining to housing and accommodation for international students in Indianapolis, IN. According to the IUPUI laboratory report (ACE, 2014), institutional leaders expressed concerns that SYSU students who enroll in dual degree programs will likely not find on-campus accommodation at IUPUI. The IUPUI laboratory report predicted that “beginning next year, there could be an additional 200 students from Sun Yat-Sen University (SYSU) under the 2+2 agreements with various schools at IUPUI” (p. 165). Because IUPUI is designed as a commuter school rather than as a residential campus, the lack of on-campus housing for Chinese students will likely pose a significant challenge for a long-term successful partnership.

A third challenge outlined in the IUPUI laboratory report (ACE, 2014) is the lack of U.S. faculty members and staff working at SYSU. Specifically, the IUPUI laboratory report expressed concerns that some IUPUI faculty members and/or staff are resistant to conducting collaborative research projects with China, likely due to a misalignment of their viable scholarly interests, or fear of losing access to Western archives at their home institution. The IUPUI (ACE, 2014) report also indicated that a large number of IUPUI scholars and staff have never traveled to China, much less to SYSU, to assist with the development process of their dual degree program. This policy challenge is not at all surprising given that the ACE (2014) survey found that a small percentage (15%) of American faculty, staff, and students reside in dual degree partner institutions. IUPUI (ACE, 2014) concluded in its report that the university should hire a U.S. liaison to represent IUPUI in Guangzhou, which could help the institution further cultivate and sustain key relationships with faculty members and staff at SYSU, and “[maximize] enrollment through the Sun Yat-sen University 2 + 2 programs” (p. 169).

CONCLUSION

This article highlights the growing complexities and nuances of developing international joint and dual degree programs during the COVID-19 era. Specifically, this article outlines the juxtaposition between the policy positions of implementing international joint and dual degree programs and collaborations and cooperation among and within stakeholders. While a common consensus and understanding exists on inter-institutional collaborative degree programs, the lack of institutional rules, rituals, and policies in place, as well as cultural differences and preferences, is a major source of concern when developing future international joint and dual degree programs. As Bamford (2020) noted:

The complexities of student experiences are evidenced both in terms of the students' differing cultural backgrounds and their responses to the challenges of different cultural encounters in the classroom and with regard to the cultural experience of participating in an international joint double degree, such as navigating different national cultures and different pedagogic approaches (p. 139). Needless to say, this article seeks to provide institutional leaders and policy leaders with policy-relevant information in the world of TNHE, especially considering the greater interest in international joint and dual degree programs during the COVID-19 pandemic. While this article is not meant to be exhaustive by any means, it does pinpoint that no two dual or joint degree programs are identical or even similar. Instead, each international collaborative degree program serves different purposes, functions, and meanings in the global landscape of higher education, and those differences vary by type, location, size, and prestige of each institution.

Future research should examine the impact international joint and dual degree policies have on internationalizing higher education, the role international joint and dual degrees have in shaping the internationalization of curriculum, the value that is added for students who complete cross-border collaborative degree programs, and the effects of outward and inward mobility scholarship programs (e.g., China's National Merit Scholarship) on access to and completion of joint and dual degrees (Bamford, 2020; Jiang, 2021; Li & Haupt, 2021). Additionally, new collaborative research that uses advanced quantitative or qualitative research methods is vastly needed in order to understand the academic policies regarding course equivalencies, credit transfers, grading/evaluation methodologies, and general education requirements; the institutional policies regarding accreditation policies and procedures, quality assurance standards, articulation agreements, study abroad programs, and student exchange agreements; and the campus policies regarding academic freedom, academic integrity, faculty, and student expectations, health and safety, and off-campus housing, all in relation to international joint and dual degree programs (Hou et al., 2016; Zheng, et al., 2017). This research is also essential for communicating policy-relevant information to policy leaders, international consultants, and social entrepreneurs during and after the COVID-19 pandemic (McAllister-Grande & Whatley, 2020).

Recommendations: Policies and Applications

Given the ongoing restrictions and uncertainties of the COVID-19 pandemic, this paper illustrates that measuring the effectiveness and sustainability of international joint and dual degree programs is a major source of concern (Lafleur, 2018). As recommended by Li and Haupt (2021), however, "higher education institutions should envision TNE as a central segment of international higher education in the post-pandemic era, given that student mobility is expected to take years to recover" (para. 4). Hence, the benefits of evaluating and critiquing the policy formation of international collaborative degree programs like IUPUI-SYSU may be crucial to further assist policymakers and institutional leaders in developing these programs during and after the worldwide COVID-19 pandemic, as evident in Yu's (2020) and Ergin and Leal's (2020) studies. Below are five recommendations university leaders and policymakers should consider when developing international joint and dual degree programs during the COVID-19 era.

