

## Exploring the Historical and Geographical Perspectives on the Development of Malaysian Higher Education Institutions

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### *Abstract*

Despite the multiple spillover effects that often translate to innovation and economic progress, the distribution of higher education institutions is inextricably connected with the question of accessibility as key institutions for knowledge transmission and generation. The purpose of this research is to look at the evolution of Malaysian higher education institutions (HEIs) from 1965 to 2020. The goal of studying the pattern of higher education institution establishment is to identify variables and forces that contribute to their existing spatial configurations. As a result, Malaysian HEIs are approaching maturity in terms of the number of education providers who are now focusing on improving quality, particularly among private higher education providers. Private and public higher education institutions in different parts of the country are more concerned with students' social and employment demands. Integrating information processing methods such as Geographic Information System (GIS) would result in improved data visualisation and clearer evidence visualisation for researchers, policymakers, and the general public.

**Keywords:** Geographic Information System, Spatial Configuration, Malaysia higher education development.

### **Introduction**

Higher education has long been recognised as having a direct impact on economic growth and competitiveness at the national level. The distribution of higher education institutions, as crucial institutions for knowledge transmission and development, is intricately connected with the issue of accessibility, as well as numerous spillover consequences that frequently translate to innovation and economic growth (Power and Malmberg, 2008; Uetela, 2015). Higher Education and Training is one of the 12 pillars of national competitiveness identified by the World Economic Forum, and Malaysia is listed in the Global Competitiveness Report 2016-2017 as one of the emerging economies making the transition from an efficiency-driven to an innovation-driven economy (Schwab, 2016). Higher education has also been identified as a critical industry for transforming Malaysia's economy into a knowledge economy (Azman, Sirat and Ahmad, 2014). Higher education policy has been extensively studied as a result of these factors, and the Malaysian government has implemented a number of national policies to ensure the sector's long-term viability, such as the Malaysia Education Blueprint (Higher Education 2015-2025) and the National Higher Education Strategic Plan.

Interdisciplinary research on higher education based on a synergy of geography and education has recently emerged as significant insights into spatial processes of education, particularly information movement (Jöns and Hoyler, 2013; Brocks, 2013). According to Brock (2013), education and geography are related because the acquisition of information and skills necessitates a geographical dimension in the form of diffusion. In light of this potential synergy, the purpose of this paper is to examine the historical development of Malaysian higher education institutions (HEIs) and their changing spatial configuration while taking into account changing politics, economics, social and environmental trends, and the global higher education trend. Note that because this is not a policy research, the focus will not be on important national policies. The focus of this study is on universities and university colleges, including public, private, and foreign universities and university colleges, as higher education 'institutions,' and thus they serve as the unit of analysis.

## **Literature Review**

### *HEIs Massification*

Higher education massification, which is often associated with growing tertiary enrolment rates and the expansion of higher education institutions, is a global trend in higher education (Altbach, Reisberg and Rumbley, 2009). This is because to the perception that higher education contributes to national economic growth, political progress, and social and cultural transformation (Lee, 2015). According to Lee (2015) Malaysia has experienced a similar rapid expansion, which can be divided into three waves: the first wave, which revolved around the struggle for the first independent university (University Malaya) in the 1950s and early 1960s; the second wave, which occurred in the 1970s and 1980s, and was focused on establishing more public universities to address educational disparities among the various ethnic groups (Lee, 2015). The Education Act of 1996, the Private Higher Education Act of 1996, the National Accreditation Board Act of 1996, the National Council on Higher Education Act of 1996, and the Universities and University Colleges Act of 1996 were all enacted to provide the necessary regulatory framework for the third wave of reform (Azman, Sirat and Karim, 2010).

The privatisation of higher education isn't just a Malaysian phenomenon. Neoliberal rhetoric has had an impact on higher education around the world (Torres, 2013), where it is connected with deregulation, privatisation, and state disengagement. Neoliberalism is a political economic theory that contends that the greatest way to enhance human well-being is to liberate individual entrepreneurial independence and skills within an institutional framework marked by strong private property rights, free markets, and free trade. (Harvey, 2005).

