

The Greater Bay Area (GBA) **Development Strategy and Its** Relevance to Higher Education

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Abstract

Purpose: This article provides a policy review of the Greater Bay Area (GBA) development strategies and their relevance to higher education.

Design/Approach/Methods: This article reviews key GBA policies adopted by the central government of China and interprets higher education cooperation policies at provincial and national levels before discussing the opportunities and challenges for higher education.

Findings: The GBA Development Strategy aims to build an integrated, innovative, and internationalized economy. It presents an opportunity for universities to attract new funding opportunities as well as to prepare graduates to play a key role in the GBA. The shift toward a high-tech service-led economy would hinge upon creating an effective partnerships platform between industry and higher education institutions. To do so would require greater institutional and professional autonomy for the academic research enterprises. There is also a need for evidence-based policies by the Central and GBA regional governments.

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Originality/Value: The article examines the state of the relationship between GBA strategies and higher education cooperation. It can be used to guide policies to promote higher education cooperation in the GBA in a more integrated, innovative, and internationalized way.

Keywords

China, Greater Bay Area, higher education

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Introduction

The Guangdong-Hong Kong-Macao Greater Bay Area (GBA) comprises the two Special Administrative Regions (SARs) of Hong Kong and Macao and the nine municipalities of Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen, and Zhaoqing in Guangdong Province. It covers an area of 56,500 km², with a resident population of more than 67.65 million. Because of its geographical location and economic significance in China's social and economic landscape, the central government has initiated the GBA Development Strategy, which is China's first official bay area regional development strategy that has risen to the national level (Chen, 2018). As with other important policy initiatives, the GBA Development Strategy starts with a general framework and will be enriched by additional policy measures. The policy framework is ambitious, dynamic, and subject to interpretation and negotiation by policy actors at different levels.

This review introduces key GBA policies adopted by the central government and gauges their implications for higher education cooperation. It starts with an overview and an interpretation of strategical goals, followed by an analysis of current higher education collaboration in the GBA. Finally, it highlights future challenges and opportunities.

The GBA Development Strategy, its policy origins, and the three "I"s

The GBA Development Strategy aims to create a connected and unified bay area that is comparable to those world's leading bay areas in San Francisco, New York, and Tokyo in terms of economic competitiveness and technique innovations. Yet, the Strategy itself does not start from scratch. It is the result of a series of policy reforms and evolvement that targets at the economic and social cohesion in the Pearl River Delta. The GBA Development Strategy originated from *The Outline of the Pearl River Delta Reform and Development Plan (2008–2020)* issued by the National Development and Reform Commission (NDRC, 2009). The *Outline* is the first time that the nine cities of the Pearl River Delta and Hong Kong and Macao were included together in one policy initiative. In March 2015, the concept of the GBA was first proposed in *The Vision and*

Action for Promoting the Construction of the Silk Road Economic Belt and the 21st Century Maritime Silk Road jointly issued by the NDRC, the Ministry of Foreign Affairs, and the Ministry of Commerce (Ministry of Commerce of the People's Republic of China [MCPRC], 2015). In March 2016, the concept of GBA appeared again in the 13th Five-Year Plan for National Economic and Social Development of the People's Republic of China (State Council of the People's Republic of China [State Council], 2016). Then, the GBA concept was included in the report of the 19th National Congress of the Communist Party of China in October 2017 and in the Government Work Report delivered by Premier Li Keqiang (March, 2018), which signified its rising, as a policy initiative, to the national level. In 2017, Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Greater Bay Area was signed (NDRC, July 2017). In February 2019, the Central Committee of the Communist Party of China and the State Council released the Outline Development Plan for Guangdong-Hong Kong-Macao Greater Bay Area, which is to guide the GBA's development ahead to the year 2035 (State Council, 2019). The policy framework finally came into shape.

The GBA Development Strategy represents China's regional approach to develop its economy and is a part of its overall regional coordinated development strategy. Other regional development strategies include the Belt and Road Initiative, Jing-Jin-Ji Coordinated Development Initiative, the Yangtze River Economic Belt, as well as the Yangtze River Delta Regional Integration Strategy. All regional development strategies aim at achieving a high-quality development and narrowing regional gaps by joint collaborations between different areas (State Council, 2018). Yet, each strategy is also different in terms of approaches and pillars because of their own geographic locations and economic structure.

GBA progress is supported by a triple "I" helix strategy of integration, innovation, and internationalization.

Integration

The policy initiative aims to promote China's two Special Administration Regions' economic and cultural integration with the Chinese mainland under the "one country, two systems" framework. Deeper cooperation for Hong Kong, Macao, and the mainland will be mutually beneficial. As noted by Xi (2017) in the 19th National Congress of the Communist Party of China: "We will give priority to the development of the Guangdong-Hong Kong-Macao Greater Bay Area, cooperation between Guangdong, Hong Kong, and Macao, and regional cooperation in the pan-Pearl River Delta, thus fully advancing mutually beneficial cooperation between the mainland and the two regions." It will leverage the advantages of Hong Kong and Macao, support their development, and bring prosperity to China and the international community.

