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REVIEW ARTICLE

Reimagining vocational education in Hong Kong Special Administrative Region through the lens of Singapore's success

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ABSTRACT

Vocational education, a key component of social and economic development, is not only related to the career development of individuals but also plays a pivotal role in optimizing the economic structure of society as a whole. Its importance is increasingly prominent with the progress of science and technology and changes in market demand, especially in Hong Kong Special Administrative Region (Hong Kong SAR). This paper discusses the important role of Hong Kong SAR's vocational education system in social and economic development. First, it reviews the historical development of Hong Kong SAR's vocational education system and related policies and expounds on the role of vocational education in promoting the economy and enhancing graduate employability. It then describes the characteristics of vocational education, such as strong adaptability and close connection with industry, shows how the system is consistent with industry, and provides an effective way for academic and professional development. Although Hong Kong SAR's vocational education system is gradually developing, it still faces challenges. To better reflect the current challenges, this article compares vocational education in Hong Kong SAR with Singapore, showing that the current system in Hong Kong SAR requires social prejudice to be addressed. Society still regards vocational education as an alternative to higher education and as the first choice for students with poor grades. To improve the current situation, there is an urgent need for a more flexible and relevant teaching framework to train talents to adapt to changing market needs and to strive to change the social perception of this group.

Key words: vocational education, Hong Kong Special Administrative Region, socioeconomic, historical development, Singapore

INTRODUCTION

In the knowledge economy, vocational education has become a key driver of human capital development, especially in high-density urban centers with limited natural resources. While European dual-system models (such as German and Swiss) have been extensively documented by global scholars, Asian systems, such as Hong Kong Special Administrative Region (Hong Kong SAR), remain understudied, despite their unique evolution under colonial heritage and rapid post-industrial transition (Mok, 2015b). As more and more people become aware of the value of vocational education to society, vocational education is being integrated into the broader educational framework, and relevant policy initiatives are being developed to this end.

In Hong Kong SAR, which is characterized by high population density and limited natural resources, vocational training is essential to meet the needs of a dynamic economy (Lam & Luk, 2020). This paper

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addresses this gap by analyzing Hong Kong SAR's vocational education system through three lenses: its historical development, shaped by economic transformations; persistent challenges rooted in sociocultural perceptions; and reform opportunities illuminated by Singapore's successful paradigm, since Singapore is a city-state with comparable socioeconomic dynamics.

Vocational education, also known as technical or career education, aims to equip individuals with the practical skills and knowledge necessary to perform specific trades or professions. In addition to supporting individual career development, this education pathway plays a key role in promoting and meeting labor market demands (Liang & Vivian TSE, 2018). In an increasingly competitive labor market, the need for skilled workers is more evident than ever. Hong Kong SAR's system has experienced significant transformations, reflecting broader socioeconomic shifts and policy changes over the years (Leung & McGrath, 2010). The evolution of vocational education in Hong Kong SAR reflects the complex interplay of historical, socioeconomic, and policy factors that has shaped Hong Kong SAR as it is today.

Hong Kong SAR's vocational education system has evolved through distinct phases. Emerging during the colonial era through apprenticeship models, it transitioned post-1945 to support industrialization, culminating in the establishment of the Vocational Training Council (VTC) in 1982, which is the cornerstone of modern vocational training (Lam & Luk, 2020). Key milestones include the Qualifications Framework (QF) in 2008 to standardize credentials and the integration of vocational pathways into senior secondary education in 2015 (Chun *et al.*, 2022). These reforms reflect efforts to align vocational education with economic shifts from manufacturing to services, while countering persistent perceptions of vocational education's inferiority to the academic route. The study of challenges and perspectives related to vocational education in Hong Kong SAR touches on issues of concern to the community and helps address key social issues. While vocational education effectively solves practical problems and is technically robust, it often suffers from a negative image. Many view it as a secondary option compared to traditional academic pathways (Chun *et al.*, 2022). This analysis examines various ideas and initiatives aimed at improving the image of education and highlights the need for change and its smooth integration into the wider education system to enhance reputation. Ultimately, this study deepens our understanding of the role of vocational education in driving personal and economic change in Hong Kong SAR and beyond.

