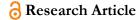
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A Historical Analysis of the Education System in Singapore during the 1920s –1958

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Abstract

This article outlines a historical analysis of the development of Singapore's education system during the period of 1920 to 1958, focusing on the historical, political, and social contexts that shaped education policies during this period. The study examines three significant stages of governance: the colonial era (1920-1942), the Japanese Occupation (1942-1945), and the pre-independence period (1946-1958). Using a qualitative historical research approach, this paper draws on archival materials, government reports, and secondary sources to analyze the ideologies and educational strategies employed by each regime to address Singapore's education challenges. Key findings reveal that under colonial rule, education policies emphasized English-medium schools to support administrative needs, often neglecting local communities. The Japanese Occupation disrupted existing structures, introducing policies to promote Japanese language and culture, which were met with resistance. In the post-war pre-independence phase, efforts were made to expand access to education, standardize curricula, and address inequalities, laying the groundwork for a modern education system. The analysis underscores the profound influence of political ideologies and governance structures on educational priorities and outcomes. These insights demonstrate how Singapore's early education policies evolved in response to shifting socio-political landscapes, contributing to the foundation of a system known today for its emphasis on equity and excellence. The paper highlights the importance of historical context in shaping education systems and suggests that lessons from Singapore's past can inform contemporary education policy discussions, particularly in postcolonial and rapidly developing contexts.

Keywords: Historical Background, Singapore's Education System

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1. INTRODUCTION

The academic achievements of Singaporean students have garnered interest from many developing countries. Despite having minimal natural resources, Singapore's economic success has outpaced many better-equipped nations. Education researchers and policy makers as well as governmental leaders often attribute Singapore's success to the robustness and adaptability of its education system. Education plays a fundamental role in developing a labour force equipped with necessary competencies. Since the colonial period, education in Singapore has served as a tool for economic policies and nation-building. Singapore's educational policies reflect a relationship in which education and economy are corelated and dependent on each other. (Gopinathan, 1974). These policies were implemented to develop a skilled workforce aligned with economic demands. This close integration of education and training systems, aligned with state-driven economic policies, played a crucial role in Singapore's economic success despite its limited natural resources. From 1920 to 1958, there were three significant stages of government: the colonial period (1920-1942), the Japanese occupation (1942-1945), and the pre-independence stage (1946-1958). Each governing body aimed to apply its ideology and educational approaches to tackle Singapore's educational challenges. The educational reforms during these three stages significantly impacted the development of Singapore's



education system. This paper outlines each stage, providing an overview of the historical, political, and social climate in Singapore at the time, followed by the educational climate and strategies implemented.

1.1. Research Aims and Questions

In proposing a historical analysis of the development of education in Singapore during the period from 1920 - 1958, this paper will explore the following questions:

- 1. What was the historical, political and social climate during the three stages of governance in Singapore during the period from 1920 to 1958?
- 2. What education policies or initiatives were implemented during the three stages of governance in Singapore during the period from 1920 to 1958?

After the methodology section, the author describes the historical, political and social climate of each regime, followed by the education policies or initiatives that were implemented in the following sections.

1.2. Significance

The development of Singapore's education system highlights the interplay between education and nation-building. While specific to Singapore's historical context, the study underscores broader issues like the role of education in fostering social cohesion, addressing economic imperatives, and navigating political transitions. These themes resonate with other postcolonial and rapidly developing nations seeking to build robust, inclusive education systems amidst diverse challenges. In addition, this historical analysis provides a model for integrating educational strategies with political and economic objectives. For example:

- Postcolonial Nations: Countries transitioning from colonial rule can learn from Singapore's gradual shift toward unified education policies to address ethnic and linguistic diversity.
- Emerging Economies: Nations prioritizing workforce development can adapt Singapore's emphasis on vocational and technical education to meet industrial demands.
- Conflict-Affected States: The study demonstrates how education can rebuild societal structures after disruption, as seen during the Japanese Occupation.

