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# **Transnational Higher Education in Singapore -**

## **Relevance and Sustainability:**

**“Can transnational higher education programmes in partnership with Private Education Institutions continue to be relevant and sustainable in Singapore with the government’s drive with SkillsFuture Initiatives?”**

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**A Thesis Submitted for the Degree of Doctorate of Education**

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## **Abstract**

Globalisation and the advancement of information technology in the 21st century has resulted in the growing worldwide trend of higher education internationalisation and mobility. Coupled with rapid socio-economic changes and technological advances, two mega-trends – massification and mobility – have greatly influenced the higher education landscape.

The inclusion of education as a tradable service under the WTO's GATS treaty in 1995 has 'dislodged' education from its traditional public good position to be a quasi-public good negotiated within a typical market structure. Students are treated as "customers" and the programmes are "products or goods". The global expansion of this tradable service has led to an increasing trend of mobility of students, faculties, programmes and institutions. Transnational education (TNE) has contributed a significant proportion of the international education expansion and growth.

The objective of this study is to evaluate the status and sustainability of TNE in Singapore, in the context of the focus on mastery of skills against traditionally degree-based qualifications under the SkillsFuture Initiatives Framework launched by the Singapore government. The study researched on demographic data, facts and statistics and government discourse on university degree. TNE stakeholders, such as overseas university partners, students, graduates and teaching faculties were surveyed and interviewed to draw insights. The findings could be summarised as follows: as Singapore pushes towards a globalised and knowledge-based economy, there is continued appetite for higher education to stay competitive through the acquisition of new skillsets. With the cohort participation rate set at 40% for local public universities with no plans to increase this further, access to TNE as an alternative will

cater to the needs of the remaining cohort as well as adult learners who need to upgrade themselves to stay relevant and competitive in the rapidly changing economic environments.

## **Declaration**

This thesis results from my own work and has not been offered previously in candidature for any other degree in this university or any other university.

## **Acknowledgements**

The completion of this thesis will mark the climax of a long but fruitful learning journey for me. At my age of 65, and encountering several new medical conditions to myself and close members of the family, as well as coping with the restrictions imposed by the global Covid19 pandemic, had made this journey more challenging.

My personal work experiences, having spent more than 30 years in commercial corporate environments, need significant adaption and change in approach and style for this academic pursuit. Thus, coming to this stage of my doctorate journey would not have been possible without the many who took the time to come alongside with valuable advice and support.

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Finally, I am deeply indebted to family, especially my wife, my two sons, my two daughters-in-law and daughter, who have stood by my side through the whole journey and provided the much-needed emotional support. Thank you for constant reminders and words of encouragement that have meant a lot to me, and have kept me going through some of the most challenging periods in my life. Thanks for the understanding when I had to take time away from all of you to work on this thesis. I will have to find some time to make it up to all of you.

This journey certainly does not end here. I certainly look forward to continue contributing back to the higher education community by continuing the career mentoring to students in RMIT University for their Singapore and Melbourne students as well as for the students studying in Curtin University in Singapore Campus. I will use the research insights to contribute to the body of knowledge to the University of Newcastle, Australia in the pursuit of establishing an International Branch Campus in Singapore.



## Table of Contents

<b>Chapter</b>	<b>Contents</b>	<b>Page</b>
	Abstract	2
	Declaration	4
	Acknowledgement	5
	Table of Contents	7
	List of Abbreviations	11
	List of Tables	14
	List of Figures	18
	List of Appendices	19
	References	277
	Appendices	302
1	Introduction	20
	1.1. Globalisation, Economic Restructuring, Education and Skill Development	21
	1.2. Global Talent Crisis	34
	1.3. Transnational Education - Definition, Growth and Impact	37
	1.4. Background of the Problem	41
	1.5. Significance and Justification for the Study	46
	1.6. Research Questions and Sub-Questions	47
	1.7. Literature Review	49
	1.8. Research Context and Objectives	50
	1.9. Research Methodology Overview	54
	1.10. Limitation of the Study	56
	1.11. Impact of Study	58

	1.12. Definitions of Key Terms	58
	1.13. Outline of Study - Chapter Organisation	59
	1.14. Chapter Summary	61
2	Development of Higher Education in Singapore	62
	2.1. Global Trends, Education Hubs and CPR Cap	62
	2.2. Singapore Education System Overview and Landscape	73
	2.3. Committee on University Education Pathways Beyond 2015	82
	2.4. Cohort Participation Rate Tension and Debate	84
	2.5. Global Schoolhouse and World Class Universities Project	88
	2.6. TNHE in Capacity Building and PEIs	92
	2.7. Growth of PEIs	96
	2.8. The Massification and Expansions of PEIs	98
	2.9. Past Issues with PEIs	101
	2.10. CPE and Regulatory Controls	102
	2.11. Current Challenges and Issues	105
	2.12. Chapter Summary	115
3	Literature Reviews	117
	3.1. Introduction	117
	3.2. Evolution of Internationalisation of Higher Education	118
	3.3. Global Market and International trade in HE	119
	3.4. Dimension of Transnational Higher Education	123
	3.5. Emerging Trends in Global HE	132
	3.6. Students and Job Mobility	133
	3.7. Development of Research Problem and Propositions	135
	3.8. Chapter Summary	136

4	Research Methodology	139
	4.1. Introduction	139
	4.2. Selection and Justification for Using Qualitative Case Study	144
	4.3. Justification for working in the interpretative paradigm	150
	4.4. Determining Data collection protocol and techniques	153
	4.5. Collecting, analysing and interpreting data	159
	4.6. Data reliability	162
	4.7. Limitation of Study	166
	4.8. Chapter Summary	167
5	Findings of Surveys, Focus Groups' Discussions and Semi-structured Interviews	170
	5.1. Introduction	171
	5.2. Students' Perspectives and Personal Experiences	177
	5.3 TNE Graduates' Perspectives, Experiences and Expectations	197
	5.4. Lecturers' Perspectives, Experiences and Expectations	216
	5.5. TNE Providing Institutions' Perspectives and Expectations	232
	5.6. Qualitative Analysis and Summary of Major Findings	243
	5.7. Assessment of the 3 Universities for Relevance and Sustainability	252
	5.8. Porter's Five Forces Analysis on the TNE Sector	253
	5.9. Case Studies using SWOT on the TNE Universities	257
	5.10. Chapter Summary	266
6	Conclusions, Limitations and Implications	268
	6.1. Introduction	268
	6.2. Conclusion about research proposition	269

	6.3. Contribution to the research problems	274
	6.4. Limitation and future research	274
	References	277
	Appendix A – Ethnics Approval Letter	302
	Appendix B- Consent Letter/Survey Questionnaires- students	303
	Appendix C – Consent Letter/Survey Questionnaires - graduates	308
	Appendix D – Consent Letter/Survey questionnaires - lecturers	314
	Appendix E – Interview/Survey questions for institution staffs	320