Singapore's inclusion in this study is justified by its globally recognized vocational education model, which shares key contextual similarities with Hong Kong SAR: both are service-oriented, high-income economies reliant on human capital development and limited natural resources. Singapore's success in elevating the prestige of vocational pathways through initiatives such as the Institute of Technical Education and SkillsFuture provides actionable insights into Hong Kong SAR's ongoing reforms. Hong Kong SAR's VTC, while proactive in fields such as FinTech, could benefit from adopting Singapore's dual emphasis on pedagogical agility and prestige building.

This paper examines the historical development and key features of Hong Kong SAR's vocational education system. It demonstrates how the system aligns with industry demands, provides robust pathways for academic and professional advancement, and addresses the challenges and opportunities it encounters in an ever-evolving landscape. This paper also aims to explore the historical evolution, key policies, and challenges of vocational education in Hong Kong SAR while providing a comparative analysis with Singapore.

Historical development and key policies

Since the middle of the 20th century, when there were broad changes in Hong Kong SAR's social economy, the development of vocational education in Hong Kong SAR has also changed. Understanding this evolution provides valuable insights into how vocational education has adapted to meet the demands of different eras and how it continues to evolve in response to contemporary challenges.

The roots of Hong Kong SAR's vocational education originated in British colonial practices. In England, vocational education began with Queen Elizabeth I's apprenticeship system and later evolved into formalized training during the Industrial Revolution. Following Hong Kong SAR's establishment as a British colony in 1842, Christian missionaries established Ying Wa College in 1864 as the territory's first vocational institution in response to the growing demand for technical skills in port operations and commerce (Liang & Vivian TSE, 2018). This colonial foundation set the stage for vocational training development, although there remained a lack of systematic structures until a critical turning point in the late 20th century.

The most significant transformation occurred in 1982 with the establishment of the Hong Kong SAR VTC, marking a qualitative leap in institutionalizing vocational education. Prior to this, post-World War II industrial expansion had driven rapid vocational school growth, but fragmented programs created skill mismatches during Hong Kong SAR's manufacturing boom (Mok, 2015a). The VTC introduced standardized curricula and quality assurance mechanisms across traditional

industries, such as textiles and construction, while demonstrating remarkable adaptability as Hong Kong SAR transitioned to a service economy in the 1990s (Leung, 2008). It successfully pivoted to develop programs in hospitality, finance, and, later, digital technologies through industry partnerships that ensured curriculum relevance to labor market needs (Ng *et al.*, 2016; Chow, 1995). This strategic institutional framework transformed vocational education from scattered initiatives into an ecosystem integrating classroom training with workplace internships—a paradigm shift that remains foundational to Hong Kong SAR's skills development approach today.

To cater to the upgrading of Hong Kong SAR's industrial structure in recent years, Hong Kong SAR's vocational education has gradually formed an employability-oriented policy framework that adapts to market demand. Policies, laws, and regulations not only provide a clear direction and model for vocational education but also have a significant impact on the implementation process, enabling the continuous improvement and development of the vocational education system in Hong Kong SAR.

From a policy point of view, the government set up a number of laws and regulations to promote vocational education in the official text to ensure the quality of education and qualification recognition. For example, the enactment of the *Education Ordinance* clarified the legislative basis of vocational education and ensured that various vocational education qualifications could be legally recognized. Through the implementation of the *Vocational Training Council Ordinance*, the government set up a training platform aimed at upgrading vocational skills and providing students with targeted vocational training. The effective implementation of these policies and regulations not only established a legal guarantee for vocational education but also created an ecological environment conducive to the development of vocational education.

Policy analysis models can effectively reveal the practical application of government policies, laws, and regulations in the vocational education system. For example, using the rational choice model, the process of policy formulation and implementation can be analyzed to assess its actual impact on the quality of education and the employability of students. Through survey data, it has been found that, generally, vocational training programs supported by policies can significantly improve the employment rate and vocational skill levels of participants.

Moreover, the implementation of government policies has had a lasting impact on the long-term development of vocational education. The improvement of vocational education not only depends on a single policy promotion but also needs to integrate resources and forces from all aspects.

To keep pace with changes in the education system and the economy, Hong Kong SAR's vocational education system underwent a major reform at a later stage, gradually transforming the original single training mode into a job-inclusive system and linking it with long-life learning and industry skills training.