Innovation

The policy initiative constitutes part of a nationwide regional development strategy framework to build an innovation economy. China will pursue a structural rebalancing from a labor intensive, low investment, export-oriented economy to a high-tech manufacturing, and service-based economy that relies more on domestic consumption. The GBA is considered to be China's most developed region with leading industries in the areas of manufacturing, financial services, and technological innovation which is key to its economic transition (Chen, 2018). It is no wonder that the GBA constitutes a new momentum for China's economic growth, a new channel for it to be engaged with the global economy and thereby a new engine for China's economic growth (Deloitte, 2018).

Internationalization

The GBA initiative serves as a catalyst for promoting China's economic internationalization. The 19th National Congress of the Communist Party of China stressed that "Openness brings progress, while self-seclusion leaves one behind" as well as "We must actively participate in and promote economic globalization, develop an open economy of higher standards, and continue to increase China's economic power and composite strength" (Xi, 2017). As Wang Yang (2018), the Vice Premier of the State Council, pointed out, it is necessary to deepen the openness of China's coastal economy and promote the deep structural adjustment of China's economy. A road map for opening up to the outside world in the coming period was drawn and a series of new tasks and new initiatives are planned (Xi, 2017). Among them are the Belt and Road Initiative and the optimization for an open regional layout. As the most open region to the outside world, the Greater Bay Area has an advantage in global economic positioning. As expected, it will play a key role in the Belt and Road Initiative and shoulder the responsibility of piloting more reforms to help China internationalize its economy.

Higher education collaborations under "one country, two systems"

The GBA has over 170 higher education institutions with a student population of more than 2 million. In addition, according to the 2021 QS world ranking, the GBA has five universities ranked among top 100 in the world (QS Ranking, 2021). The GBA colleges and universities will provide high-level human resources and become an engine for technical innovation. However, most higher education institutions are geographically concentrated in Guangzhou and Hong Kong. Their capacity to serve the GBA in an integrated way is a matter of concern. Another issue for stakeholders is that all five QS world ranked universities are located in Hong Kong. Since barriers to cross-system technology transfer and collaborations still exist, these top universities have some limitations in contributing to the structural rebalancing of the economy and to a high-tech drive in

hinterland of the Pearl River Delta (Xie et al., 2019). There is a need for policy innovations that reduce the barriers hindering technology transfer and higher education collaborations at the institutional level.

The first modern university in the GBA was Lingnan University, established in 1888 in Guangzhou. Two decades later in 1911, the University of Hong Kong was founded. By the 1980s, Macao had opened its first university. Before 1978, the year when China began its opening-up and economic reform, there were a small number of Hong Kong and Macao youth who studied in Guangzhou (Zhang, 2002). Back then, the number of higher education institutions in Hong Kong and Macao was small and student mobility was restricted by Chinese government.

From 1979 to the 1997 reunification of Hong Kong with the Motherland, the educational and academic contacts, cooperation, and partnerships were encouraged and grew rapidly. After 1997, GBA cooperation grew at all levels and took various forms. The number of cross-border educational and academic exchanges in both directions grew rapidly. This included student exchange programs, research projects, joint research centers and laboratories, and industry–university–research bases. Since 2009, the Hong Kong SAR and Macao SAR governments with the support of the central government initiated joint venture campuses in the Chinese mainland.

By 2020, GBA higher education collaborations evolved to take various forms under different policy schemes.

Documents

Exchange programs based on the Memorandum of Understanding signed by the two SAR governments and the Ministry of Education (MOE) encouraged student exchange at university level or college/department level across the GBA borders with mutual recognition of credits and academic qualifications among universities.

Enrollments

GBA student enrollment includes the two-way recruitment by universities across GBA cities. Universities in the mainland recruit students from Hong Kong and Macao under three schemes: individual enrollment, joint enrollment, and recommendation enrollment. "Individual Enrollment" began in the 1980s. Approved by the MOE, a small number of mainland universities such as Sun Yat-sen University and Jinan University are authorized to organize their own entrance examinations for students from Hong Kong and Macao and recruit students independently. "Joint Enrollment" is a scheme in which students in Hong Kong take the Joint University Program Admissions System (JUPAS) examination in Hong Kong every May. Nearly 300 universities, including those in Guangdong, recruit qualified candidates, based on their performance achieved in JUPAS. "Recommendation Enrollment" targets mainly Hong Kong students. Their recruitment depends

upon performance in the Hong Kong Diploma of Secondary Education Examination. Around 90 universities, including those in Guangdong, recruit part of their students through this scheme. In the meantime, universities in Hong and Macao recruit students from the mainland into their undergraduate or postgraduate programs through mainly two ways. First, after qualifying the National College Entrance Examination (NCEE), students who apply for the admission to undergraduate programs in Hong Kong take an "Independent Enrollment" test organized independently by each university. Universities in Macao recruit undergraduates based on their performance achieved in the NCEE. Second, all universities in Hong Kong and Macao admit postgraduate students by an independent application system that is similar to Western universities. Currently, there are 12 universities in Hong Kong and 6 universities in Macao recruiting students from the mainland.