### *Driving Forces of HEIs Establishment: Malaysian Policies*

The 1996 higher education reform and the recent moratorium are two significant milestones in the growth of Malaysia's higher education system. The first event allowed additional players to enter the sector in order to meet public demand, whereas the moratorium primarily intends to maintain control over the number of participants and, in part, represents a shift in focus toward quality. The Ministry of Higher Education (MOHE) imposed an embargo on the formation of new private higher education institutions in 2013. This ban is in place from February 1, 2013, for a period of two years till 2015, after which it was extended for another

two years until January 31, 2017 (Ministry of Education, 2015). Due to the large number of private higher education institutions, this moratorium states that no new establishments are permitted, with the exception of foreign branches ranked within the top 100 in the world or institutions wishing to establish their campus in one of two designated areas: Iskandar Malaysia or Pagoh in Johor state. This moratorium is significant because it represents the Malaysian government's shift in focus on higher education, from quantity development to quality enhancement. This isn't to suggest that the Ministry of Higher Education hasn't emphasised quality in the past. As a result of the National Accreditation Board Act of 1996, the Malaysian Qualification Agency (MQA) has been in charge of monitoring the quality of tertiary education in the country since its formation.

### *Higher Education and Spatial Geography*

Human geography and physical geography are the two primary divisions of geography. The geography component of the link between geography and higher education is usually limited to human geography. Human geography, according to Kitchin and Tate (2013), is the study of society in relation to location and time. As a result, the spatial distribution of higher education institutions, as well as their history of founding and subsequent development, are two essential issues that this study intends to investigate. According to Jöns and Hoyler, who reviewed the literature on higher education geography, studies in this topic have expanded since 1990, with four primary lines of inquiry: university influence, transnational mobility, academic hegemonies, and neoliberal corporatization. This study examines the trend of establishment of higher education institutions, which is a different focus.

The terms 'learning region' and other related concepts, such as 'ideopolis' or knowledge-intensive city, were used to describe regions that serve as collectors and repositories of knowledge and ideas, and provide the underlying environment and infrastructure that facilitates the flow of knowledge, ideas, and learning when discussing the geography of higher education (Florida, 1995). Another word commonly used in many countries, such as Malaysia, is "education hub." Malaysia, according to Knight (2013), is one of the countries that is serious about becoming an education hub, with three major cross-border education initiatives, including Iskandar Education City, Kuala Lumpur Education City, and plans to recruit international students and students from other Islamic countries.

### **Methodology**

The study's data gathering process begins with the selection of a sample, then moves on to data collection, data analysis, and finally data visualisation. Data was gathered by manually going through the official websites of the universities and extracting important information, such as the university's location and year of foundation. This survey included a total of 138 higher education institutions; however, only public universities, private universities, private university colleges, and foreign university branch campuses were included in the sample, with public and private colleges and community colleges being excluded.

This group of people was chosen because they are substantially representative of Malaysia's higher education sector. Furthermore, the lack of data on the year that colleges and community colleges were founded, as well as their subsequent site changes, created technical issues that made inclusion them in the sample problematic. As a result, when the phrase "higher