At the end of the 20th century, Hong Kong SAR's economy underwent significant changes, especially after the handover of Hong Kong SAR in 1997 (Cheng, 2020). Hong Kong SAR experienced a shift from manufacturing to the service industry, which led to a gradual decline in the number of vocational schools and a consequent decrease in emphasis on them. Many schools were therefore converted to grammar schools to adapt to the economy (Chun *et al.*, 2022). Until the 21st century, the Hong Kong SAR government believed that Hong Kong SAR could not rely on the service industry alone, and vocational education played an important role in promoting economic growth and improving social mobility. In 2000, the education reform initiative was launched, emphasizing the integration of vocational and academic pathways to provide students with more diverse educational options (Vocational Training Council, 2023). As vocational education in Hong Kong SAR began to cooperate with the industrial and technological sectors, the community's attention to vocational education was aroused once again. A key reform of the Hong Kong SAR government was the introduction of the QF in 2008, which provided a comprehensive system for the accreditation and standardization of qualifications obtained through vocational training (Imrie, 1999). The QF revolutionized skill recognition and employability by establishing a seven-tier accreditation system (Levels 1-7) for vocational and academic qualifications. It enhanced employability and wage premiums and standardized skill certifications, bridging the gap between vocational training and employer expectations. Wang (2024) found that vocational graduates earned 30%-100% higher wages than secondary school graduates and had over 90% employment rates in sectors such as engineering (47% of the industrial workforce) and information technology (IT, 42%). Employers increasingly recognized QF-accredited courses as proxies for job readiness, particularly in technology-driven fields. In addition, the framework enabled non-traditional learners to upskill through modular courses. By 2024, over 8000 QF-recognized courses were listed in the Hong Kong SAR Qualifications Register, covering 30 industries and facilitating career transitions (Hong Kong Qualifications Framework, 2024). QF has further strengthened the link between vocational education and industry by setting

standards so that the skills of these courses are recognized by industry and talents are not bound by academic qualifications.

Key features of Hong Kong SAR's vocational education system

The above description of the historical development and policy reform of vocational education in Hong Kong SAR reflects the characteristics of the Hong Kong SAR education system, which is adaptable, closely linked to industry, and emphasizes lifelong learning. These characteristics enable the vocational education system to meet the needs of the economy and prepare individuals for the challenges of the future in a changing job market.

Industry-aligned curriculum development

Meeting the needs of industry is one of the most significant characteristics of vocational education in Hong Kong SAR. Hong Kong SAR vocational colleges and industries are closely linked and have become partners with each other, while institutions have developed training programs according to the needs of the industry to train talents with specific skills. To ensure that courses closely meet the needs of industry, the content is regularly updated to reflect current industry practices and technological advances. This collaboration extends to the involvement of industry professionals in the development and delivery of courses, providing students with insights and skills directly applicable to the workplace. Such cooperation includes internships, apprenticeships, and practical training opportunities for students to gain experience while studying (Vocational Training Council, 2023). Close cooperation with industry not only ensures that the skills learned by vocational college graduates can meet the needs of industry but also enables students to become highly competitive in the job market. This focus on employability is a hallmark of Hong Kong SAR's vocational education system, which plays a vital role in economic development (Lee & Liu, 2016).

Hong Kong SAR's vocational education system prioritizes real-time alignment with industry demands, as exemplified by strategic partnerships in high-growth sectors. The Hong Kong SAR Institute of Vocational Education (IVE) collaborates with the Hongkong and Shanghai banking corporation limited (HSBC) and the Ant Group to deliver an advanced diploma in finTech and blockchain. Students gain hands-on experience through internships at HSBC's innovation labs, developing skills in digital payments and artificial intelligence (AI)-driven risk assessment. Under the VTC, the Hotel and Tourism Institute (HTI) partnered with Marriott International and Shangri-La Group to codesign a Professional Certificate in Smart Hospitality Management. This program integrates augmented reality for virtual hotel operations training and includes a six-month paid internship at partner hotels.

Flexibility and multipath progression

In addition to these close ties, the flexibility of Hong Kong SAR's vocational education system is also one of its distinguishing features. Students can choose from multiple entry and exit points to meet their different wishes and needs. For example, they can start their vocational education at the secondary level through applied learning courses to lay the foundation for their careers. Upon completion of secondary education, they may choose to pursue a higher diploma, associate degree, or bachelor's degree at institutions such as the Hong Kong SAR IVE or the Technological and Higher Education Institute of Hong Kong (Education Bureau, 2023). In addition, the QF provides a clear and coherent framework for academic and vocational qualifications to facilitate credit transfer and progression across different levels of education. This flexibility allows students to tailor their education pathways to individual needs, whether they aim to enter the workforce directly or continue their studies at a higher level.