Institutional cooperation

Joint cooperation in running of educational institutions, including academic programs, schools, and universities as early as 2006, included the University of Hong Kong's master of business administration program in Shenzhen with Peking University. As the cooperation in higher education increased, joint and independent campuses grew. In 2005, Hong Kong Baptist University launched the United International College in Zhuhai collaborated with Beijing Normal University. In 2009, with the strong support from the Chinese central government, a piece of land with an area of 1.0926 km² on Hengqin Island, which belongs to Zhuhai city adjacent to Macao, was approved for the construction of the new campus for the University of Macau. With the authorization of the Standing Committee of the National People's Congress, the Macao SAR was allowed to exercise jurisdiction over the new campus. In 2014, the Chinese University of Hong Kong (CUHK) established a joint venture university CUHK (Shenzhen) in collaboration with Shenzhen university. The students admitted to CUHK (Shenzhen) also register as students of the CUHK and will be awarded a degree from the CUHK upon graduation. In 2019, the Hong Kong University of Science and Technology also launched a joint venture university in collaboration with Guangzhou University.

Joint research

This form of collaboration developed rapidly is key to the GBA's future. Besides joint research projects carried out by scientists in higher education institutions in GBA, research collaborations also take the form of independent research institutes and joint key laboratories. For example, Shenzhen government has financed five universities from Hong Kong to set up research institutes in Shenzhen to facilitate technology transfer. In the year of 2016, the Department of Education in

Guangdong Province began to promote the establishment of joint laboratories between Guangdong, Hong Kong, and Macao to promote science and technology innovation in the area.

Policy framework for higher education cooperation in the GBA

Higher education cooperation at institutional and system levels will continue to grow within the GBA (as well as globally). Currently, various types of higher education cooperation are under policy framework at such levels as governmental levels and institutional levels.

At the central government level, policies promote modest cross-border enrollment, academic exchanges, and cooperation in the running of educational institutions. These include, for example, Colleges and Universities Regulations on Enrolling and Nurturing Students from Hong Kong SAR, Macao SAR and Taiwan Region (MOE, 2016); The Policy Provisions for Personnel Going to Hong Kong and Macao to Exchange; and Regulation on Sino-foreign Cooperation in Running Schools (State Council, 2003), the issuance of the Employment Registration Certificates for Hong Kong students after graduation from mainland universities (MOE, 2017).

At the Guangdong government level, the relevant education policies and regulations include Guangdong Province Higher Education Management Regulations and Outline of Educational Modernization in Guangdong Province (2004–2010) (People's Government of Guangdong Province [PGGP], 2004), Guangdong Province Medium and Long-Term Education Reform and Development Plan (2010–2020) (PGGP, 2010b), and Letter of Intent on Qualifications Framework Cooperation Between Guangdong and Hong Kong (RenminNet, 2019).

The Hong Kong and Macao SAR governments took measures to promote student exchanges and cooperation among the higher education institutions. This includes the recruitment of nonlocal students, especially those from the Chinese mainland to local higher education institutions. The Hong Kong SAR Government gradually relaxed the quota for admission of nonlocal students in its colleges and universities. However, higher education institutions in Hong Kong have limitations placed on the recruitment of undergraduate students at the time of a demographic shift to a shrinking college age cohort. This contributed to the closure of Centennial College. It also affects enrollments at other colleges.

There are also collaboration agreements and memos signed between the central government and the two SAR governments to support higher education cooperation between Guangdong, Hong Kong, and Macao. They include *The Mainland and Hong Kong Closer Economic Partnership Arrangement* (MOE, 2003), *The Mainland and Macao Closer Economic Partnership Arrangement* (MOE, 2005), and *Memorandum on Mutual Recognition of Higher Education Degree Certificates Between the Mainland and Hong Kong* (MOE, 2004).