2. METHODOLOGY

Historical research is distinct in its focus on understanding the past. In this study, the author employed a process of historical triangulation. Historical research involves the systematic collection and evaluation of data to describe, explain, and ultimately understand past events. This particular study concentrated on the analysis of historical documents related to Singapore to address the research questions. Triangulation of data was essential to ensure the validity of the findings, involving the collection of multiple data points from diverse sources across the three regimes, each independently offering insight into the same research questions. This approach enabled the researcher to derive accurate and well-supported conclusions.

The research methodology followed a series of steps, integrating the perspectives of Punch (2014) and Fraenkel and Wallen (2010) on historical research and data triangulation:

- 1. Defining the research purpose, cause, or problem: This study focused on the climate of the three regimes in Singapore from 1920 to 1958 and the educational initiatives or policies introduced during this period.
- 2. Identifying and locating relevant sources, where triangulation played a key role. The study utilized numerous primary and secondary sources, including speeches, books, seminar reports, and journals. Comparing this data facilitated the verification of events and outcomes.
- 3. Summarizing information from the sources by assessing the relevance of the collected data.
- 4. Critically evaluating the sources, adopting a rigorous and analytical approach in reviewing the credibility and significance of the data.
- 5. Analyzing the data using the Miles and Huberman method, which includes three concurrent steps: data reduction, data display, and drawing and verifying conclusions. Data reduction involves selecting, focusing, simplifying, and abstracting the data without losing key information. Data display organizes

and presents the data in a clear format. The final step ensures that conclusions are drawn and validated through thorough analysis.

The study's sources comprised three categories: archival materials such as printed newspaper reports and government speeches from 1920 onwards; publications on Singapore's history before 1958; and contemporary materials related to Singapore's education system housed in the National Library of Singapore. By following this structured approach, the study gained valuable insights into Singapore's historical climate and the educational initiatives and policies implemented between 1920 and 1958.

2.1. Colonial Period (1920 – 1941)

2.1.1. Historical, Political and Social Climate

In 1819, Sir Stamford Raffles established Singapore, which then formed part of the East India Company's territories which followed the governance of the colonial administration. Eventually, the East India Company separated its holdings to two distinct entities — the Federated Malay States and the Straits Settlements. Singapore became part of the Straits Settlements in 1826. Although each region faced different circumstances, the Federated Malay States and the Straits Settlements followed comparable government policies.

During the colonial period, Singapore experienced a significant wave of migration from China and India. Many wealthy migrants directed their investments toward developing their ethnic communities, including founding schools. The growing pluralistic nature of Singapore's society revealed underlying weaknesses and social strains, making it essential to foster national unity. However, the colonial administration's policies and procedures often did not adequately address these societal challenges.

2.1.2. Structure of the Education System

Singapore developed a decentralized education system where different types of schools followed distinct curricula during the colonial administration. With the global economy increasingly requiring a skilled workforce, investing in vocational and technical education during the 1920s may have served the nation's best interests. Such an investment could have potentially transformed Singapore's economy by cultivating a skilled labor force in engineering and manufacturing. Nevertheless, Goh (2013) noted that while colonial educational institutions established in the 1920s were meaningful and well-intentioned, their limited scale and reach prevented them from significantly influencing Singapore's economic development between 1920 and 1950. The colonial administration appeared content with Singapore's economic growth through trade and consequently made little effort to expand the outreach and number of these schools.

The Director of Education was entrusted with the administration of educational policies in the Straits Settlements. The director was assisted by three individuals responsible for overseeing Malay, English, and Chinese schools, respectively. Additionally, an Inspector of Schools handled administrative and managerial tasks. The education system included both English-language schools and vernacular schools, which catered to different linguistic communities—Malay, Tamil, and Chinese. Vernacular schools conducted lessons in the native languages of their respective communities: Malay, Chinese, and Tamil. Unlike the government-supported English and Malay language schools, which adhered to a centralized curriculum, Chinese and Tamil schools operated without a common curriculum or shared resources and were mainly financed through private contributions from affluent migrants and community donations.

The promotion of a standardized policy, structure and system for education began to take shape only after the Second World War. The absence of a unified educational policy fostered a general sense of unequal treatment among different ethnic groups and limited opportunities for both employment and education (Wilson, 1978). The vernacular schools, discussed in the following section, played a role in the lack of cohesion within Singapore's education system.