Lifelong learning ecosystem

Lifelong learning is a core pillar of Hong Kong SAR's vocational education system. Recognizing the need for continuous skills development in a rapidly changing economy, the system offers a wide range of part-time, evening, and online courses for working professionals. These programs enable individuals to upgrade their skills, switch careers, or simply keep up with developments in the industry. The Hong Kong Council for Accreditation of Academic & Vocational Qualifications supports this emphasis on lifelong learning by providing a structured continuing education pathway that allows individuals to accumulate qualifications over time. Lifelong learning can not only enhance the employability of individuals but also contribute to the overall adaptability and resilience of Hong Kong SAR's workforce, ensuring that Hong Kong SAR remains competitive in the global economy (Chan & Mok, 2001).

Comparative analysis: Hong Kong SAR and Singapore

Across the globe, vocational education is an important part of global higher education, and industries rely on vocational education to provide them with practical skills and expertise. It is important to understand that vocational education leadership is not static but is influenced by socioeconomic needs and cultural perceptions, which makes it a rich field of comparative study.

Hong Kong SAR and Singapore are known around the world, and while their vocational education trajectories are very different, they must face some of the same

challenges. Historically, both have evolved to meet the needs of the labor market. Vocational education in Singapore is closely linked to national economic strategies, such as the SkillsFuture initiative, which aims to promote lifelong learning rather than traditional academic credentials (SkillsFuture Singapore, 2017). This strategic integration positions Singapore as a leader in vocational training that constantly adapts to global economic trends (Sakellariou, 2003).

In contrast, in Hong Kong SAR, vocational education has been affected by social and economic transformations, and vocational paths have less social status than academic paths in terms of social prestige (Yau & Chun, 2020). The vocational education system in Hong Kong SAR still faces challenges, such as how to overcome the consequences of prejudice while meeting the needs of industry. Despite efforts such as vocational and professional education and training (VPET) programs, deep-rooted cultural biases continue to hinder their integration into the broader educational framework (Maclean & Pavlova, 2013). From the original system corresponding to industrial needs to the current system catering to the knowledge economy, Hong Kong SAR has gone through different stages, showing its dynamic characteristics (Lee, 2000).

Singapore's vocational education is depicted as a more cohesive and strategically integrated model. The following comparative study of the two regions can better understand the differences in their respective vocational education and consider improvements. The comparative section reveals how Singapore's pragmatic alignment of vocational education with national economic goals has positioned it as a robust model for workforce development.

In the mid-20th century, Hong Kong SAR became industrialized, and vocational education provided talents mainly for emerging industries, which meant that career paths were aligned with the needs of the economy. However, with Hong Kong SAR's transition to the service sector, society's view of vocational education began to change. This shift is not only an economic hardening but also deeply intertwined with cultural attitudes (Yau *et al.*, 2018). Compared with higher education, vocational education is always "alternative", and this view still exists (Brown, 2001). This is reinforced by cultural values that view higher education as a symbol of personal and family success, and it is precisely because of such values that the importance of vocational education is often overlooked (Wilson, 1989).

Institutional design and governance structure

Both Hong Kong SAR and Singapore use their vocational education systems to improve their economic standing to develop skilled personnel who can adapt to a rapidly changing economic environment and increase productivity (Pan *et al.*, 2020). The governance of vocational education systems in Hong Kong SAR and Singapore reflects distinct institutional philosophies shaped by their socioeconomic priorities. In Hong Kong SAR, the VTC functions as the central statutory authority mandated to standardize qualifications and align training with industry needs through its QF (Hong Kong Qualifications Framework, 2023). While the QF has successfully established a unified skills recognition system across sectors, its reliance on rigid credentialing mechanisms has drawn criticism (Zhu, 2010). For example, the slow integration of AI certifications into the QF highlights systemic inertia. This contrasts sharply with Singapore's agile Institute of Technical Education (ITE)-SkillsFuture dual model, whereby policy design explicitly balances immediate labor market needs with long-term economic foresight.