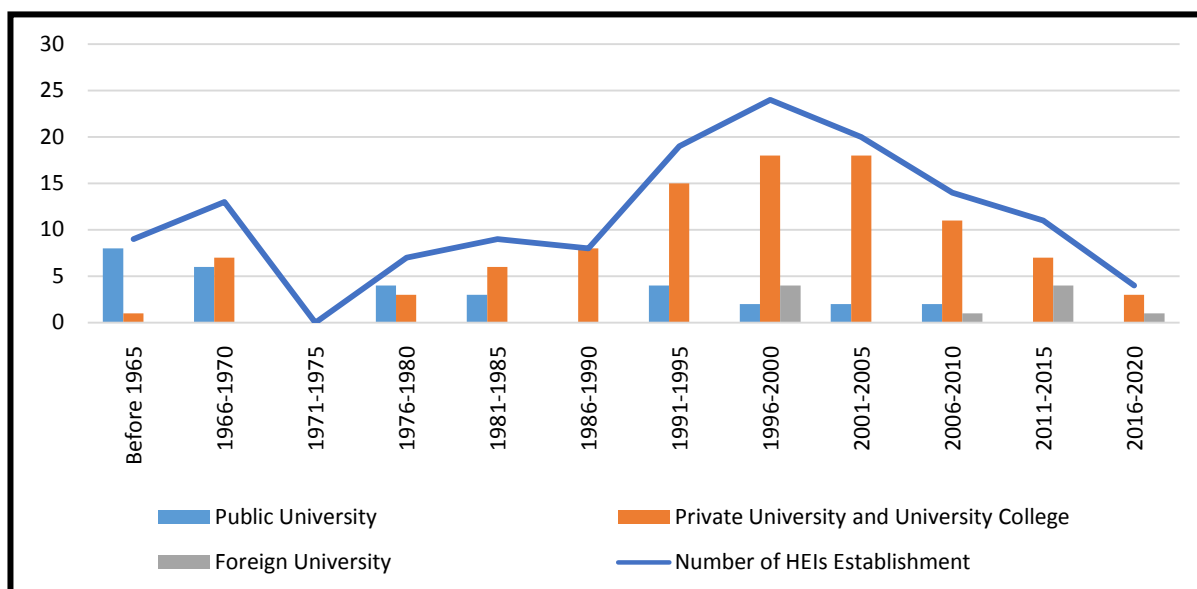
education institutions" or "HEIs" is used in this study, it refers to public universities, private universities and university colleges, as well as international universities, rather than colleges, community colleges, or other forms of tertiary institutions.

Higher education institutions are classified according to the MQA's official websites' lists (MQA, 2020). HEIs supported by the state government, such as Insaniah University College and the University College of Islam Melaka, are classified as private rather than public institutions. Apart from the typical graphs, a Geographic Information System (GIS) was used to visualise the data since it allows academics to see geographical data of higher education institutions in a more clear way (see Figure 3).

### Findings and Discussions

The findings of this study are based on several perspectives on the growth of Malaysia's higher education system. We track the development of HEIs in Malaysia from before the 1960s to 2020 from historical and political perspectives, with the study concentrating on how Malaysian histories and changes in educational policies have influenced the pattern of HEIs establishment. The number of HEIs in each Malaysian state will then be visualised to show the concentration of HEIs in certain states as well as the causes for this spatial layout. Finally, the density of public and private higher education institutions in Malaysia is contrasted in order to analyse the various spatial arrangements, followed by a brief discussion of the factors that have led to this pattern.

#### *The Development of Different Types of HEIs (before 1965-2020)*



**Figure 1: The Development of Different Types of HEIs (before 1965-2020)**

#### **1957 - 1971: Setting the Foundation of Malaysian HEIs**

The groundwork for Malaysian higher education may have been laid before 1971. In fact, all of today's Malaysian Research Universities were founded during this time period, but not all of them were given university status at the time. Universiti Teknologi Malaysia, for example, was still a college at the time, and it wasn't upgraded until 1975. The post-1969 election racial

riot, which experts have mostly linked to economic disparities among the various ethnic groups, was one incident that resulted in profound change in the Malaysian political sphere (Aziz, 2012). New Economic Policy was implemented in attempt to address economic disparities. Because higher education was seen as a powerful agent for social mobility, an ethnic quota system was implemented in the public university admissions process to increase educational opportunities for Bumiputras as part of government efforts to restructure Malaysian society and eliminate the association of economic function with ethnic group (Lee, 1997; Aziz, 2012).

### **1971 -1975: A period of upgrading former public colleges to public universities**

Between 1971 and 1975, no new higher education institutions were established. It should be noted, however, that during this time period, some former public colleges were promoted to public universities. For example, the modern University Putra Malaysia began as the School of Agriculture in 1931, then evolved into a college before becoming a university in 1971. Universiti Teknologi Malaysia, or Malaysia Technology University, began as a Technical School, was improved to a college in 1955, was elevated to an institute in 1971, and was finally granted university status in 1975. In the next decades, the same dynamic applies to later private universities and university colleges, where the institutions may have started out as a college, institute, or other type of institution, but eventually received university status.

### **1976 -1995: Expansion of the private higher education sector**

In order to accommodate the growing public demand, private higher education has expanded rapidly during this time period. While new public institutions were still being built during this time, the number of them had reached a plateau.