### **List of Abbreviations (in alphabetical order)**

ASEAN	Association of South East Asian Nations
ASPIRE	Applied Study in Polytechnics and ITE Review Committee
ASQA	Australian Skills Quality Authority
AU	Autonomous University
AUQA	Australian Universities Quality Agency
BCA	Building and Construction Authority
CAAS	Civil Aviation Authority of Singapore
CET	Continuous Education and Training
CFE	Committee for Future Economy
CPE	Council for Private Education/Committee for Private Education
CPR	Cohort Participation Rate
CUEP 2015	Committee on University Education Pathways beyond 2015
CUS	Curtin University Singapore
GATS	General Agreement on Trade in Services
EDP	External Degree Programmes
ESC	Economic Strategies Committee
ERC	Economic Review Committee
HE	Higher Education
HEI	Higher Education Institute
HEFCE	Higher Education Funding Council for England
HKCAAVQ	Hong Kong Council for Accreditation of Academic and Vocational Qualifications
IAL	Institute of Adult Learning
IBC	International Branch Campus

ICT	Information and Communication Technology
IMF	International Monetary Fund
IPOS	Intellectual Property Office of Singapore
JCUS	James Cook University Singapore
KBE	Knowledge-based economy
LKCSOM	Lee Kong Chian School of Medicine
MDIS	Management Development Institute of Singapore
MUS	Murdoch University Singapore
MCI	Ministry of Communication and Information, Singapore
MOE	Ministry of Education, Singapore
MOM	Ministry of Manpower, Singapore
MTI	Ministry of Trade and Industry, Singapore
NAFA	Nanyang Academy of Fine Arts
NIE	National Institute of Education
NTU	Nanyang Technological University
NUS	National University of Singapore
OECD	Organisation for Economic Co-operation and Development
PE	Private Education
PEI	Private Education Institution
PET	Pre-Employment Training
QAA	Quality Assurance Authority
QE-TNE	Quality Evaluation and Enhancement of UK Transnational Higher Education
RMIT	RMIT University
SAA	Singapore Aviation Academy

SIM GE	Singapore Institute of Management Global Education
SIT	Singapore Institute of Technology
SMU	Singapore Management University
SSG	SkillsFuture Singapore
SUSS	Singapore University of Social Sciences
SUTD	Singapore University of Technology and Design
TEQSA	Tertiary Education Quality and Standards Agency
TNHE	Transnational Higher Education
TNE	Transnational Education
UONA	University of Newcastle Australia
UONS	University of Newcastle Singapore
UNESCO	United Nations' Educational, Scientific and Cultural Organisation
UniSIM	SIM University
WDA	Singapore Workforce Development Agency
WSDP	SkillsFuture Work-Study Degree Programme
WSG	Workforce Singapore
WTO	World Trade Organisation
Yale-NUS	Yale-NUS Liberal Arts College

## List of Tables

<b>Table</b>	<b>Contents</b>	<b>Page</b>
1.1	Singapore Population Trends, 1970 - 2020	27
1.2	Total Population Aged 25 years and over with University Qualification	31
1.3	Age Groups of over 25 years comparison with University Qualification	32
2.1	Chronological Order of various Economic Committees to transform Singapore into KBE (1985 to 2017)	62
2.2	Cohort Participation Rate from 2005 to 2020	68
2.3	Percentage of P1 Cohort that progressed to post-secondary education vs CPR Percentage	69
2.4	CPR Percentage of Admission for Post-Secondary Levels	71
2.5	2021 Student Numbers for Various Post-Secondary Programme	87
2.6	Singapore above 15 years old Residents' Education Qualifications Attainment 2015-2021	111
2.7	Singapore Residents Unemployment Rate by Qualifications Attainment 2015-2021	112
3.1	International Student Mobility Numbers	135
4.1	The Strengths and Limitations of Using Focus Group	155
4.2	Focus Groups over One-to-One Interviews – Key Differences	156
4.3	Yin's (2000) case study tactics	163
5.1	Summary of Research Methods used for Data Collection	171



5.2	Sampling Process for Participants	172
5.3	Demographic of Students of Group One	178
5.4	Summary of responses on rationale to take a TNE programme from Group One	180
5.5	Cost Comparison between overseas study, TNE and AUs	183
5.6	Summary of responses on recommending others to take a TNE programme from Group One	185
5.7	Summary of responses on the different aspects of TNE programme from Group One	186
5.8	Demographic of students of Group Two	190
5.9	Summary of responses on rationale to take a TNE programme from Group Two	191
5.10	Summary of responses on recommending others to take a TNE programme from Group Two	194
5.11	Summary of responses on the different aspects of TNE programme from Group Two	195
5.12	Demographic of participants of Group Three	198
5.13	Summary of responses on rationale to take a TNE programme from Group Three	199
5.14	Opportunity Cost of Shorter Duration of Study	203
5.15	Summary of responses on recommending others to take a TNE programme from Group Three	203
5.16	Summary of responses on the different aspects of TNE programme from Group Three	205
5.17	Demographic of participants of Group four	209
5.18	Summary of responses on rationale to take a TNE programme from Group Four	210

5.19	Summary of responses on recommending others to take a TNE programme from Group Four	213
5.20	Summary of responses on the different aspects of TNE programme from Group Four	214
5.21	Demographic of Lecturers	218
5.22	Summary of response on rationale to teach in TNE programme from Lecturers	218
5.23	Summary of response on the aspects of a TNE programme from Lecturers	219
5.24	Summary of response on recommending others to teach from Lecturers	221
5.25	Feedbacks and Comments on PEIs' Challenges	221
5.26	Feedbacks and Comments on Students	224
5.27	Feedbacks and Comments on TNE Programmes meeting markets' needs	226
5.28	Feedbacks and Comments on TNE Continued Relevance in SkillsFutures Settings	227
5.29	Feedbacks and Comments on Ideal Numbers of PEIs and Programmes	228
5.30	Feedbacks and Comments on Improvements to TNE	229
5.31	Graduates Employment Outcomes of PEI 2019/2020 cohorts and AU 2020 cohort	231
5.32	Employment Outcomes of Fresh Full-Time EDP by selected PEIs	231
5.33	Partnership Models and Singapore Presence	232
5.34	Advantages and Limitation of Partnership Models	233
5.35	Student Experiences	235