1) *Establish clear expectations and maintain shared governance on general education requirements:* As evidenced by the discussion concerning general education requirements, greater communication about curricular expectations should be fostered. Dual and joint degrees pose reputational risks to both IUPUI and SYSU and, therefore, must be carefully evaluated. Higher education leaders in

SYSU should clearly communicate their intended goals, purposes, and missions that align with the IUPUI General Education Core (Gallagher, 2021). At the same time, IUPUI should consider hiring an academic advisor or coach who can meet with students remotely to ensure that students enrolled in the dual degree program complete their general education requirements (Arshakin & Wang, 2017). Degree-granting collaborative programs should be a two-way street, meaning that both institutions are working together between faculty members and staff (Chevallier, 2013). A roadmap from the Office of International Affairs may be helpful to ensure communication flows smoothly between the two universities (West, 2021).

2) *Improve communication between academic affairs and student affairs offices concerning international student housing*: As evidenced by the discussion concerning international student housing, institutions should ensure that the necessary resources and infrastructure are in place to meet future needs. Because IUPUI is classified as a commuter, non-residential campus, higher education leaders should consider establishing key partners with several hospitality agencies or hostels across the state of Indiana to ensure that students could pursue their dual degree program at or near the campus (Lafleur, 2018). IUPUI should consider developing relationships with external partners, donors, or venues who has the capacity to fund and house a growing number of Chinese students in Indianapolis (IUPUI Office of International Affairs, 2020).

3) *Create policies that foster inter-institutional collaboration and cooperation*: Higher education institutions in the United States and China should actively collaborate with national governments and organizations in the policy design, implementation, and operation of international joint and dual degree programs (Conner-Rondot, 2017; Lafleur, 2018). Specifically, campus leaders from IUPUI should collaborate with the international offices, general counsels, faculty members, and upper-level administrators at SYSU in determining appropriate university policies and procedures for their dual degree programs (Gallagher, 2021). The memorandum of understanding (MOU) approved by the IUPUI president should establish, identify, and clarify the rationales, goals, and purposes of such partnership with key governmental level actors (Appendix A). This requires IUPUI and SYSU to hold deep, frank conversations on several policy alternatives, including issues with accreditation standards and quality assurance policies, enrollment planning policies and management procedures, and legal regulatory procedures and practices (Hou et al., 2016; 2017). However, achieving this policy outcome or agenda requires senior leaders and governmental actors to possess a flexibility and adaptability to be able to address what may not be originally planned or scheduled in the partnership or MOU agreement (Zheng et al., 2017). The IUPUI laboratory report (ACE, 2014) emphasized the need to “build a critical mass of IUPUI faculty prepared to engage in international research and collaboration through best practices in international partnerships” (p. 29).

4) *Create a top-down approach to policy decisions*: Institutional leaders (the president, deans, chairs, coordinator, senior international officers) at both IUPUI and SYSU should implement top-down elements into their policy decision-making processes, rather than bottom-up approaches, when establishing new proposals to enhance the cross-border collaborative degree agreements (Gallagher, 2021). This requires upper-level administrators from both IUPUI and SYSU to remain proactive on both sides through open dialogue and communication so as to prevent any unanticipated growth (Lafleur, 2018). The IUPUI laboratory report (ACE, 2014) stated, “Define the criteria for relationships with other universities to move along the continuum from faculty-to-faculty informal collaboration to a small number of full and formal university-to-university partnerships, defined by IU as a ‘quality international agreements that have substantial levels of activity’” (p. 29). Namely, international educators should embrace cross-cultural

communication when articulating clear institutional policies, procedures, and guidelines for future development. Cross-cultural communication is crucial because any changes during the course of implementation may require face-to-face or at the very least online dialogue. By developing mutually beneficial collaborations and relationships, international educators from both IUPUI and SYSU can work together with a shared mission and goal to further the commitment of their inter-institutional collaborative partnership (Chevallier, 2013; Gatewood, 2020; Lanford, 2020).

5) *Engage with governmental associations and governmental agencies*: Institutional leaders from IUPUI and SYSU should work with international higher education governmental associations (e.g., ACE, IIE, Association of International Education Administrators (AIEA), Association of Public Land Grant Universities (APLU), NAFSA, China Education Association for International Exchange, Asia-Pacific Quality Network, International Association of Universities (IAU), International Network of Quality Assurance and Accreditation of Higher Education) individually and collectively to develop, implement and design a common conceptual framework or paradigm that encourage institutional leaders to deepen their policy commitment for international collaborative degree programs (West, 2021). Colleges and universities must not relax key quality standards or procedures in the rush to build international connections. Instead, international educators at IUPUI should consider their domestic policies first when establishing international joint and dual degree program requirements, such as course transfers and course equivalencies. This is because, oftentimes, one size does not fit all (Gallagher, 2021). In addition, governmental agencies such as OECD and UNESCO should work with international leaders to define, assess, and differentiate among the various modes of TNHE (Jiang, 2021). International agencies have a uniquely powerful and privileged capacity to advise and assist countries in the formation, adaptation, and succession of policies related to TNHE activities within both developed and developing economies (Lee, 2021; Zheng et al., 2017).

