## The Future of the U.S.-China Educational Exchanges By Mustapha Dukuly (Columbia University)

As China and the United States grapple with issues of intellectual property theft, cybersecurity concerns, and competition for technological supremacy, their once symbiotic relationship in education is now in jeopardy. By "symbiotic" I mean the mutually beneficial exchange of knowledge, talent, and resources that has characterized the U.S.-China educational cooperation for decades. American universities have benefited from the influx of talented Chinese students and researchers, while China has gained access to cutting-edge research and educational practices. This reciprocal relationship has fostered innovation, cultural understanding, and economic growth for both nations. However, in recent years, the U.S. has imposed restrictions on Chinese students and scholars to facilitate the transfer of technologies critical to national security and economic competitiveness to China, while China has tightened its control over academic freedom and foreign influences on its campuses. These actions tend not to only hinder the flow of knowledge and talent between the two nations but also undermine decades of progress toward a more collaborative relationship with far-reaching implications for both countries and the global community.

On the Chinese side, the government has sought to assert greater control over the academic sphere, including through tighter <u>ideological oversight of universities</u>, <u>restrictions on foreign</u> <u>textbooks</u> and online resources, and pressure on Chinese scholars to align their research with national priorities. This has raised concerns about academic freedom and the openness of China's education system to international engagement.

While legitimate security concerns exist on both sides, current restrictions risk eroding the trust essential to US-China educational exchanges. This hinders the flow of knowledge and talent, fostering suspicion that could damage the broader relationship and jeopardize global stability. In this tense environment, educational exchanges are more crucial than ever for maintaining dialogue and collaboration. The US and China must prioritize finding a sustainable framework that balances security with the vital principles of openness, reciprocity, and mutual benefit. Though difficult, the stakes are too high to let this bridge between two major global powers collapse.

## The Power of Educational Exchange: Beyond Dollars and Diplomas

The magnetic pull of American universities and the rapid rise of Chinese talent have fueled an unprecedented era of educational exchange between the two nations. In just four decades, what began as a trickle of <u>52</u> Chinese scholars sent to the U.S. in <u>1978</u> had surged to over <u>289,526</u> by <u>2023</u>, with more than half pursuing STEM degrees. However, this remarkable growth has had its challenges. In recent years, the number of Chinese students in the U.S. has begun to level off and even decline, dropping by <u>8.6%</u> in the <u>2020-2021</u> academic year. This trend has been driven in part by the tightening of U.S. visa policies, as well as by growing concerns among Chinese students and parents about safety, discrimination, and the overall climate for international students in the U.S. On the other hand, while the number of American students in China had grown to around <u>15,000 per year</u> at its peak, that figure has also declined sharply in recent years, falling by more than <u>50%</u> between <u>2019</u> and <u>2021</u>. This drop can be attributed to a combination of factors, including the <u>COVID-19 pandemic</u>, rising geopolitical tensions, and growing concerns about <u>academic freedom</u> and safety for American students in China.

The benefits of this U.S.-China educational exchange have been substantial for both sides. Chinese students and researchers have made immense contributions to U.S. innovation, particularly in cutting-edge fields like artificial intelligence, where <u>around 27%</u> of top researchers are China-born. Their intellectual dynamism and global perspectives have enriched American campuses and labs while returning students have been a key conduit for knowledge transfer fueling China's rapid development.

For the U.S., Chinese students and researchers have been an indispensable source of talent and innovation. They have pioneered groundbreaking research, launched thriving startups, and helped maintain America's edge in critical fields like artificial intelligence, biotechnology, and quantum computing. According to <u>NAFSA's report</u>, Chinese students contributed a whopping \$15.9 billion to the U.S. economy in 2018 alone through tuition, housing, and other spending.

But the value of these exchanges goes beyond dollars and diplomas. They have fostered a reservoir of goodwill and understanding between the American and Chinese people. For many Chinese, <u>studying in the U.S. is a formative experience</u> that shapes their worldview and leaves them with a lifelong appreciation for American culture and values. For Americans who study or work in China, the experience can be equally eye-opening, challenging stereotypes and revealing the nuances of a

rapidly evolving society.

These grassroots connections have long been a stabilizing force in the often-rocky U.S.-China relationship. During the dark days following The Tiananmen Square Crackdown in 1989, it was the network of the U.S.-educated Chinese officials and scholars that helped keep lines of communication open and prevent a complete rupture in relations. More recently, as tensions have spiked over trade, Taiwan, and technology, the voices of moderation on both sides have often been those with deep personal ties to the other country.