5.36	TNE Contributions to the communities	236
5.37	Financial Impacts for Stakeholders	238
5.38	Quality of Programmes vs On-Campus in Australia	239
5.39	Relevance of TNE arrangement to Stakeholders	240
5.40	Future Plans in Singapore and TNE in the regions	242
5.41	Combined responses of Top 5 reasons for taking a TNE programme	244
5.42	Combined responses of Top 5 Aspects of TNE programme	247
5.43	Situational Analysis of each of the university case	252
5.44	SWOT Matrix of Curtin University	258
5.45	SWOT Matrix of Murdoch University	260
5.46	SWOT Matrix of University of Newcastle, Australia	263
6.1	Median Salary Comparison of different qualifications	270

## List of Figures

<b>Figure</b>	<b>Contents</b>	<b>Page</b>
1.1	<i>ESC 2009 Vision for Singapore – High-Skilled people, Innovative Economy, Distinctive Global City</i>	28
2.1	<i>Why they want a degree</i>	72
2.2	<i>MOE's 21<sup>st</sup> Century Competency Framework</i>	74
5.1	<i>Porter's Five Forces Model</i>	254

## List of Appendices

<b>Appendix</b>	<b>Contents</b>	<b>Page</b>
A	Approval of Ethics Application	302
B	Consent Letter for Survey & Questionnaire for Students	303
C	Consent Letter for Survey & Questionnaire for Graduates	308
D	Consent Letter for Survey & Questionnaire for Lecturers	314
E	Consent Letter & Interview Questions for TNE Providers	320

## CHAPTER ONE: INTRODUCTION

*“Just as castles provided the source of strength for medieval towns, and factories provided prosperity in the industrial age, universities are the source of strength in the knowledge-based economy of the twenty-first century”.*

Lord Ronald Dearing (CB), September 2002

Lord Dearing’s words continue to ring true and relevant, as the economic and social prosperity of a nation depends upon a healthy knowledge-based economy. In our globally competitive economic and unstable environment that constantly grapples with technological disruptions, still shaken in the past two years by the coronavirus pandemic, we are faced with an unprecedented greater need for a talented, enterprising workforce, for constant innovation in product and service development, for a thriving culture of entrepreneurship, for dynamic leading-edge scientific and technological development, and for world-class research that attracts investment.

The demand for higher education has been increasing in Singapore and globally at an unprecedented rate. The demand for international higher education is growing in tandem with this demand, aided by globalisation and the adoption of information technology. The push towards knowledge-based and innovation-driven economies has spurred demand for higher education worldwide to meet the needs of new skills. Rising wealth in emerging economies has prompted the children of the growing middle classes to seek educational opportunities in higher education either locally or abroad. Transnational education (TNE) makes up a significant portion of the international higher education sector as an additional route for an international qualification besides traveling to the home campus to study.

This chapter provides an introduction to this study on TNE. The chapter will explain the growth and impact of globalisation and how this triggered the economic restructuring of Singapore to maintain its economic growth for the past 50 years. This restructuring to pivot towards a knowledge-based economy requires a new strategy on Singapore's education and skills development to face the challenges in the global talent crisis. This chapter will then cover the definition of TNE, its growth and contribution to capacity building, issues and challenges leading to the background of the problem and the research questions and the contribution of this study.

## **1.1 Globalisation, Economic Restructuring, Education and Skills Development**

The Singapore economy grew at an average of over 8.5% per year from 1965 to 1997. Emerging from the Asian financial crisis of 1997-1998, lacking natural resources and losing its cost-advantage compared to the regional developing economies of East Asia, Singapore's goal was to re-invent itself into an innovation-driven economy with world-class capabilities to stay competitive and relevant in the fast-changing knowledge-driven economy. Externally, globalisation and the information technology revolution triggered the restructuring of corporations and national economies. Knowledge-related activities have become central to creating wealth and sustainable economic growth. Singapore had to move out of the low-wage, low-cost leagues to compete with the OECD economies and their knowledge-based industries. This re-invention opened new opportunities and challenges for government policies, business focus, economic structures, education developments as well as knowledge creation.

The OECD (1996) defines a knowledge-based economy (KBE) as one in which the production, distribution and use of knowledge are the main drivers of growth, wealth-creation, and employment for all industries. In the KBE, people's ideas and capabilities are the key source of wealth and opportunities. To be a KBE, Singapore will need human and intellectual capital to create, absorb, process, and apply knowledge, a strong technological capability, an entrepreneurial culture, an open cosmopolitan society to attract global talent, and connection to other global knowledge centres. To support the new economy, the Singapore workforce must be nurtured with the skills, quality, and mindset to support and to meet the changing needs of the industry and have the know-how to create new products, markets and wealth.

Singapore's knowledge economy aspirations and practices reflect its past development trajectory. Adopting a historic openness to embracing foreign ideas and foreign expertise, its education policies have followed its broader economic development policies. The city-state is now seeking to gain innovation leverage in much the same way that it acquired capacity in manufacturing expertise - by using foreign institutions and foreign talents to meet the objectives. This has led to international cooperation and collaborations taking place in educational, social, economic and services sectors at all levels of society through national to international organisations, government to government, and institution to institution collaboration.

In the knowledge society, with knowledge creation and information technology as its key elements, higher education plays a crucial role in reshaping and restructuring the social, economic and political institutions of a country. While education and training



of the national labour force remain important, universities are now intensifying efforts to produce qualities of entrepreneurialism, creativity and cosmopolitanism in their graduates.

Faced with new responsibilities to contribute to national development, Singapore's universities nonetheless operate in complex transnational environments. Like any university seeking global prominence and profile, Singaporean universities are caught up in global circuits and regimes of value created in part by competition for "talent" in selective fields.

A transformation through the internationalisation of educational activities that is affecting both the provision and purpose of higher education is happening, similar to the larger scale phenomenon of globalisation characterised by both integrating and fragmenting dynamics, by expanding commodification and privatisation, by accelerating flows of goods and services, and by intensified personal and institutional mobility (Hershock, 2010).

### **1.1.1 Globalisation**

Globalisation is not a new concept and was the defining term of the 1990s (O'Rourke and Williamson 2000, pp 1). According to Held, et al., globalisation is a stretching of social, political, and economic activities across borders, whereby the events, decisions and activities in one region of the world can significantly impact distant regions of the globe. The term embodies transregional interconnectedness, including the widening reach of networked power (2003, p 67). The globalisation of economies had a significant effect upon the pattern of diversification of global resource allocations, leading to the liberalisation of restrictions and resulting in increased trade, mobility of resources, integration, economic growth and benefits.

Globalisation is an ongoing ubiquitous process of interconnectedness and interdependence of people, institutions, societies and nations occurring as a result of increasing worldwide integration and interaction of political, economic, social, technological and ecological systems. Likewise, higher education has also become a globally interconnected system in many ways with globalisation having a tremendous impact on the internationalisation of higher education over the past decades.

