commodified. According to World Bank data on payments and purchases of intellectual property by the United States, Brazil, Argentina, and Chile (Balance of Payment, US$) during 2017, the United States profited by US$79 billion, whereas Brazil lost US$4.5 billion, Argentina US$2.1 billion, and Chile US$1.4 billion. This data demonstrates the unequal financial dynamics of the knowledge economy and exemplifies the importance of knowledge production for development. Intellectual property consumption results in a financial deficit for countries that create less knowledge. Given these current inequalities, maintaining the same global structure and the same national stratification, especially for low knowledge producers, is not the answer.

Training Graduate Students

Research and teaching do not have to be mutually exclusive and faculty work in these areas is not always zero-sum. Training graduate students is especially important in the current knowledge society. Students today must be skilled in the research process, whether or not they become academics, in order to recognize rigorous research as well as understand how to participate in it. Given the challenge for students worldwide to access top institutions as a result of stratification, knowledge creation should be a core educational component across all university types.

Research Capacity Building

In the current knowledge society, students and scholars, particularly in nonresearch universities, should learn how to be active contributors of knowledge, rather than mere consumers. Especially in low-income countries lagging behind in research production, capacity building should integrate research and teaching.

Additional promising strategies to build knowledge production capacity include investing in and monitoring research funding, creating reputable publication outlets and monitoring predatory journals—as well as educating students (undergraduate and graduate) about the difference—and rewarding meaningful research that addresses local needs and informs local and international audiences.

Final remarks

In sum, global knowledge production would be severely weakened if the recommendation of limiting the types of institutions or the categories of faculty conducting research was followed through. Moreover, simple solutions do not fix complex problems—and may create even worse challenges. The message cannot be to dissuade particular types of universities or categories of faculty from doing research. The problem with such utilitarian approaches is that they do not change the status quo and serve to justify cultural hegemony. Reducing the number of research publications may weaken the market for predatory publishers and might address some forms of corruption but would also limit the participation of marginalized groups. The future of research, teaching, and service is to be innovative, interdisciplinary, and borderless. Limiting research to elite universities will not change the current global order. At present, knowledge and wealth are inextricably linked; only if we start changing the dynamics of this order can we start reducing inequality gaps within and across countries. ■

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China–US Cooperation in Higher Education: A Critical Stabilizer

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As the United States and China were engaged in normalizing relations in the late 1970s, Chinese leader Deng Xiaoping became adamant that China should have "a thousand talented scientists" who would be recognized around the world. By "trumpeting the need for more qualified scientists and engineers," Deng wanted quick approval to send several hundred Chinese to study at top American universities. Over the past 40 years, diplomatic relations between the United States and China have steadily grown, even considering periodic strains over economic, political, and military issues. Expanded economic and financial interdependence along with finely tuned statecraft have ensured that cool heads prevailed in times of stress, and thus cooperation across a wide array of domains has seemingly kept expanding over the last several decades.

Trumping Out a Thousand Talents

Unfortunately, those days of relative calm and foresight may be ending abruptly thanks to the Trump-initiated trade war, which Alibaba's Jack Ma says, "may last for 20 years if it's unfortunate." And there are emerging signs that US–China cooperation in higher education may be in for a serious jolt for the first time in four decades. Even the-

most optimistic observers must admit that we already have entered a somewhat "rough patch." China's Thousand Talents Program (TTP), which brought around 7,000 top-level scientists and researchers back to China over the 10 years of the program, the majority from the United States, may be the first target. That strategic program is now viewed by the US National Intelligence Council as a potential means to transfer sensitive technologies to China from the United States. China views it as an American effort to constrain China's rise, especially its progress in science and technology, business, and manufacturing. Of particular concern to the United States is the Chinese "Made in China 2025" program, which aims to catapult the PRC into the ranks of the world's top technological leaders. The ubiquitous US News show "60 Minutes" revealed proactive investigations of Chinese scholars in the United States resulting in potential permanent career damage. US universities may not fire TTP scholars, but it could affect the federal funding of various American universities. China insists that TTP is intended to recruit world-class scientists, and not to grab critical American industrial know-how.

More Chinese scholars may be convinced to head to European universities instead of the United States.

After decades of goodwill in academic exchanges between China and the United States, the Trump administration seems anxious to put a damper on the entire network of collaborative relationships. In May, the Trump administration announced that the validity of visas issued to Chinese graduate students studying in STEM (science, technology, engineering, and mathematics) related fields, especially robotics, aviation, and high-tech manufacturing, would be limited to only one year. Many Chinese scholars in the United States are beginning to feel that they are under suspicion. This sentiment also is increasing toward Chinese-American citizens more generally, according to Chi Wang, former head of the Library of Congress's China section, who worked for the US government for 50 years.

A Bonus for Australia, Canada, the European Union, Israel, and Russia

More Chinese scholars may be convinced to head to European universities instead of the United States. The United States' withdrawal from several multilateral agreements, including trade pacts in Asia, has produced a vacuum at a time when China has become more outward looking with its new 60 plus country "Belt and Road initiative." China clearly is willing to take advantage of the vacuum left by the United States. The so-called "post-American" world will likely open significant new opportunities for expanding Europe's cooperation in higher education and research with China.