Singapore's bifurcated governance structure separates operational and strategic roles (Abu Bakar *et al.*, 2020). The ITE delivers sector-specific technical programs, while SkillsFuture orchestrates national-level workforce planning. A notable example is SkillsFuture's collaboration with Infineon Technologies to codevelop semiconductor fabrication modules, which are updated biannually to reflect technological advancements (Chen, 2024). Such partnerships enable Singapore to rapidly channel industry inputs into curriculum updates, which is a flexibility absent in Hong Kong SAR's centralized model.

Divergent policy tools further underscore these differences. Hong Kong SAR's QF prioritizes static alignment, certifying skills based on current industry benchmarks. However, this approach struggles to address emerging sectors; for instance, only 12% of the FinTech firms surveyed in 2023 considered QF certifications relevant to blockchain technology roles (FinTech Association of Hong Kong, 2023). Conversely, Singapore's SkillsFuture employs dynamic adaptation mechanisms, such as subsidized microcredentials for skills such as cybersecurity and green energy. These credentials, often developed with multinational firms, such as Siemens, are embedded into a modular lifelong learning system funded by SkillsFuture Credits (Ministry of Trade and Industry, 2023).

The system's flexibility allows for movement between vocational and higher education, catering to diverse learner needs and supporting lifelong learning (Baxter & Hatt, 2003). This adaptability is crucial for maintaining economic resilience in the face of changing labor market demands. Unfortunately, Hong Kong SAR's approaches are not as focused, and they are often hampered by competing socioeconomic priorities and the lack of a cohesive policy framework. Deep-rooted prejudice has

greatly hindered the development of vocational education. Although the current policy has promoted the development of the workforce, this is still undervalued in society (Yuen *et al.*, 2019). Hong Kong SAR's vocational education system has been criticized for its rigidity and lack of integration with the broader educational framework.

Curriculum design and pedagogical implementation

The curriculum design and pedagogical practices in Hong Kong SAR and Singapore reflect divergent approaches to bridging education and industry needs. In Hong Kong SAR, industry training advisory committees (ITACs) play a consultative role in defining competency standards, yet their influence remains limited to periodic reviews rather than active cocreation. For example, ITACs in the FinTech sector take on average, 18 months to approve new blockchain-related modules, resulting in curricula that lag behind rapid technological advancements (Vocational Training Council, 2023). This contrasts sharply with Singapore's "Teaching Factory" model, whereby enterprises such as Infineon Technologies codesign curricula through joint laboratories. The Singapore Polytechnic-Shenhao Tech Joint Laboratory, for instance, integrates industrial robotics projects directly into coursework, with updates occurring biannually to align with semiconductor industry demands (Chen, 2024).

Singapore's agility in curriculum adaptation is bolstered by proactive policy tools, such as SkillsFuture Credits, which subsidizes microcredentials in emerging fields. These credentials, developed with multinational firms such as Siemens, are embedded in modular lifelong learning pathways. Conversely, Hong Kong SAR's reliance on static competency frameworks and fragmented industry engagement perpetuates a mismatch between training outcomes and labor market needs, which is evident in its 25% lower graduate salaries compared to Singapore.

Student development and employment outcomes

While Hong Kong SAR's VTC reports an 88% employment rate for graduates, median starting salaries remain comparatively low, at Hong Kong dollar (HKD) 14,000, reflecting weaker alignment with high-value industries, such as advanced manufacturing and FinTech. This contrasts sharply with Singapore, where 90% of graduates secure employment within six months, with median salaries of Singapore dollar (SGD) 2200 for ITE graduates and SGD 3500 for polytechnic graduates, driven by strategic integration with sectors such as semiconductors and green energy. To mitigate entrenched social stratification, Hong Kong SAR should reconceptualize vocational education as a respected and economically viable career pathway. This requires systemic efforts to enhance inclusive access while actively dismantling cultural prejudices that perpetuate the academic-vocational hierarchy (Johannis *et al.*, 2024). In Singapore, vocational education is designed to create clear pathways for students, facilitating smooth transitions between different levels of education and into the workforce. Hong Kong SAR's employment outcomes are constrained by its reliance on service sector roles, while Singapore's focus on technology-driven industries ensures higher wage growth and industry relevance.