Globalisation also serves as both an overarching framework and an explanatory concept to better understand the world we live in and how or why certain phenomena develop. The more globalised the world becomes, the more likely it is that what happens in one part of the world will have an impact on other parts of the world. Globalisation continues to be fuelled by international politics, international trade, international travel, international communication and international higher education. Internationalisation is the adaptive strategic response of people, institutions, societies and nations to the process of globalisation. It is therefore the process of developing goods and services (for instance, higher education offerings) and adapting those goods and services to local contexts. Within the context of higher education, the supply of higher education continues to expand rapidly in response to the growing demand for it. The increasing demand and higher participation rates for higher education is a worldwide phenomenon and has become the norm in most countries. Singapore, most countries in Asia, and OECD countries have high participation rates of young adults in higher education.

In an increasingly globalised knowledge community and hyperconnected world, there is a corresponding increase in the mobility of skilled workers whose skills are sought across the world. Its effects are enhanced by the revolution in communications and

the fast-changing pace of technology-driven innovations. The digital revolution together with the introduction of the General Agreement on Trade in Services (GATS) by the World Trade Organisation (WTO) in 1995 (alongside the various regional trade agreements liberalising merchandise trade and services) are contributing to the transformation of the role of individual nations and the lowering of national boundaries to create a more seamless global ecosystem. More salient in the future will be the evolution of transnational political, economic and personal networks that transcend traditional boundaries creating an interconnected and interdependent world.

Education is an important factor in determining a country's wealth and the extent of education integration into the global economy is important and extremely powerful. According to the OECD, all countries, regardless of their national wealth, stand to gain from more and better education as this would boost GDP by an average of 28% per year in lower-income countries and 16% per year in high-income countries for the next 80 years (OECD, 2015). A well-educated workforce can be successful in the global markets and spur greater economic development. The cross-border mobility of educational institutions and programs is a very visible form of globalisation of higher education which also promotes greater access.

The implementation of GATS in 1995 opened up the privatisation and marketisation of higher education services within a fairly short period. Trade in higher education services is now a multi- billion-dollar industry that includes recruitment of international students, establishment of university campuses abroad, study abroad student exchanges and franchised provisions. The digital revolution in information and communication technologies is creating alternative and new means of delivering

contents and access in higher education. Providers of higher education services are also evolving with models of private and public partnerships as well as new and traditional modes of delivering education services across borders in a multitude of partnership models. The current Covid-19 pandemic best demonstrates the use of technology in learning as the pandemic had shut down almost all universities and curtailed the international movements of students. Universities and students are now learning online using technologies such as Zoom, Webex and other online platforms in order to remain safe and continue their lessons. Student internships are similarly done virtually, as employees work from home to be compliant with lockdown measures in their respective countries to curb the spread of Covid-19.

Increasingly, economic rationales are the driving force towards international and transnational provision of higher education services. The commercial or profit motive is apparent in both private and in some cases public providers.

Globalisation has impacted on societies and individuals, creating new types of jobs and work requirements that require different skillsets at different levels of employment, with growing expectations and needs for higher thinking skills and the ability to compete in global markets. Advanced and developing economies, with their changing demographics and pursuit of growth in knowledge economies have seen demand for higher and adult education increasing leading with a movement towards lifelong learning.

With the forces of globalisation and the rapidly changing economic landscape of the world, Singapore is facing its most challenging times since its independence 56 years ago due to the intense competition in the Asia-Pacific region and the shift in foreign direct investment towards lower cost countries in the region. A small nation

without natural resources and short in human capital, Singapore has been pushing towards creating an economy driven by knowledge, ideas and innovation.

The data (Table 1.1) from the Department of Statistics, Singapore, 2020, reported that total population for the nation was 5.685 million (Population Trends, 2021, Department of Statistics).

Table 1.1. Singapore Population Trends, 1970 – 2020

<b>KEY DEMOGRAPHIC INDICATORS, 1970-2020</b>						
<b>Population</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>
Total Population ('000)	2,074.5	2,413.9	3,047.1	4,027.9	5,076.7	5,685.8
Population Density (Per sq. km)	3,538	3,907	4,814	5,900	7,146	7,866
Ratio (Males per 1,000 females)	1,049	1,032	1,027	998	974	957
Median Age (Years)	19.5	24.4	29.8	34.0	37.4	41.5

*Source: Department of Statistics, Singapore- Population Trends 2021*

This is a relatively small population compared to the competing economies in the region. Thus, human capital development through education and training is of great importance to restructure the economy from a low-cost, labour-intensive economy focusing mostly on low-cost manufacturing in Singapore's early days of nation building, to the current drive towards a knowledge-based economy producing high value-added products and services with highly skilled and knowledgeable human capital.

### **1.1.2. Economic Restructuring**

The Economic Strategies Committee (ESC) was formed in 2009 to brainstorm new and creative ways to ensure the economy's long-term growth. Led by then-Finance Minister Tharman Shanmugaratnam, the ESC released its report in 2010 with its

central vision for Singapore stated as follows: “High-Skilled People, Innovative Economy, Distinctive Global City”



*Figure 1.1. ESC 2009 Vision for Singapore – High-Skilled people, Innovative Economy, Distinctive Global City*

Boosting skills, innovation and productivity should be the basis for sustaining economic growth that is inclusive and broad-based for citizens, living in a vibrant and distinctive global city that is open and diverse.

Such a push towards a knowledge-based economy is creating massive demand for acquiring higher qualifications. The pressing need to adapt to a knowledge-based economy increased demand for the upgrading of qualifications, and this exceeded

the country's capacity to expand places in higher education institutions to offer sufficient opportunities.

In December 2015, the Singapore government set up an economy review committee – the Committee on the Future Economy (CFE) – to prepare for the challenging and structural changes in the global environment characterised by rapid technological changes, subdued global growth and anti-globalisation trends. Chaired by then Finance Minister Heng Swee Keat, the committee was tasked to develop economic strategies for Singapore's future. This was the third of such committees formed, with the first formed in 2001 after the Asian financial crisis to formulate a blueprint for restructuring Singapore's economy. The committee released its report on 9<sup>th</sup> February 2017 that outlined seven broad and "mutually-reinforcing" strategies for Singapore to stay ahead in the digital era (CFE, 2017). The Committee's goal was to tackle five key areas:

- Future growth industries and markets
- Corporate capabilities and innovation
- Jobs and skills
- Urban development and infrastructure
- Connectivity

The CFE's key recommendations envisioned Singapore being a responsive economy, with its citizens possessing deep skills and engaging in continuous lifelong learning to stay relevant in the rapidly changing technological workplace. Its businesses would be innovative and nimble in the subdued growth and anti-globalisation market and the city would be vibrant and connected to the world. Both the previous Economic Review Committee (ERC) and Economic Strategies

Committee (ESC), together with the current CFE recommendations, paid strong focus on human capital development as the key driver for economic growth.