## The Economic and Social Risks of Decoupling

The erosion of the U.S.-China educational exchanges carries grave economic consequences that demand urgent attention. As artificial intelligence and other disruptive technologies reshape the global labor market, the United States risks a critical shortage of skilled workers in the very fields that will drive the economy of the future.

Consider the projections: A 2022 report by the Center for Security and Emerging Technology estimates that the U.S. could face a shortfall of <u>30,000 AI experts by 2025</u> if restrictions on Chinese researchers continue. Losing access to this vital talent pool could undermine America's innovation edge and competitiveness in the industries of the future.

But the risks go beyond economics. As the <u>U.S. and China decouple</u>, the social fabric that has bound the two societies together is fraying. Educational exchanges have long fostered a web of personal relationships and cultural understanding that humanize the other side and temper the impulse toward conflict. Without these stabilizing ties, misperceptions and hostilities are likely to multiply.

Moreover, as the global challenges of the 21st century - from climate change to <u>public health crises</u> to the ethical implications of AI - grow increasingly complex, solving them will require unprecedented cooperation between the U.S. and China. That cooperation depends on a foundation of mutual understanding and trust, one that is built through people-to-people ties and sustained collaboration.

If educational decoupling continues, the U.S. and China risk not only economic loss but a dangerous empathy gap, one that could have catastrophic consequences in the event of a crisis. The costs of

conflict between the world's two largest economies would be incalculable, not just for them but for the entire global community.

#### **Exchanges Under Threat: Finding Solutions**

Educational exchanges between the U.S. and China, which have historically strengthened their relationship, are currently facing significant challenges. The U.S. has tightened visa restrictions, launched investigations into researchers' links to China, and proposed cuts to exchange programs due to concerns about <u>espionage and technology transfer</u>. This has resulted in a <u>chilling climate for</u> <u>Chinese</u> students and scholars are reporting heightened feelings of suspicion and alienation. The Asian American Scholar Forum (AASF) has raised concerns about multiple incidents of Chinese American scientists, academics, and scholars being harassed or interrogated at <u>ports of entry</u>, which they believe are based on their background or ethnicity. These incidents involve U.S. citizens of Chinese descent or their family members being interrogated for hours, leading to increased fear and concerns about being targeted and surveilled within the community. AASF Executive Director <u>Gisela</u> <u>Perez Kusakawa</u> stated that these incidents cement the perspective for Chinese American scientists, researchers, and scholars that they can be subjected to heightened scrutiny, investigation, and surveillance, despite their contributions to the country.

In China, increased censorship, political interference, and surveillance complicate research for American scholars. The consequences of this narrowing space for academic dialogue are far-reaching, impacting both individual scholars and also extends to topics deemed politically sensitive by the Chinese government. A case in point is the 2022 denial of a visa to an American Human Rights professor, Ryan Thoreson, known for advocating for LGBTQ rights and developing capacities in human rights research and training. While the reason remains unclear, both the university and the professor were left without a specific explanation. However, the professor's past work on promoting equal rights and social justice raises questions about whether these broader themes may have also played a role in the decision. This climate of restriction has fueled self-censorship among foreign academics, who fear that their research or teaching activities may jeopardize their visas or access if they address sensitive topics.

These academic barriers reflect the deep political sensitivities between the two nations, exacerbated by the <u>U.S. Department of Justice's "China Initiative</u>" (established in 2018 to combat economic espionage), and <u>China's assertive actions in the South China Sea</u>, stifling the free exchange of

ideas. Such restrictions not only impact individual careers but also threaten broader academic collaborations essential for fields ranging from technology to the social sciences. This cycle of suspicion and the resulting restrictions not only harm individual careers but also threaten larger academic collaborations that rely on trust and the free flow of ideas. When scholars cannot collaborate without fear of geopolitical consequences, critical research partnerships across various fields, from technology and science to humanities and social sciences, are put at risk..

To balance these security concerns with the benefits of collaboration—such as advancements in biotechnology and cancer research—both nations could implement measures like robust data encryption and establish collaborative oversight bodies composed of neutral experts. These bodies could be composed of:

- Senior researchers from top universities in the U.S. (e.g., MIT, Stanford), China (e.g., Tsinghua, Peking University), and countries like the UK (Oxford, Cambridge), Germany (Max Planck Institutes), or Japan (University of Tokyo);
- 2. Representatives from international scientific organizations like the International Council for Science or the World Academy of Sciences;
- 3. Former diplomats with experience in science and technology cooperation, such as those who have served on bilateral Science and Technology Committee;
- 4. Legal experts specializing in international intellectual property law and research ethics.