In summary, this article outlines that adopting flexible and inclusive policies will be able to help remedy or address the ongoing issues facing international joint and dual degree programs or collaborative academic degrees. While no single policy will ever be able to address all issues, this article suggests that working collaboratively to identify policy problems will help institutions enhance their capacity, expertise, and training opportunities for their faculty, staff, and students. IUPUI and SYSU have launched a series of policies, procedures, and reform strategies during the COVID-19 pandemic to encourage, regulate, and guide policy leaders and institutional leaders on the succession of their program. Future research should continue to investigate the integrity and sustainability of international joint and dual degree programs, along with the best path for accreditation, whether national, binational, regional, or international accreditation during the COVID-19 era.

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**Appendix A. Indiana University-Purdue University, Indianapolis (IUPUI)-Sun Yet-sun University
(SYSU): Memorandum of Understanding (MOU)**



MEMORANDUM OF UNDERSTANDING

BETWEEN

THE TRUSTEES OF INDIANA UNIVERSITY (U.S.A.)

AND

SUN YAT-SEN UNIVERSITY (P.R.CHINA)

Sun Yat-sen University in Guangzhou, Guangdong Province, P.R.China and the Trustees of Indiana University ("Indiana University") in the State of Indiana, U.S.A. (each a "Party" and collectively, the "Parties"), to foster academic exchange and cooperation, enter into this Memorandum of Understanding ("MOU") on this [] (the "Effective Date") and hereby agree as follows:

1. The Parties shall encourage the following activities in particular:
 - a. Exchange of academic materials, publications and other relevant information
 - b. Exchange of professors and research staff
 - c. Exchange of students, collaborative education programs
 - d. Joint research and meetings for research
2. These activities shall be carried out after mutual consultation between the Parties or the divisions thereof. The Parties shall enter into a letter of agreement setting forth the responsibilities of the Parties for each agreed activity and such other matters as the Parties agree are necessary for the efficient achievement of the activity. Each such letter of agreement, prior to becoming effective, shall be vetted in accordance with each Party's internal policies and procedures and signed by an authorized representative of each Party.
3. This MOU shall be effective upon signing by both Parties and shall remain in effect for five (5) years from the Effective Date. The Parties shall discuss the renewal or extension of this MOU at least one (1) year prior to the intended termination date. This MOU may be terminated at any time by either Party with six (6) months written notice. Such termination shall not affect the obligations already in progress.
4. This MOU may be amended any time by the written mutual consent of both Parties.
5. Each Party shall send communications or notices pertaining to this MOU to the other Party at the relevant address set forth below or to such other address designated by that other Party through written notice.

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 Fax: +86-20-8403-6860
 Email: adsxy@mail.sysu.edu.cn, guoll3@mail.sysu.edu.cn

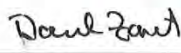
6. Each Party grants, for the term of this MOU, a limited, non-exclusive, royalty-free license to use its logo and name, to the other Party, solely for the promotion of this MOU and any joint programs and projects developed hereunder. Except as otherwise set forth in this paragraph, each Party agrees not to use the other Party's name, trademarks, or other intellectual property in any manner whatsoever without prior written consent in each instance.
7. In the event of a dispute arising out of or relating to this MOU or any letter of agreement entered into pursuant to this MOU, the Parties shall establish a committee of six (6) senior representatives, three (3) appointed by each Party, to attempt to resolve the dispute.
8. While no commitments have been made by the Parties binding the two institutions, the Parties sign this MOU in recognition of their common interests and as a token of good will.
9. This MOU is executed in both Chinese and English, each of which shall be deemed equally authentic, and each Party shall hold one copy.

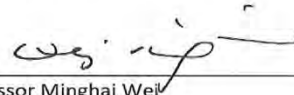
For
The Trustees of Indiana University

For
Sun Yat-sen University


 Michael McRobbie
 President
 Date: _____


 Professor Luo Jun
 President
 Date: June 26, 2015


 David Zaret
 Vice President for International Affairs
 Date: 28/8/15


 Professor Minghai Wei
 Vice President
 Date: June 29, 2015