### **1.1.3. Education and Skills Development**

While Singapore's education system has won global praise, it faces two key challenges: preparing Singaporeans for the future economy, and sustaining social mobility even as the well-off are better able to give their children a head start. The system has sometimes been criticised for locking Singaporeans into fixed pathways from a young age, and inadvertently stigmatising poor performers or reinforcing structural factors such one's socio-economic background.

Education is an asset not only because of its intrinsic value, but also because it provides individuals with skills and as a signal of such skills. As a result, investments in education yield high returns later in life (OECD, 2020). Higher levels of education usually translate into better employment opportunities and higher earnings. The potential to earn more and see those earnings increase over time, along with other social benefits, is an important incentive for individuals to pursue higher education. Having a tertiary degree carries a considerable earnings advantage in most OECD countries, with the earnings advantage increasing with the level of tertiary attainment along with better employment opportunities (OECD, Education at a glance, 2021).

The increase in demand for places in higher education institutions both locally and overseas is evident over the past decades. In Singapore, these increases are seen locally in the public universities and transnational providers as well as in overseas universities. Statistics from Department of Statistics Singapore (Population Trends, 2021, Department of Statistics) in Table 1.2 shows that the percentage of population aged 25 years and over with a university qualification increased from 77,000 (4.75%)



in 1990 to 982,000 (32.98%) in 2020, an increase of over 1200%. During this period, the percentage of population over the age of 25 remained fairly constant at 51 to 53%, yet the demand for university education over the same period rose sharply, with the sharpest increase of three-fold in the period between 1990 to 2000. The following decade saw a two-fold increase before tapering down to less than two-fold for the recent decade. This upward trend reflects the increase in demand for higher education in Singapore.

Table 1.2. Total Population Aged 25 years and over with University Qualification

	1990	2000	2010	2020
<b>Total Population ('000)</b>	3,047.1	4,027.9	5,076.7	5,685.8
<b>Population Aged 25 year and above ('000)</b>	1,622.3	2,074.0	2,576.0	2,977.8
<b>% Of aged 25 years and above</b>	53.24%	50.82%	50.74%	52.37%
<b>Total University Qualification ('000)</b>	77.0	249.9	610.0	982.0
<b>University Qualification/Total Population (%)</b>	2.53%	6.20%	12.02%	17.27%
<b>University Qualification /Total Population 25 years and above (%)</b>	4.75%	12.05%	23.68%	32.98%

Source: Department of Statistics, Singapore- Population Trends 2021.

Table 1.3 shows a focus on two age groups, 25 to 29 years and 30 to 34 years from 1990 to 2020. Within this 30-year span alone, the percentage of the population within these age groups who have a university qualification increased from below 10% (at 6% and 8% respectively) to over 50% (at 56% and 60% respectively), which again reflects the continuing demand for higher education.

Table 1.3. Age Groups of over 25 years comparison with University Qualification

	1990	2000	2010	2020
<b>25 – 29 years population</b>	281,500	250,500	249,400	268,900
No. of University qualification	22,700	66,800	114,300	150,200
<b>Percent with degree</b>	<b>8.06</b>	<b>26.67</b>	<b>45.83</b>	<b>55.86</b>
<b>30 - 34 years population</b>	292,700	279,500	289,300	296,000
No. of University qualification	18,400	62,500	136,500	171,400
<b>Percent with degree</b>	<b>6.29</b>	<b>22.36</b>	<b>47.18</b>	<b>57.91</b>
<b>University Qualification of Aged 25 years and over for 4 Age Groups (by%)</b>				
<b>Age Group</b>		<b>2010</b>	<b>2020</b>	
25 to 34 Years		46.5	<b>56.9</b>	
35 to 44 Years		34.6	<b>52.2</b>	
45 to 54 Years		15.4	<b>35.5</b>	
Above 55 Years		6.1	<b>11.1</b>	

Source: Department of Statistics, Singapore- Population Trends 2021.

The Singapore MOE conducted various studies and reviews on these growing trends over the years and implemented various measures to increase the number of places in public universities. The latest recommendations, after extensive studies in 2012 done by the Committee on University Education Pathways beyond 2015 (CUEP 2015) was to grow the university sector qualitatively and quantitatively with a more diversified university landscape with an emphasis on greater diversity - offering more choices and more opportunities, and expanding the places to 40% of the cohort participation rate (CPR) by 2020. This is an increase from the 30% CPR by 2015 from the recommendation by the previous committee. (The university CPR is the percentage of locals, in a Primary One cohort, who matriculate into publicly-funded

full-time undergraduate places at local institutions.)). The 2012 report mentioned a need to leverage on the private education sector and highlighted the need to conduct an in-depth study of the private education sector and examine whether to fund full-time degree programmes at the SIM University (UniSIM). SIM University, now renamed as the Singapore University of Social Studies, was a private university back then and was gazetted as Singapore's 6<sup>th</sup> Autonomous University on 17<sup>th</sup> March 2017 following the report as part of Singapore's restructuring of the higher education landscape and focus on skills and lifelong learning.

In January 2016, with the emphasis on skills and competitiveness in the global marketplace, the Singapore government reorganised its functions for effective implementation of two key priorities: the national SkillsFuture initiative, and the need to ensure competitiveness and quality jobs for Singaporeans over the long term. This reorganisation saw the creation of two new separate statutory boards to focus on skills and employment respectively – SkillsFuture Singapore (SSG) and Workforce Singapore (WSG).

The creation of the two new statutory boards enabled each organisation to focus its energy on its key mission, SSG will foster a culture of lifelong learning, and help to integrate a whole system of education and training for life, whilst WSG will help companies to be manpower-lean while remaining competitive,

SkillsFuture is a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting point. The movement is a multi-agency effort within the Government and involves all the tripartite partners, employers, employees and the labour union. MOE, MOM, the Ministry of Trade and Industry (MTI), and other agencies will work alongside SSG

and WSG to ensure the effective implementation of SkillsFuture initiatives. The SkillsFuture Initiative will look at improving technical education and career guidance systems, strengthening workplace partnerships, developing better career pathways and expanding apprenticeship opportunities so that graduates are better placed and prepared for work. Higher education institutions will be plugged into the needs of industries and the real world of work.

Through this movement, the skills, passion and contributions of every individual will drive Singapore's next phase of development towards an advanced economy and inclusive society. Skills mastery is perceived under this movement as being more important than having the right paper qualifications, and the movement encourages a mind-set of continually striving towards greater excellence through knowledge, application and experience as encapsulated by its motto –

***“Your skills. Your asset. Your future.”***

Metaphorically speaking, SkillsFuture is seen as upgrading the human brain's “software” with the latest version, equivalent to what we do for our electronic devices so that it can process the latest information and remain productive. It is essentially extending the runway for a person's career.