### **1996 -2005: Rapid expansion of the private higher education sector**

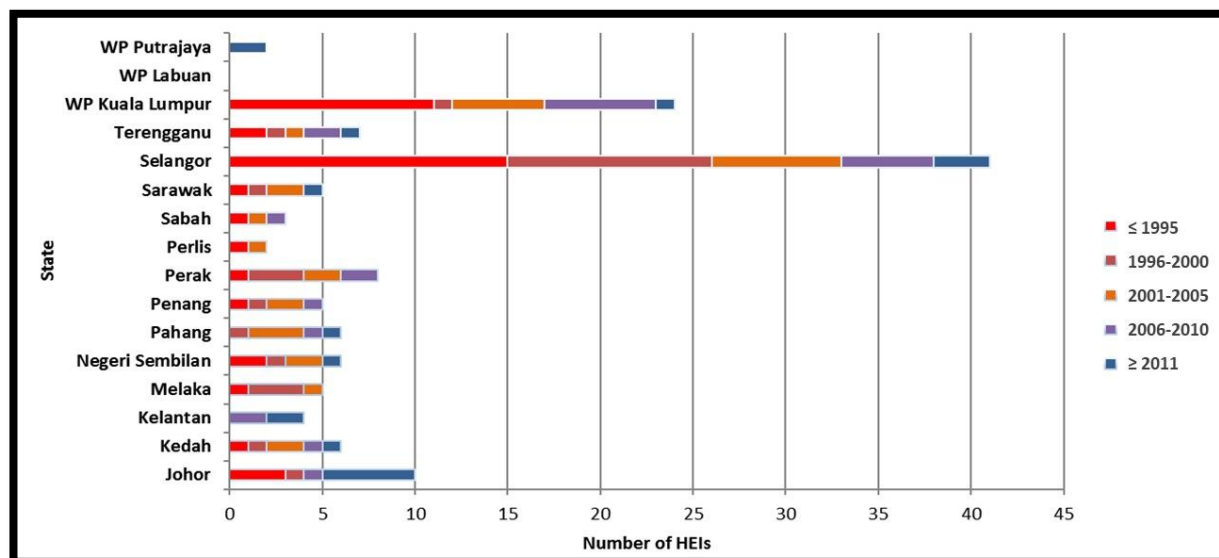
The year 1996 marks an important turning point in Malaysian higher education history, as a succession of higher education regulatory frameworks were developed to manage and govern the growing number of private higher education providers, as previously indicated. More importantly, legislative frameworks liberalised private higher education markets, leading in a rapid expansion of private universities and university schools, as well as foreign universities' income as new players in the Malaysian higher education system, between 1996 and 2005. Part of the increase was a reaction to neoliberal pressures to privatise higher education in order to allow market forces to play a larger role.

### **2006 -2020: Reaching a state of maturation and saturation**

Following the 1996-2005 period, when private higher education reached its peak pace of expansion, the sector progressively approached saturation and transitioned to a more matured condition. As demonstrated in Figure 1, the number of new private higher education providers joining the sector is falling. Surprisingly, while the number of new local private institutions has decreased during this time, the number of foreign universities has increased, reflecting the pervasiveness of higher education internationalisation and the government's desire to transform Malaysia into an international education hub. The moratorium described above, which imposes restrictions on the establishment of new higher education institutions, thus new

players are not allowed to enter the market unless they meet certain pre-specified standards, also indicates the saturation of the Malaysian higher education sector (see above).