In terms of vertical mobility and educational pathways, Hong Kong SAR's higher diploma programs theoretically allow transitions to bachelor's degrees, but systemic barriers, such as limited university quotas and complex articulation requirements, hinder upward mobility. For example, only 15% of VTC graduates successfully transfer to universities each year, often due to the prioritization of traditional academic credentials. In contrast, Singapore's SkillsFuture modular credit system enables seamless progression from ITE to polytechnics and universities. Over 40% of ITE graduates advance to higher education, supported by policies such as subsidized lifelong learning and industry-recognized microcredentials. The National University of Singapore reserves 10% of undergraduate slots for polytechnic graduates, ensuring equitable access. The above analysis shows that Singapore's policy-driven mobility frameworks dismantle academic hierarchies, while Hong Kong SAR's pathways remain fragmented and culturally biased toward university degrees.

In summary, the vocational education systems of Hong Kong SAR and Singapore, though rooted in similar economic aspirations, diverge significantly in implementation, adaptability, and societal perception. This contrast stems from differences in governance philosophy, industry collaboration, and cultural attitudes toward nonacademic pathways.

Singapore's vocational framework operates as a dynamic ecosystem tightly interwoven with national economic objectives. Its dual-layered structure—combining technical training with forward-looking workforce planning, which ensures rapid responsiveness to technological advancements. Hong Kong SAR's system, managed centrally by the VTC, emphasizes standardization through its QF. While this approach ensures consistency, it struggles with bureaucratic delays in certifying emerging skills, leaving curricula trailing industry needs. Limited funding allocation and fragmented policy coordination further restrict its capacity to pivot toward innovation-driven fields, resulting in lower graduate wage growth compared to Singapore.

Singapore's success lies in its proactive industry engagement, whereby companies codesign programs within campus-based labs, such as semiconductor modules developed with Infineon Technologies. This "learning-by-doing" model mandates 70% hands-on training across all technical courses, ensuring that graduates meet precise employer demands. Conversely, Hong Kong SAR adopts a consultative approach through ITACs, which often lag in updating competencies due to lengthy approval processes. Internships, though emphasized in sectors such as hospitality, remain optional in critical industries, such as manufacturing, weakening practical skill application. This misalignment is evident in employer dissatisfaction.

Singapore dismantles academic-vocational hierarchies through seamless educational pathways. This fosters social equity and attracts diverse talent to technical fields. Hong Kong SAR faces entrenched cultural biases that prioritize university degrees, relegating vocational training as a "second-tier" option. Despite initiatives such as VPET, systemic barriers (*e.g.*, limited university transfer quotas and complex articulation rules) affect upward mobility.

Challenges and recommendations

Challenges in Hong Kong SAR's vocational education system

The vocational education system in Hong Kong SAR is facing multiple challenges that not only affect its development potential but also have a profound impact on the stability of the overall social labor market. Low social recognition is one of the outstanding problems facing vocational education in Hong Kong SAR. Although vocational education provides students with practical skills and direct employment opportunities, in society, many still see it as a "second choice" to traditional higher education. This social bias not only affects students' choice and willingness to participate but also leads to misunderstandings about the quality and outcomes of vocational education. Research has shown that the social value of academic qualifications is overemphasized in Hong Kong SAR, resulting in a large number of young people tending to pursue academic education while ignoring the importance of vocational skills training when choosing an educational path.

Insufficient policy support has also become a key factor restricting the development of vocational education in Hong Kong SAR. Although the Hong Kong SAR government has made some efforts in education policy, such as the establishment of the VTC, which is involved in providing vocational training and related services to young people and the unemployed, the limited scope and intensity of policy implementation has resulted in an uneven distribution of education resources and funds. There is a significant dislocation between the vocational education curriculum and market demand, resulting in the skills of graduates not effectively matching the needs of the current labor market. For example, in the post-pandemic recovery phase, the demand for professionals in the IT and care industries rose rapidly, but the corresponding vocational courses were not adjusted or updated in a timely manner. This phenomenon not only leads to a lack of market demand for vocational college graduates but also deepens the structural unemployment problem of Hong Kong SAR's labor force to a certain extent.