## **1.2 Global Talent Crisis**

Education and training which was instrumental to the earlier successes of Singapore during its nation building in the past 50 years will still be paramount to generate the know-how and skills to meet the demands of fast evolving economic growth in new technologies and new growth sectors to provide for the success of the nation for the next 50 years. With labour markets undergoing profound transformations, where

automation is displacing workers in routine occupations, and as the application of digital technologies and artificial intelligence expand, there is a need for a new wave of education, including continuous lifelong learning to meet the needs of the industries and narrow the gap of mismatch of skills. As Singapore now competes in this knowledge-based economy, the competition it faces is much greater as this involves competing against other advanced economies compared its earlier stages of development where the competition was less intense among less developed economies. Increasingly Singapore will need to compete with all advanced economies for businesses as well as the global skilled workers.

Korn Ferry's 2020, *The Global Talent Crunch* study, finds that a global talent crisis is looming, with skilled labour shortages that could surge from 20.3 million in 2020 to 85.2 million by 2030. Organisations and governments need to improve workers' skills, and redeploy their talent that will be critical to the success in the future of work.

*"In the new economy, the speed of change means that it's very difficult for leaders to predict what's going to happen to their market or their business. The companies that will thrive in this environment are those that can build the capability to learn and react swiftly to changing market needs."*

*Jean-Marc Laouchez, President, Korn Ferry Institute*

This trend is likely to continue due to a structural change that led to talent shortfalls experienced by nations and companies. Companies need workers with creativity, emotional intelligence, diplomacy, and negotiation skills to navigate the new world of work. Higher education must move in tandem to meet industry needs. In small, knowledge-based economies like Singapore, where the talent crunch has already hit and is expected to intensify in the next decade, government and business must think

about talent differently to meet the economic and business growth targets and stay competitive globally.

While the education and training sectors are being prepared to train more for the new industries especially in the technology fields, the government through the economic agencies under the Ministry of Trade and Industry, namely Economic Development Board (EDB) and Enterprises Singapore (ESG), launched a new initiative to attract talent under the "Tech@SG programme" to access talent and business networks for the Singapore's Technology Ecosystem on 30<sup>th</sup> July 2019 (ESG Media Release, 30<sup>th</sup> July 2019). This was further enhanced and expanded with the announcement on 12<sup>th</sup> November 2020 to launch a Tech Pass, a programme targeted to attract founders, leaders and technical experts with experience in established or fast-growing tech companies to contribute to the development of Singapore's tech ecosystem (EDB Media release, 12<sup>th</sup> November 2020).

Minister for Trade and Industry Chan Chun Sing announced the initiative at a dialogue with members of Singapore's European Chamber of Commerce (EuroCham). He spoke of a "surging demand" and competition among countries around the world for global talent. "Not even huge countries like the United States, Europe or even China will ever claim that they have sufficient talent. Everyone is in this quest for more talent, and a more diverse slate of talent from all across the world. We'd rather top talent be competing on the side of team Singapore, than competing against Singapore " said Mr Chan (Business Times, 12<sup>th</sup> November 2020).

### **1.3 Transnational Education – Definition, Growth and Impact**

The forces of internationalisation and the push for the knowledge economy are generating massive demand for internationally acceptable and global qualifications in higher education (Huang, 2006). Statistics from OECD showed strong growth in international student enrolments worldwide, growing on average by 5.5% per year between 1998 to 2019, from 2 million in 1998 to 6.1 million in 2019 (OECD, 2021). Internationalisation of higher education has brought remarkable changes to cross-border education. Attracting a good number of international students has been a strong base of educational trade that is growing rapidly around the world, estimated to be around USD2.2 trillion (MTI, 2002). Higher educational trade has already become an important part of the economy in developed countries like the United States, UK, Australia, and Canada. Several of the Asian countries, such as China, Malaysia and UAE, are already putting phenomenal efforts into attracting international students. Singapore did similarly go to great lengths to capture its share of the global higher education market in the 2000s under the Global Schoolhouse initiative (MTI, 2002).

While internationalization is a broad concept encompassing a wide array of initiatives, the terms "transnational education" or "cross-border education" refer specifically to the mobility of individuals, educational programs, or educational institutions across national borders (Knight, 2003; Mazzarol, Soutar & Seng, 2003). The mobility of students has been the largest form of transnational education (Knight, 2003), whereas the movement of institutions has been limited in comparison (Mazzarol et al., 2003). Since the early 1980s, cross-border movement of educational programmes and institutions has been part of a wider occurrence resulting from the internationalisation of education (Huang, 2007). The basic

definition of TNE is whereby students opt to study a foreign qualification without the need to be present in the home campus of the awarding institution and in most cases, students do not leave their home country to study while many others study in a third country.

According to UNESCO, transnational education is broadly defined as education “in which learners are located in a country different from that where the awarding institution is based” (UNESCO-CEPES, 2000). With the growth of education hubs in many parts of Asia, these hubs are attracting learners from different countries where the awarding institutions and learners are different from the host countries. With mobility of programmes, higher education institutions (HEIs), hosting providers and learners, national and regional borders are being crossed. TNE programmes are available in many different delivery models, such as International Branch Campus or partnership arrangements with either private or public education institutions through joint/double degrees, articulation, franchising and validations. Some partnerships can involve multiple or overlapping modes of delivery, adding to the challenge of defining TNE.

The Council of Europe (2002) defines transnational education (TNE) which was reinforced in the 2007 Lisbon Recognition Convention as:

*“All types of higher education study programme, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based. Such programmes may belong to the educational system of a state different from the state in which it operates, or may operate independently of any national system”. (Council of Europe 2002, p1)*



The rise of transnational education (TNE) in higher education in the Asia Pacific region is a result of the growing pace of globalisation and the proliferation of higher education providers is evident in Asia, notably in Singapore, Hong Kong, Malaysia and several Middle East countries. Coupled with marketisation and privatisation of higher education, it has created a diversified ecosystem which blurs the notion of public and private institutions.