2.1.2.1. Vernacular Schools

Vernacular schools delivered lessons in the native languages of local communities, namely Malay, Chinese, and Tamil. The colonial administration prioritized early education in these native languages, resulting in variations in the types of schools in Singapore and the level of support they received. English and Malay schools received more support compared to Chinese and Tamil schools. Students progressed at

different rates, which was seen as unjust and intolerable. The differences also affected the advancement of scientific competencies among students. Some schools were deployed with competent and experienced science teachers and logistical support. However, there were other schools which could not provide the same quality science education and experience for the students. The Tamil and Chinese language medium schools' teachers did not receive the same guidance as those in English and Malay medium schools. This deepened societal divisions in Singapore, where migrants were already facing challenges in establishing common ground. Historians such as Gopinathan (1974) and Ho (1952) viewed this inequality as detrimental to the nation's development. Tamil language schools had low enrollment during the colonial era, leading to minimal historical documentation.

In contrast, Chinese medium schools were more numerous and had higher student admission. These schools were financially supported by the Chinese government, with teachers trained and recruited from China to deliver a curriculum influenced by political ideologies. A deep sense of patriotism toward China was a key aspect of the Chinese education system in overseas communities like Singapore, reflected in the schools' materials and textbooks. While the colonial administration did not initially object to this patriotism, tensions arose when Chinese students began expressing views that challenged colonial authority in Singapore. To address the growing political rift between Chinese schools and the colonial government, the Straits Settlement Legislative Council implemented the Education Ordinance in 1920. This ordinance mandated the registration of both schools and teachers, aiming to restore government oversight of vernacular schools and eliminate institutions and educators promoting undesirable political ideologies. Additionally, the ordinance introduced grants-in-aid, contingent upon adherence to a curriculum prescribed by the colonial administration, marking an early effort toward establishing a unified educational system.

As the indigenous population of the island, the Malays attracted specific attention regarding their language education. In 1922, the Sultan Idris Training College was established in Perak, serving as the primary institution for training the Malay language schools teachers across the Straits Settlement. This college was regarded as the central hub for disseminating knowledge to Malay vernacular schools. Despite these efforts, dissatisfaction grew among the Malays concerning their educational progress. The Malays were discontented particularly with the slow development of their education system. (Winstedt, 1923). The colonial administration's support and regulations unintentionally put the Malay community at a disadvantage, especially by limiting access to English language education. Limited access to English instruction impeded their opportunities for employment and further education. It was only after the Second World War, with the introduction of new educational policies, that English began to be taught more widely in Malay schools. By the 1930s, English was increasingly becoming the nation's lingua franca, and greater emphasis on its instruction could have significantly benefited the local population. However, the colonial government remained firm in controlling the extent of English education within the Straits Settlement, resulting in unequal access to the opportunities associated with English proficiency.

The reasons behind the colonial administration's cautious approach to English education were not explicitly stated in primary sources like the annual reports of the Straits Settlement used in this study. However, secondary sources suggested that this restriction was driven by concerns over a potential loss of power. The colonial administration associated English proficiency with employability. According to Whitehead (2005), there was also apprehension about the unrestrained expansion of English-medium schools without corresponding job opportunities. A related situation had occurred in India. Many individuals who were proficient in the English language were unemployed due to a lack of administrative positions, leading to resentment against the colonial government. To avoid a similar backlash, the colonial administration in the Straits Settlement sought to manage the spread of English education carefully.

Under colonial rule, education was primarily seen as a tool to promote economic growth through trade, serving the colonial economy rather than Singapore's local development. If a stronger focus was placed on industrializing the economy, an increased emphasis on science education would have ensued (Blackburn, 2017). By the late 1930s, colonial administrators recognized the inevitable shift in the economy. The rational decision was to focus on vocational and technical education to address economic needs and create more job opportunities.

In 1938, the colonial government commissioned H.R. Cheeseman, the Inspector of Schools in Singapore, to produce a report on vocational and technical education. The committee's report, published in February 1939, recommended integrating science into the secondary school curriculum. It unanimously

advocated for expanding science teaching and introducing a general science curriculum across all secondary schools. The report emphasized the importance of science education for industrial development and personal welfare, particularly in areas like hygiene. Recommendations also called for a science curriculum focused on agriculture and hygiene, reflecting the growing recognition of science's importance during this period. However, the onset of the Second World War halted these educational initiatives, and they were only re-examined after the war.