### *Distribution of HEIs in Malaysia*



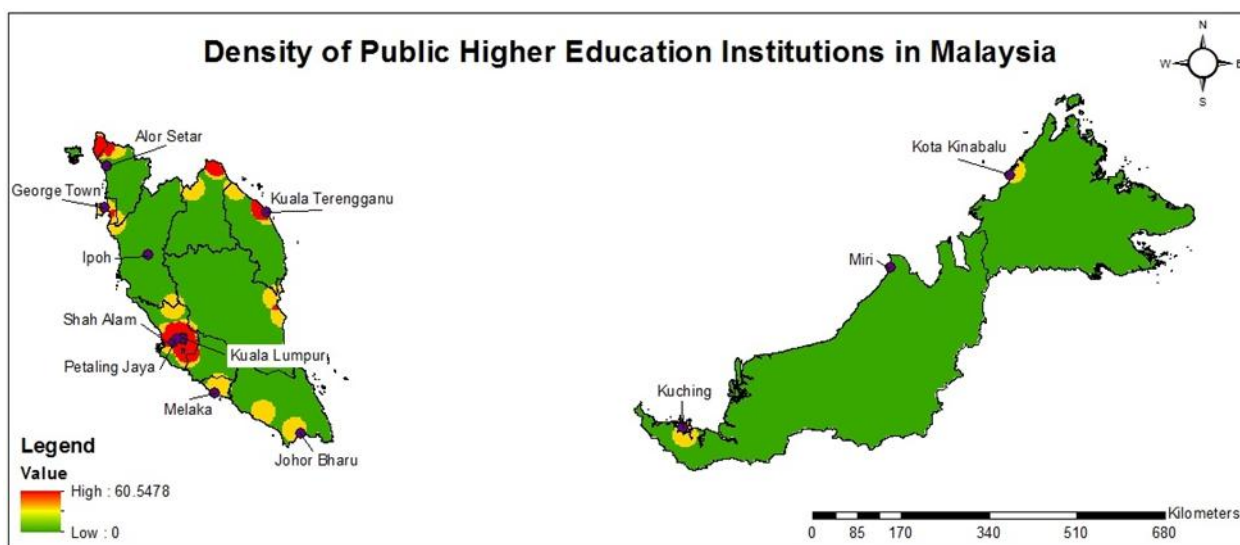
**Figure 2: The number of higher education institutions in Malaysia states**

Figure 2 depicts the distribution of HEIs in Malaysian states. According to the data, Wilayah Persekutuan Kuala Lumpur and Selangor have the most HEIs, owing in part to the Kuala Lumpur Education City (KLEC) plan, a government initiative aimed at transforming the region into a worldwide learning region (Azman et al., 2014). Intriguingly, the number of higher education institutions in Johor increased between 2011 and 2015 as a result of Iskandar education city development, which aimed to establish Nusajaya as an international education hub, and Johor now ranks third after Selangor and Kuala Lumpur in terms of HEIs. The Private Higher Education Act (1996), as Knight and Sirat (2011) explained, was a key national policy that facilitated the establishment of an education hub because it clearly outlined the requirements for establishing private institutions and paved the way for the government to invite reputable foreign universities to open branches in Malaysia.