TNE is not a new phenomenon to Singapore with several institutions that had been in Singapore since 1985. Universities from Australia, United Kingdom and others had been in partnership with Singapore-based private education providers for over 30 years. Curtin University of Australia offered their degree programme in partnership with Marketing Institute of Singapore in 1985 before setting up their dedicated campus in 2008, operated by Navitas Education Group of Australia ([www.about.curtin.edu.au](http://www.about.curtin.edu.au)). Curtin University has about 3,600 students studying in a wide range of programmes. Similarly, Singapore Institute of Management, a non-profit organisation, through its subsidiary SIM Global Education has partnered with RMIT University of Australia and University of London from United Kingdom since 1987 ([www.simge.edu.sg/university-partners](http://www.simge.edu.sg/university-partners)). Each partner had about 8,000 and 10,000 students respectively studying the various programmes. University of Bradford from United Kingdom graduated some 9,000 students from their programmes in Singapore through their partnership with Management Development Institute of Singapore (MDIS) since 1993 (this partnership has since ended in 2020 and the final two bachelor programmes will be teaching out by December 2022). For the past 30 years, many foreign universities had TNE programmes in Singapore offering undergraduate and postgraduate programmes to local Singaporeans as well as foreign students. Their presence here can be seen in the following formats:

- In partnership with Autonomous Universities (AUs) for Joint degrees/Dual degrees and top-up degrees.
- In partnership with polytechnics under the polytechnic-Foreign Specialised Institute (poly-FSI) initiative to cater for more upgrading opportunities with top-up degrees for graduates of polytechnics.
- In partnership with government statutory boards for full and top-up degrees.
- In partnership with not-for-profit organisations and non-governmental organisations to offer full and top-up degrees.
- In partnership with private for-profit organisation to offer full and top-up degrees.
- As an International Branch Campus of the university offering both undergraduate and postgraduate degrees.

The availability of higher education through transnational arrangements has been playing a significant role in providing more access to meet the limited places in the public universities.

While TNE had been around for many decades, the lack of large volumes of research in this field suggests that evidence of impact had been mixed, as it is difficult to quantify or demonstrate in detail. Countries such as Singapore, Hong Kong and Malaysia which have been more established in TNE with a high dependence on higher education enrolment have generally shown a positive connection between the level and quality of tertiary education building the stock of human, social and financial capital for the respective countries. However, there were also cases of poor quality, bogus degrees or degree mill qualifications and regulatory ambivalence.

After more than thirty years of global expansion, the dynamics of TNE has greatly changed beyond the traditional form of capacity building and student mobility.

## **1.4 Background of the problem**

### **1.4.1 Transnational Qualifications, Quality and Relevance**

Over the past three decades, the wave of transnational education in higher education has grown with many foreign universities mainly from Australia, United Kingdom and United States setting up their partnerships in Singapore, offering a wide range of programmes from bachelor to doctorate degrees locally, catering to both the locals as well as attracting international students from the region. Thus, TNE had played a significant role in Singapore's human capital development, both in term of local graduates' development as well as attracting overseas graduates who had completed TNE qualifications. TNE programmes increased the pool of graduates needed for the economy and attracted foreigners to fill the shortage of knowledge workers.

Singapore had seen unprecedented growth with various partnership models between foreign universities and PEIs offering TNE programmes. The growth was the greatest after the announcement of the Global Schoolhouse Initiative in 2002, which comprised of a 3-tier pyramid. The apex would be the so-called "world-class universities", the middle tier being the "bedrock" local pre-existing publicly funded universities, and the base would be the "additional private universities" in the form of TNE. Private education institutions were quick to take on this role with the strongest growth in this tier where the target was for 100,000 foreign students.

The successful secondary education developments provided a huge pool of qualified learners aspiring for tertiary education. This huge increase in demand far outstrips

supply, and in many countries, this can range from 20 to 50% higher than the places available in public institutions. This demand is expected to continue to grow for many years and coupled with the rising demand for lifelong learning and upgrading of knowledge and skills, the demand for higher education will remain high.

The growth of PEIs had widened access and added more capacity for higher education. They cater to the demands of local and international students seeking higher education and also provide opportunities for adults to upgrade their skills. These greatly contribute to the growth of Singapore's talent pool, support Singapore's economy, and strengthened Singapore's position as a global education hub.

TNE brings significant challenges and difficulties. Despite the presence of quality public universities in Singapore, known as Autonomous Universities (AUs), the places for such public universities had been limited to cohort participation rate (CPR) guidelines of 30% by 2015. The CPR was raised to 40% by 2020, following the recommendation of the Committee on University Education Pathways Beyond 2015 (CUEP 2015) on 28<sup>th</sup> August 2012 (Press Release, MOE, 28<sup>th</sup> August 2012). The six AUs, namely NUS, NTU, SMU, SUTD, SIT and SUSS together with the two arts institutions, LASALLE and NAFA, offer places for up to 16,000 students each year by 2020. This target was achieved and exceeded in 2021.

The rapid growth of TNE programmes from the private education sector has created more places, thus offering opportunities for both fresh school leavers as well as working adults who could not secure places in AUs in the past. However, as the majority of PEIs' partnerships are driven by commercial objectives of return on investment through cost minimisation, quality standards may be compromised.

Coupled with the light touch approach taken previously by MOE, there were less regulatory requirements to ensure compliance, providers' integrity as well as consistency of programmes and teaching quality. This generated significant unevenness in the quality provision and quality of graduates. The earlier years of high growth in the private education sector had resulted in many incidents of dissatisfaction over programme quality as well as loss of fees to unscrupulous providers. These prompted MOE to tighten its regulatory framework and quality to protect students through corporate governance and quality assurance in private education. The PE Act was passed in September 2009 by Parliament to strengthen the regulatory framework for private education.

Under this act, the Council for Private Education (CPE) was established as the regulator for this sector under the supervision of the MOE. (The Council for Private Education was renamed to Committee for Private Education in a revamp in 2016 and comes under the supervision of SkillsFuture Singapore, which is under the preview of MOE). CPE is thus entrusted to implement and regulate this sector with a strengthened registration framework under the compulsory Enhanced Registration Framework (ERF) and a voluntary quality certification scheme known as EduTrust. It is also tasked to promote best practices to raise standards in the private education sector. This direction was a calibrated move from the early years of an economic-driven focus to a limited, selective, tightly controlled structured growth strategy for higher education.

#### **1.4.2. “SkillsFuture Initiatives” as the new Human Capital Development**

As the economy is facing unprecedented challenges – social, economic and environmental – driven by globalisation and faster rate of technological disruptions,

these forces are pushing the government to look at new directions for human capital advancement. The future is uncertain and unpredictable, but there is the need to be open and ready for it. The children entering education in 2018 will be young adults in 2030. Schools may not be able to prepare them for jobs that have not yet been created, for technologies that have not yet been invented, to solve problems that have not yet been anticipated. It will be a shared responsibility to seize opportunities and find solutions for continuous training and re-training to stay relevance and productive.

To navigate through such uncertainty, students will need to develop curiosity, imagination, resilience and self-regulation; but there is the need to be open and ready for it. At the same time, working adults need to be re-trained to meet the needs of the future economy. It will be a shared responsibility between individuals, employers and government to be engaged in lifelong learning.