Alongside Cheeseman's report, Professor G. McOwan of Raffles College proposed the introduction of engineering courses at the post-secondary level. He believed expanding vocational and technical education would offer students opportunities for further educational advancement. Despite the recommendations from Cheeseman and McOwan, the colonial administration remained hesitant about increasing vocational and technical education opportunities in Singapore.

Singapore fell under Japanese control in February 1942, marking the beginning of the Japanese occupation. The Japanese occupation lasted for three and a half years until September 1945. Despite the relatively brief period of occupation, the Japanese administration implemented notable changes to Singapore's education system. One of the most significant developments was the beginning of vocational and technical education, a move that had a lasting influence on the teaching of science in Singapore.

2.2. The Japanese Occupation (1942 – 1946)

2.2.1. Historical, Political and Social Climate

Singapore was regarded as Britain's invincible fortress and was important to the colonial administration. This was due to its ideal location as a port before 1942. However, Singapore's military defenses were insufficient in avoiding the Japanese invasion during the Second World War. The Japanese had a different approach to education compared to the colonial administration. During the occupation, the economy shifted to a manufacturing economy. This increased the demand for industrial workers. During the Japanese occupation, these workers formed the establishment of a small skilled industrial workforce that contributed significant growth to Singapore's manufacturing sector.

2.2.2. Structure of the Education System

The Japanese recognized the importance of well-crafted educational policies which could foster a sense of loyalty among Singapore's local population. Therefore, their educational policies were intended to promote cultural cohesion between Japanese and local cultures. At the same time, industrial and technical development was also supported. A Japanese official from the Japanese Consulate in Singapore, Mamoru Shinozaki, was appointed to head the education department despite lacking prior experience in educational development or policymaking. This placed him in a challenging position with several immediate issues to address.

The first issue was the numerous school-aged children contributing to lawlessness through petty crimes and unruly behavior. This was mainly due to the closure of schools after the war. There was a need to reopen schools to keep these children engaged in education rather than on the streets. By April 1942, Shinozaki successfully reopened English, Tamil, and Malay schools. However, strained relations between China and Japan at the time led to a deliberate delay in reopening the Chinese schools.

The next challenge was the integration of the Japanese language, Nippon-go, into the school curriculum. The Japanese were resolute in their efforts to incorporate the use of their language across their territories. The underlying goal was to instill the concept of Nippon seishin, or the Japanese spirit, in Singapore's population. They believed that this would foster unwavering loyalty to the Japanese Emperor. However, the exclusive use of Nippon-go in administrative and commercial activities would have disrupted business operations, as many locals were unfamiliar with the language. As a compromise, the Japanese introduced nationwide language lessons. Teachers were required to attain proficiency in Nippon-go before teaching it to students, and by July 1942, the language became a mandatory subject in schools. Despite local resentment, the successful implementation of this policy was driven by pragmatic considerations, such as the perceived advantage of knowing Nippon-go for employment opportunities.

The third problem Shinozaki faced was the limitation in the availability of appropriate teaching materials. The Japanese administration was intent on embedding Japanese cultural values into Singapore's education system, making it essential for school textbooks to reflect the principles of the occupying government. However, wartime constraints limited access to textbooks from Japan, leading the administration to use existing texts, which were rigorously screened to remove any undesirable content.

Despite these obstacles, the Japanese occupation brought some notable advancements to Singapore's education system. There was a strong emphasis on promoting mechanical and engineering skills, resulting in a significant rise in vocational schools. Attendance in these schools grew, particularly among boys aged 14 and above, who later were employed as civilian mechanics with the Japanese Navy, Army, and Air Force. The Japanese administration established six specialized technical schools that trained boys aged 14 to 19 for war-related roles such as aero-mechanics, electricians, mechanical engineers and technicians.