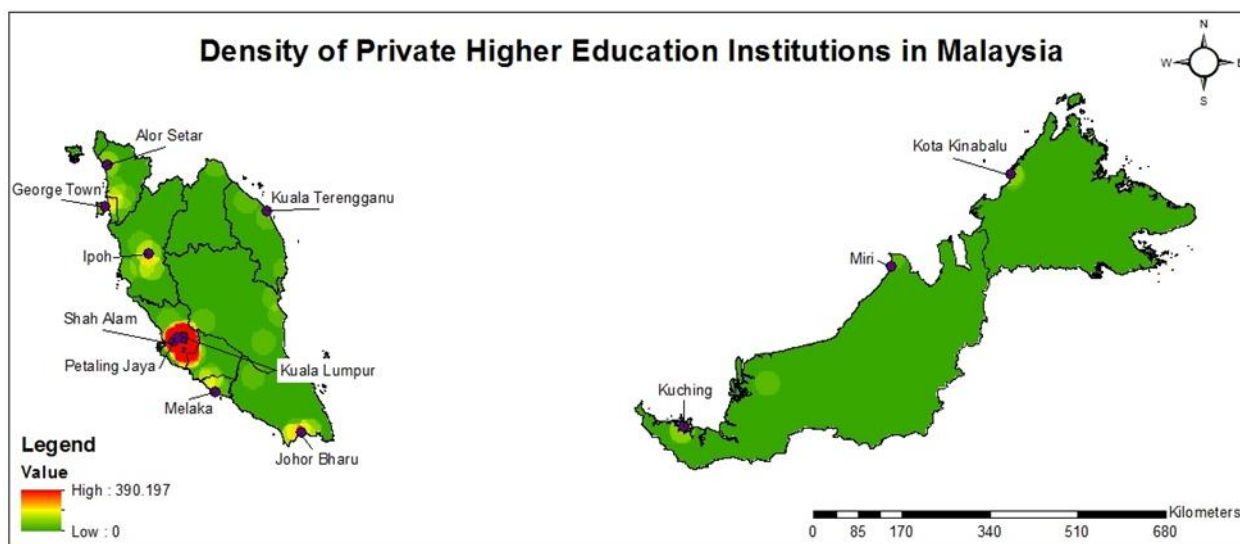
### *Density of HEIs in Malaysia*

The template is designed so that author affiliations are not repeated each time for multiple authors of the same affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization). This template was designed for two affiliations. Political and market forces influence the spatial configuration of HEIs in Malaysia. The HEIs sample is visualised using GIS technologies to assess the density of HEIs in Malaysia (Figure 3a showing the density of Public HEIs and Figure 3b showing density of Private HEIs). The concentration of private HEIs is generally concentrated in capital cities, implying that the institutions are using the capital city's appeal as a marketing tactic. When compared to other states, it is obvious that Kuala Lumpur and Selangor have a relatively high-density value (see Figure 3b). They do, however, differ in terms of distribution

patterns. Private higher education institutions are located closer to other capital cities, including as Ipoh, George Town, and Johor Bharu. These urbanised areas provide several options for social interaction as well as jobs. It is thought that private HEIs are placed in these places because students want to pursue their education in areas where part-time employment possibilities are accessible to help fund their studies financially. Furthermore, the establishment of industrial links between private HEIs and firms in capital cities would be a significant factor in improving graduates' employability and internship prospects.



**Figure 3a: Density of Public Higher Education Institutions in Malaysia**



**Figure 3b: Density of Private Higher Education Institutions in Malaysia**

On the other hand, public HEIs, which are supported by the federal government and whose locations are generally selected by the Ministry of Higher Education, place a premium on accessibility when determining where to locate because they serve as agents of the state, putting national interest first. The distribution of public HEIs throughout Malaysia states is

well distributed, as shown in Figure 3a. Even though Kuala Lumpur and Selangor have high densities, the Northern and East-coast regions of Malaysia also have high densities.

### **Conclusion**

To summarise, Malaysian higher education institutions are approaching maturity in terms of the quantity of education providers, and the Ministry of Education has made it plain that the focus is now shifting toward quality enhancement, particularly among private higher education providers. While the MQA will be in charge of ensuring the quality of education programmes, many private higher education institutions are still dealing with the concept of quality. Graduate employability is widely regarded as a quality indicator in the private higher education sector, necessitating the need to ensure that qualifications provided are recognised by professional associations. Because of this focus on vocation, research receives less attention. The pursuit of higher quality also raises the question of whether research is a reliable predictor of successful instruction and marketable graduates. This has actual consequences for private higher education institutions because prospective students may or may not consider academic research activities when looking for the proper institution to join before enrolling. Furthermore, research necessitates a significant investment from institutions, raising operating costs. As a result, if research is seen as an important component of educational quality, more government efforts are needed to increase funding opportunities for academics from private higher education providers, as well as research training to improve the level of research capacity among academics in private institutions.

The geographic study conducted allowed for a better depiction of how education hub initiatives have influenced the spatial design of higher education institutions. Nonetheless, due to their different natures of ownership and institutional orientations, there is an observable difference in how private and public higher education providers were located on the GIS density map. Private higher education providers tend to be more concerned with students' social and employment needs. Due to these factors, as well as fierce competition in the private higher education market, major cities, particularly Kuala Lumpur and Selangor, have a high density of private higher education institutions. The distribution of private higher education institutions demonstrates the non-regulation of their location choices, allowing private providers to pick mostly based on market factors. However, for students from low-income families who lack the financial means to move to capital cities to complete their education, the greater cost of living in capital cities may offer a significant barrier.

Finally, we believe that the GIS map has clearly illustrated the data, and we hope that future research in the field of higher education can take advantage of information processing tools such as Geographic Information Systems to better visualise data and produce clearer visualisations of evidence for researchers, policymakers, and the general public.

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