These steps would protect sensitive information while building trust necessary for fruitful partnerships. A recent Nature Index analysis highlights the <u>dramatic decline</u> in non-collaborative research between the two countries, underscoring the risks of prioritizing security over knowledge sharing. Implementing secure data-sharing protocols and establishing joint research oversight committees have proven effective, as seen in the recent agreement between Stanford University and Peking University, which includes provisions for joint ethical review of research projects.

Moreover, promoting open forums for debate on diverse topics enables critical thinking and idea exchange, crucial for academic progress and innovation. The <u>University of Chicago's</u> commitment to protecting controversial speech serves as a model for fostering a culture of intellectual openness essential for groundbreaking research, as seen in multicultural teams developing life-saving vaccines. Ensuring no restrictions based on nationality or ethnicity, as advocated by the <u>National Science Foundation</u>, is critical for maintaining a thriving academic environment.

In the end, prioritizing open discussion and debate on college campuses, as exemplified by the <u>China Focus Essay</u> Competition hosted by the Fudan-UC Center on Contemporary China, the 1990 Institute, The Carter Center, and the 21st Century China Center, is vital for fostering critical thinking and challenging perspectives.

### Rescuing Educational Exchange: A Path Forward for the U.S. and China

President Biden and President Xi Jinping recognize the importance of interpersonal ties, turning rhetoric into reality will demand bold action. President Biden has promised to increase funding for the <u>Fulbright program</u> and other educational exchanges, signaling a commitment to fostering mutual understanding. Similarly, <u>President Xi</u> has emphasized the need for direct exchanges and cooperation in education during his speeches. To turn these words into action, both leaders could take specific steps such as easing visa restrictions for students and scholars, creating new joint research projects, and establishing high-level dialogues on education cooperation. These actions would demonstrate a genuine commitment to rebuilding trust and promoting mutual understanding through educational exchange.

To achieve this, both sides must act quickly to rescue and reinvest in educational exchange. The U.S. could shift its approach towards targeted restrictions in sensitive research areas rather than broad bans, ensuring knowledge sharing in non-critical fields. Transparency in explaining these restrictions to universities and scholars could foster greater trust. Additionally, programs fostering a welcoming environment for Chinese researchers and students would reduce anxieties and promote healthy collaboration. Ultimately, by leading the way in setting global standards for ethical and secure research collaborations, the U.S. could create a system where clear rules and fair practices prevail. These shifts are essential to finding a balance between protecting critical national interests and remaining open to the benefits of educational exchange.

For China, rescuing educational exchange will require a realistic appraisal of how its own actions have eroded the confidence of American partners. Greater transparency around issues like research funding, intellectual property, and academic freedom could help rebuild trust. So too could a more open posture towards American scholars and students seeking to study and conduct research in China.

Critically, it also means redoubling investments in homegrown innovation and STEM education to

sustain America's competitive edge. By cultivating its own domestic talent pipeline, the U.S. can reduce its overreliance on Chinese students while still welcoming the best and brightest from around the world.

#### The Power of Institutions and Individuals

Beyond government actions, the real power to preserve educational ties lies with the institutions and individuals at the heart of these exchanges. American and Chinese universities can collaborate to develop joint educational programs and research initiatives focused on areas such as sustainable development, cultural exchange, and technological innovation, ensuring <u>transparent</u>, <u>reciprocal</u>, and a shared commitment to addressing global challenges. Scholars and students from both countries can actively promote the importance of open exchange, serving as influential advocates and informal ambassadors dedicated to fostering mutual understanding.

One particularly promising area for collaboration is artificial intelligence. As a transformative technology with immense implications for both countries, AI is a domain where U.S.-China cooperation could yield significant benefits. Joint research projects, subject to appropriate oversight and IP protections, could accelerate progress on shared challenges like climate change, public health, and disaster response. Moreover, by bringing together American and Chinese AI researchers, such collaborations could help establish norms and best practices to guide the responsible development of this powerful technology.

#### Conclusion

The vitality of the educational exchange between the U.S. and China must be preserved and renewed. Not as a panacea for all that divides these two nations, but as a crucial reminder of what unites them: a shared interest in global stability, prosperity, and innovation. In an age of existential challenges and transformative technologies, maintaining robust educational exchanges may be the most significant advantage we can secure. These exchanges are not merely transactions of knowledge; they are investments in a peaceful and prosperous future, enabling both countries to navigate the complexities of modern geopolitics not as rivals, but as partners in the pursuit of knowledge and the service of humanity.

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