The expansion of vocational education spurred the development of science education in Singapore's secondary schools. The technical and trade schools established during this period laid the foundation for a skilled labor force that played a crucial role in Singapore's post-war economic growth. Furthermore, the Japanese occupation reshaped local perceptions and mindsets, challenging the perceived invincibility of colonial rule and demonstrating that Singapore could function without colonial oversight. This period marked the beginning of decolonization and a shift in educational policies, with a greater focus on advancing local interests rather than preserving the ruling government's power.

2.3. Pre – Independence (1946 – 1958)

2.3.1. Historical, Political and Social Climate

After the Japanese Occupation, the policies implemented by the colonial administration laid the foundation for the focus on industrial training in the educational institutions in Singapore in the 1950s. This development fostered a vital link between industry and education in Singapore's economy, underscoring their mutual dependence for economic growth. After the Japanese occupation ended, with Japan's formal surrender to the colonial administration on 12 September 1945, the British returned to Singapore and sought to adopt a more constructive governance approach by establishing self-governing states. The British then resumed control of Singapore for a transitional period following Japan's withdrawal.

After the end of Japanese rule, a surge in national consciousness and a stronger desire for self-governance emerged among the Singaporean population. This sentiment was reflected in the rise of political groups like the Malayan Democratic Union, which signaled the growing dissatisfaction with colonial rule and an upsurge of nationalism. It became increasingly necessary for the British administration to address these concerns through constitutional reforms that allowed greater local participation.

To address post-occupation needs, the Malayan Planning Unit was established. This unit acknowledged that the war had significantly transformed Singapore's population and that locals now expected greater involvement and development. Eventually, it was recognised that the English language could serve as a unifying factor across ethnic communities, laying the foundation for common citizenship. This had a profound influence on the educational system during this period.

Singapore was separated from the Straits Settlement and became a distinct Crown Colony with its own Governor and Director of Education on the 1st of July 1945. This change signified that Singapore was governed by its own legislation, leading to the localization of policies designed to meet the nation's specific needs. The country held its first national election in 1948, resulting in the formation of two councils: the legislative council and the executive council. The executive remained composed entirely of colonial officials while the legislative council included six locally elected members.

In July 1953, Governor John Nicoll established the Rendel Commission to conduct a thorough review of Singapore's colonial constitution. The commission's recommendations prepared the nation for internal self-governance while maintaining British control over foreign affairs and internal security. Singapore achieved partial self-governance in 1955, and by 1958, the country obtained full internal self-government formed by People's Action Party.

2.3.2. Structure of the Education System

After the war, there were two major challenges faced by the colonial administration: rehabilitating the existing school system and establishing a new education framework in preparation for self-governance. The Ten Year Plan in 1947 as well as the All Party Committee Report in 1955 were introduced by the colonial government to address these challenges. Both these plans played a pivotal role in shaping subsequent educational reforms. In addition, an advisory council was created in April 1946. The Director of education, John Barrie Neilson, the then Director of Education proposed the Ten Year Plan on August 7, 1947. This plan was notable as it represented one of the earliest efforts to align educational policies with clearly defined objectives. The key considerations of the programme included:

- 1. Encouraging self-governance and fostering civic loyalty and responsibility.
- 2. Ensuring equal educational opportunities for all, irrespective of race and gender.
- 3. Equipping students with basic skills to prepare them for higher education.
- 4. Promoting cooperation and an understanding of global relationships.

The first policy implemented following the Ten Year Plan's recommendations was the introduction of free primary school education. This signified the first occurrence in Singapore's history of the provision of equal educational access across race, religion and gender. The Ten Year Programme and the Five Year Supplementary Plan, played a crucial role in expanding English language education. The extension of English-medium education was intended to foster self-governance and significantly reduced racial tensions stemming from the previously fragmented education system under colonial rule (Gopinathan, 1974). While vernacular schools continued to operate, given the belief that native languages were the most effective mediums of instruction, Chinese-medium schools began developing political orientations that diverged from the colonial government's agenda, a trend that had already emerged prior to World War II. Efforts to control the curriculum through grants-in-aid were only partially successful, and ideological differences persisted into the pre-independence period.