We must understand that Hong Kong SAR's efforts to develop vocational education have been aimed at changing social attitudes and enhancing the attractiveness and integration of vocational education. However, deep-rooted social prejudices remain obstacles, and there is still a long way to go; the idea of vocational education as an academic fallback or complementary option must be combated (Yau & Chun, 2020). In addition, studies have indicated that there is currently a situation of "Not in Education, Employment or Training (NEET)" in Hong Kong—that is, people who are neither employed nor educated. Divorced from traditional education to employment channels, this group is often marginalized by socioeconomic factors, and its members challenge the effectiveness of vocational education in providing convenient and meaningful pathways to employment and social integration (Tam *et al.*, 2016).

Actionable recommendations

This comparative analysis with Singapore underscores that Hong Kong SAR's vocational education challenges (rooted in cultural prejudice, policy rigidity, and misaligned curricula) are not insurmountable. Singapore's success in harmonizing vocational training with economic agility and societal inclusion offers a blueprint for reform. By adopting a dual focus on structural adaptability and cultural repositioning, Hong Kong SAR can transform its vocational system into a catalyst for both individual mobility and industry innovation.

Enhance industry collaboration for real-world relevance

(1) Expand student-industry projects: Create mandatory capstone projects in collaboration with local firms so that vocational students solve real-world challenges, such as optimizing public transport efficiency or developing e-commerce solutions. Singapore's "Teaching Factory" model demonstrates how such projects bridge classroom learning and workplace needs. (2) Internship guarantees: Legislate internships for all vocational programs, requiring companies in high-

demand sectors to reserve 10% of internship slots for vocational students. Subsidize SMEs to offset training costs, ensuring equitable access. (3) Establish student advisory panels: Integrate student representatives into ITACs to provide direct feedback on course relevance.

Strengthening pathways to higher education and careers

(1) Simplified university credit transfer: Work with universities to publish clear credit transfer guidelines for vocational diplomas, reducing bureaucratic hurdles. Singapore's ITE-to-polytechnic pathways, which allow 40% of graduates to advance, offer a proven template. (2) Dual certification programs: Pilot joint vocational-academic degrees whereby students earn both practical certifications and academic credits, appealing to those seeking flexible career-academic trajectories. (3) Mentorship networks: Partner with professional bodies to assign industry mentors to vocational students. Mentors would guide career planning and skill development, mirroring Singapore's SkillsFuture Career Guidance initiatives.

CONCLUSION

Hong Kong SAR's vocational education system has undergone a major transformation that began with colonial-era apprenticeships. Under the leadership of the VTC and QF, the vocational education system in Hong Kong SAR has developed into a structured ecosystem. While these reforms have provided avenues for skill development, they continue to be constrained by sociocultural perceptions that have led to vocational education becoming a "second-tier" alternative to the academic route. There are significant differences in governance agility, industry consolidation, and social evaluation in Hong Kong SAR compared to Singapore, highlighting the urgency for Hong Kong SAR to address institutional and cultural barriers.

Singapore's vocational education model, SkillsFuture, shows how strategic alignment with economic priorities can enhance career paths. In contrast, Hong Kong SAR's centralized governance and fragmented industry participation have hampered its ability to tackle emerging sectors, such as FinTech and green energy. In addition, Singapore's success in eliminating the academically vocational hierarchy through equitable promotion pathways highlights the need for Hong Kong SAR to reform its credit transfer system and expand lifelong learning opportunities.

To reposition vocational education as the cornerstone of Hong Kong SAR's knowledge economy, three key strategies must be adopted. (1) Deepen industry collaboration: Require internships, integrate real-world projects into the curriculum, and empower students to codesign training programs with employers. (2) Increase policy flexibility: Adopt a modular certification system for emerging skills, subsidize training for small and medium-sized enterprises, and simplify university access. (3) Rebrand vocational education: Launch public awareness campaigns to remove prejudice, celebrate career success stories, and position skills as key to Hong Kong SAR's innovation-driven future.

The future of vocational education in Hong Kong SAR depends on Hong Kong SAR's ability to move beyond outdated notions and emulate Singapore's dual focus on economic relevance and social equity. By fostering a culture that values diverse talent and aligning education with global technological change, Hong Kong SAR can transform its career system into a dynamic engine for individual empowerment and sustainable economic growth. This will require not only policy innovation but also a social reckoning with entrenched prejudices.

Future research should explore the intersection of vocational education with emerging technologies, such as artificial intelligence and green energy, while policymakers must prioritize stakeholder collaboration to build a system that connects aspiration with employability, tradition with innovation, and individual potential with social progress.

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