In 2004, the Ministry of Science and Technology and the Hong Kong Trade and Industry and Technology Bureau signed the *Agreement on the Establishment of Science and Technology*

Cooperation Committee Between the Mainland and Hong Kong (Xinhua, 2004) and established the Mainland and Hong Kong Science and Technology Cooperation Committee. A joint research scheme—Guangdong-Hong Kong Technology Cooperation Funding Scheme and the Shenzhen-Hong Kong Science and Technology Cooperation Funding Scheme—was created and led to the Guangdong-Hong Kong Cooperation Framework Agreement (PGGP, 2010a) and the Guangdong-Macao Cooperation Framework Agreement (PGGP, 2011).

The three "I"s: Opportunities and challenges for higher education in GBA

The GBA Development Strategy aims to build an integrated, innovative, and internationalized economy. It projects both opportunities and challenges for higher education institutions. There is an opportunity for universities to attract new funding opportunities as well as to prepare university graduates who can play a key role in the future of the GBA. The shift toward a high-tech service-led economy can be met by effective partnerships between industry and higher education institutions.

For higher education institutions in GBA, integration means deeper collaborations. The best picture would be that the higher education system will become a world-class one and function as a unified system which can respond well to the social and economic needs in GBA. Yet, although there are already policies encouraging and facilitating cross border academic and research collaborations, the higher education systems of Hong Kong SAR, Macao SAR, and Guangdong are still relatively separated from one another. Collaborations at the system level are alive and well, but the academic culture is not the same. This has important implications for student and institutional mobility. For example, studies suggest that there are increasing Chinese mainland students in Hong Kong universities. Yet, students reported acculturative issues because of Hong Kong's Westernstyle education model which emphasizes independent critical thinking, teamwork, creativity, and sophisticated research methods (Vyas & Yu, 2018). There is much academic cooperation across systems, but most of it is on an individual level, not an institutional level. For such institutional level collaborations as cross-border joint universities, the institutional distances including academic cultural recognitions usually constitute the barriers (Qin, 2020). Hong Kong's top universities will continue to maintain their competitive advantage by the predominant use of English in higher education instruction, retaining institutional autonomy, keeping transparency in administration and shared governance and involving academic staff in major development planning and key decisions (Postiglione & Jung, 2017). The strategies of universities in Guangdong may be less likely to be the same. That is why the policy designs and strategies for higher education collaborations in GBA are very limited and lack detail. The only commonality across the GBA systems of higher education is a market-driven environment. The GBA systems of higher education are very

different in the extent to which their HEIs are mission-centered and market-smart. HEIs are a tool for improving human capital but identity and cultural production within a market-driven atmosphere are far more complex than ever. Challenges exist on how to define a common culture and identity and how are integrated into institution goals and the curriculum in a market-driven framework.

Policies of collaborations that lead to integration of knowledge networks require a higher degree of institutional autonomy and within-institutional professional autonomy. Both systems innovate in similar ways and different ways due to resources, policies, laws, work habits, academic leadership, the doctoral training received (in one system or in HK or overseas), etc. Yet, Hong Kong universities have legal autonomy to make decisions. Mainland universities often need approval from education department at the city or provincial level or MOE for such matters as international collaborations. For the academic staff—who become accustomed to operating in one system or the other and more senior staff may find it more difficult to change from one system to another, not only due to language but also governance style. A higher degree of institutional autonomy and within-institutional professional autonomy, therefore, is a key to more collaborations. They are also essentials for keeping the vitality of academic research enterprises and can stifle the capacity for innovation and worldwide impact (Postiglione, 2015).

Higher education institution in GBA can become world leaders in addressing problems like COVID-19, future pandemics, climate change, global poverty, equity and social justice, and sustainable development in innovative ways. They have begun to cultivate innovative talents with global vision and competitiveness, high-quality research, and industry-university cooperation. But their potential is limited by the awkwardness of their divergent frameworks for institutional governance in higher education. This is especially true with respect to internationalization. Qatar, Dubai, and Singapore all regarded the internationalization of higher education as an important strategy to attract and nurture international talents. China's SAR universities are well-seasoned in how to anchor globalization for economic and social development. In GBA cooperation, Guangdong's universities have to juggle internationalization along with limited institutional autonomy and a concern about the protection of its educational sovereignty.

There is no lack of ideas about how macro-policy designs can steer GBA higher education collaborations. Current policies are market-driven but not always market-smart. To maintain their integrity, institutions of higher education have to remain mission-focused, market-smart, and conscious of how to make the best use of their limited resources to raise their quality and relevance of their work. Higher education improves human capital and technical expertise, but it should avoid creating a highly stratified society. GBA HEIs have a challenge and an opportunity to appeal to the future generation of leaders by preparing them with the talent to innovate, the vision to think globally and act locally, and to be competitive in the international labor market.

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Ailei Xie and Gerard A. Postiglione initiated the project. Ailei Xie and Qian Huang collected the data. Xie, Huang and Postiglione wrote the initial draft of the manuscript. Xie and Postiglione critically revised the manuscript.

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