In May 1955, the All Party Committee of the Legislative Assembly was established. One of their main tasks was to conduct a comprehensive review of Chinese-medium schools. This resulted in the All Party Report. The formation of this committee was a landmark moment, representing Singapore's first attempt at creating a unified approach to education. Although the committee's primary focus was Chinese-medium schools, the resulting proposal was an inclusive policy addressing the educational needs of various communities (Wilson, 1973). With its diverse representation, the committee ensured that all communities had a voice in shaping education policy. According to Gopinathan (1974), the All Party Report was a foundational step in the development of Singapore's national education policy. Released in February 1956, the report made several recommendations, which can be summarized into three core objectives: promoting national unity through education, enhancing language instruction, and integrating civics and cultural education.

The first objective emphasized unity through education by eliminating discrimination against vernacular schools and applying consistent policies across all educational institutions. This approach laid the groundwork for the development of a national education system.

The second objective focused on language instruction. Even though the importance of mother tongue languages was acknowledged, the committee stressed the need for vernacular schools to teach a common language. English language learning was made compulsory and this ensured opportunities for higher education and employment were accessible to students from all schooling systems.

The third objective addressed the integration of civics and culture into the education system. The report proposed making civics education mandatory in all schools to instill shared values and foster social cohesion. Additionally, it called for the equal representation and respect of all races and cultures in school curricula and textbooks.

In essence, the committee aimed to build a nation moving toward independence by creating an inclusive education system that accommodated Singapore's diverse racial, cultural, and linguistic landscape while providing equal educational opportunities for all. There was a growing emphasis on science education during the ore-independence period. The Department of Education's policy on science instruction in secondary schools were implemented and this resulted 40 government and aided English schools offering science education to 204 classes comprising 6,672 students by 1948. Over time, science education expanded

in both English and vernacular schools. In 1955, the educational structure evolved with the development of primary, secondary, and post-secondary school systems. Science subjects were introduced in all primary schools, while physics, chemistry, and general science were offered at the upper secondary level. To address the technical labor shortage of the 1950s and facilitate the growth of the manufacturing sector, a polytechnic institution was established. These educational initiatives, driven by the colonial administration, were instrumental in preparing Singapore for independence by laying a foundation for industrial training and workforce development in an emerging industrialized economy.

3. CONCLUSION

The educational policies that were implemented in Singapore reflected a relationship between the education system and the economy, meaning that education policies were designed to develop a skilled workforce aligned with economic demands. This was important for Singapore due to its heavy reliance on its human workforce and limited natural resources. The education-economy relationship was interpreted and executed very differently throughout Singapore's history from 1920 to 1958. This evolving relationship allowed Singapore to develop a strong foundation for its present successful education system.

Education in Singapore has long been closely tied to its economic policies and nation-building efforts, often described as the education-economy nexus. Singapore's educational policies reflect this interdependent relationship. The strategic implementation of education and training policies was aimed at developing a skilled workforce to meet the evolving needs of the economy. This focus was especially crucial given Singapore's limited natural resources and its dependence on human capital. By prioritizing workforce development, Singapore was able to achieve remarkable economic success despite its resource constraints.

3.1. Contribution to Understanding

This interpretation contributes to a deeper understanding of the period by highlighting how educational policies were strategically aligned with economic needs, reflecting a pragmatic approach to nation-building. It underscores the adaptability and foresight of Singapore's governance in leveraging education as a tool for economic development, which was crucial given the country's resource constraints. By examining the shifts in educational policies across different governance stages, we gain insights into how Singapore's leaders navigated and responded to changing economic demands and global trends.

3.2. Further Research

Future research could explore the long-term impacts of these educational policies on Singapore's socio-economic landscape. For instance, how have these policies influenced social mobility and income inequality over the decades? Additionally, comparative studies could be conducted to examine how other resource-constrained nations have utilized education to drive economic growth, providing a broader context to Singapore's experience. For further areas of research, one may explore how Singapore's education-economy nexus evolves in the face of emerging global challenges such as technological advancements, climate change, and shifting geopolitical landscapes. This question encourages exploration of how future educational policies can continue to adapt and support sustainable economic development in an increasingly complex world.

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Data Availability Statement. All data can be obtained from the corresponding author.

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