The real worry is that the ongoing trade war between Beijing and Washington could slow down scholarly exchanges and collaboration between China and the United States—just at a time when Chinese scientific and technological progress offers more and more to American partners. While such a slowdown could affect China's science and technology ambitions as it strives to transform from a manufacturing-led to an innovation-driven economy, the Chinese will likely turn to new cooperative partners such as Israel and Russia as well as the European Union, Canada, and Australia. While US actions may increase PRC anxiety, we must remember that Chinese leaders have great patience and strong determination; they will adapt and find ways to strengthen university partnerships outside the US domain. Hostile policy toward Chinese students and scholars by the US government may make good election strategy for the Trump administration, but it ignores the fact that the solution to almost every major global issue will require some form of close Sino–US consultation as well as cooperation.

Recalibrating for Resilience and Sustained Cooperation

Fortunately, most US campuses in China are not encountering serious difficulties. One exception is the relationship between Cornell University and Renmin University in the field of industrial and labor relations; Cornell apparently has decided to withdraw from that relationship because of issues surrounding academic freedom. That recognized, at a recent Forum in Beijing cosponsored by the China Education Association for International Exchange and Duke Kunshan University, the consensus was that Sino–American cooperation in higher education within China remains quite steady and vibrant. The degrees of major American university campuses in China still are accredited in the United States. If academic freedom on these campuses were seriously curtailed, it could end the authority of the US campuses in China to issue degrees that are equivalent to those at the home campuses. This would undermine the foundation of most cooperative education joint ventures.

At the September 27, 2017 US–China University Presidents Forum held at Columbia University, Henry Kissinger, the architect of US–China relations that led to normalization in 1979, said that the only alternative to positive relations between Washington and Beijing is global disorder. At that meeting, China's then Vice-Premier Liu Yandong said

that China and the United States should enhance people-to-people exchanges to build stronger ties where the two countries have the least disagreements and the most consensus. Sino–US competition on the annual university international rankings may become more intense as PRC universities strive to attain world-class status, but that pales in comparison to what strong bilateral university relations means for addressing global problems and maintaining geopolitical stability. Before Trump, China–US ties clearly were more resilient and dynamic. The two countries could carry out strategic and forward-looking dialogues around critical issues for mutual benefit. At present, universities in both countries may not be able to eliminate the trade distortions and confrontations that currently occupy the attention of the Trump and XI Jinping administrations, but there is much they can do to keep US–China relations on an even keel as the relationship reconfigures itself to better reflect current political and economic realities. Students from both countries eventually will become future leaders in government, business, and academia; hopefully, greater mutual understanding developed through cooperative learning and cross-cultural exchange will help to soften some of the current mistrust and pave the way for more reasoned and balanced conversations in the years ahead. ■

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Not Your Parents' Internationalization: Next Generation Perspectives

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Internationalization of higher education is generally considered to be a "young" phenomenon—as a field of inquiry, an area of professional practice, and a strategic undertaking for higher education institutions. Even so, there is today a sizable corpus of published material on the subject, and a recognized cadre of experts whose work has shaped the field in profound and long-lasting ways. The contemporary "founders" of the study of internationalization stand out for the contributions they have made in proposing and defining key terms, positing conceptual frameworks, shaping relevant debates, drawing the attention of a multitude of stakeholders, and connecting theory with policy and practice.

The intellectual evolution of internationalization has occurred in tandem with the development, around the world, of a community of organizations dedicated to serving international education through programming, knowledge development, and/or professional training for those working in this field. Some of these organizations are decades old, including the Institute of International Education in the United States, which celebrates 100 years in 2019; the German Academic Exchange Service (DAAD), founded in 1925; NAFSA: Association of International Educators, which was established in the United States in 1948; and The Netherlands-based European Association for International Education, which dates from 1989. These entities—and the plethora of related organizations and associations that operate at national, (sub)regional, and (inter) continental levels around the world—have set the scene for much of the conversation and the action agenda connecting international education globally. Indeed, the founding scholars and organizations in international education have had an immensely influential role in determining how we understand and enact internationalization in higher education worldwide.

Acknowledging both the utility and the "baggage" that the past provides, important questions arise as we simultaneously reflect on where we have come from and where we are headed, as we hurtle toward the end of the second decade of the twenty-first century: How and in what ways can "next generation" perspectives on internationalization of higher education lead us meaningfully into the future? Why does innovation—both in terms of sources of information and content—matter? From our perspective, the increasing complexity of the global higher education landscape, the rapid evolution of internationalization dynamics, and the high stakes connected to quality in higher education and human capital development in a global context, make it crucial to (re)focus the conversation on internationalization across new modes, new contexts, and new topics. Considering these matters through a collection of new voices from around the world is also vital, if we are serious about understanding and responding to the possibilities and challenges that lie ahead.

New Modes, New Topics, New Contexts

Previous exploration into various data sources has given us a clear indication that research on higher education is overwhelmingly concentrated in a relatively small number of research centers located in a select number of (wealthy, largely English-speaking) countries. Furthermore, research output specifically on internationalization in higher educa-