With the economy going through a fundamental structural slowdown, the country is facing the issue of structural unemployment for its citizens. Thus, the government has been pushing for economic transformation by restructuring industries to create jobs of the future for a better educated and qualified workforce.

In the 2015 budget, the government launched a long-term strategy to drive Singapore to the next phase of development, marking 2015 as the start of SkillsFuture, the national movement to develop human capital by providing every Singaporeans with opportunities develop their fullest potentials throughout life with industry partnership.

This is charting towards a trend of mixing traditional degree-based learning and skill-based learning. While there will always be learners that seek to pursue the traditional

degree-learning programmes, this scheme encourages learners to look to complete skills-based learning that allows them to enter the workforce quickly or enable career progression opportunities in a cost-effective and short time period. Every citizen above the age of 25 years old will be credited with a SkillsFuture Credit of SGD500, (equivalent to GBP280) with possible additional credits in the future, without an expiry period. During the Covid-19 slowdown, 2 new top-up credits were credited from 1<sup>st</sup> October 2020 to every Singapore citizen aged 25 years and above as at 31<sup>st</sup> December 2020, which must be utilised by 31<sup>st</sup> December 2025. This was launched to encourage timely action to reskill and upskill during the slowdown.

The scheme hopes that all citizens will be given the best chance of success, making sure that they have the skills which will allow them to get good jobs, both now and in future. As a result of this, all IHLs, namely the AUs and polytechnics will be investing a greater proportion of their budget into delivering skills-based learning and career development programmes to reach out to a larger cohort of students. The future education landscape will be distributed accountability-based learning, where the learners earn proof of competency in different areas. Learners will acquire a mix of badges, collection of certifications, or micro-credentials instead of a full diploma. Learners will be supported by the “lifelong learning journey” that companies will adopt and recognise as these smaller credentials will provide specific skillsets needed for professional development, upskilling and reskilling. The Lifetime Skills Guarantee launched in UK in September 2020 is quite similar where it allows everyone to access the education and training, they need throughout their lives.

In his speech at the teaming up of Institute of Adult Learning (IAL) and Singapore University of Social Sciences (SUSS), then Deputy Prime Minister Tharman

Shanmugaratnam said that SkillsFuture is quite simply Singapore's "most important economic and social strategy in the long term". Economically, as Singapore is only as competitive as the skills it has, there must be the drive for the continuous deepening of skills and picking new ones throughout a person career. Socially, Singapore is trying to create a meritocracy of skills, rather than grades earned early in life, as a new form of social mobility. (Straits Times, April 25, 2019)

### **1.5. Significance and Justification for the Study**

This study illuminates but a few facets of the complexity of economic and cultural globalisation, revealing that the effects of globalisation on higher education and transnational higher education "unfold locally in uneven and unpredictable ways" (Luke & Luke, 2000). Though much has been written about globalisation and internationalisation, there were limited studies on transnational education. By empirically examining the nature of the connection between the various stakeholders of transnational higher education, significant gaps were observed in the overall capability and capacity building agenda, creating a mismatch in meeting the demands of the different stakeholders, comprising of PEIs and its TNE partners, the industries, the students, governments' economic and education agenda. Tensions and conflicts are present that require reform and realignment of higher education in the private education sector.

With the government's focus on employability through lifelong learning under the SkillsFuture Initiatives, there is an emphasis to delay pursuit of a degree qualification, thus it is appearing to be tempering and delaying the demand for higher education. This could have a significant impact on commercially oriented PEIs and their TNE partners. This calls for new sustainable strategies and directions for PEIs



and their TNE partners to meet with the new economic restructuring that the government is undertaking and to consider how TNE can be part of the SkillsFuture movement.

The study aims to analyse and make recommendations on the development and impact (strengths, weaknesses, opportunities and threats) of transnational education on higher education in Singapore. Specifically, this study seeks to:

- a. Provide a working classification of types of transnational education.
- b. Map the providers of transnational education (TNE) in Singapore.
- c. Identify the main factors determining the supply and demand of transnational education in higher education, together with foreseeable future trends in its growth in Singapore.
- d. Identify the current approaches adopted towards transnational education by the TNE providers, CPE and the government policies and regulations under the Ministry of Education.
- e. Make appropriate recommendations from the findings of the study

## **1.6. Research Questions and Sub-Questions**

This study, which focuses particularly on TNE programmes in partnership with private education institutions (PEIs) in Singapore, is intended to assess the relevance and sustainability of this provision. With the government's direction towards SkillsFuture Initiatives emphasizing on lifelong learning, adopting a "dual-education track" to advocate vocational skills as well as the scaling back of the Global Schoolhouse Initiatives, there will be significant challenges to all TNE providers. As such, this study hopes to uncover possible solutions to narrow the gap

in the issues faced in TNE, which could improve the viability of the private education sector.

This research will explore the delivery of TNE through the various models in the context of the market environment and education agenda in Singapore. It will seek to answer the main research question:

***“Can transnational higher education programmes in partnership with Private Education Institutions continue to be relevant and sustainable in Singapore with the government’s drive with SkillsFuture Initiative?”***

The above research question, which is general and broad, will be supported by some specific sub questions for more detailed descriptions of the content of the thesis for concrete analysis and discussions. This study is specifically focused on private education institutions’ TNE partnerships as there are several TNE partnerships with government-linked organisations, such as SIT and its 9 overseas partners or partnership of BCA/ University of Newcastle, Australia, as SIT and BCA are not PEIs. These sub questions are:

- a. Will there be sustainable demand for TNE programmes in Singapore?
- b. What are the capability enhancements needed for TNE PEIs and University Partners to add value and play a complimentary role to the higher education landscape?
- c. What are the possible roles for TNE University Partners and PEIs to contribute to the national movement in the SkillsFuture Initiative and towards lifelong learning?

## 1.7. Literature Review

In reviewing the literature on internationalisation and TNE, the aim was to search for studies and best evidence in the field to highlight the real stories that are likely to be the most influential common themes to be analysed and to identify emerging themes as well as complementary and competing perspectives and complexities.

### Definitions and context

What is internationalisation and TNE? Can an institution manage internationalisation for its strategic purpose or it is affected by what happens in the global environment which are external and beyond their control and management? Guest (2011) defined internationalisation as an entity having a worldwide reach and globalisation is the process arising from the intensification of economic, social and cultural relations across international borders. Holton (1998) refers to transnational activities as the processes and/or institutions that exist or work across borders, where transnational higher education refers to the provision of higher education by one institution in more than one country. It is noted that many definitions were used in literature and are not universal across academic disciplines.

De Wit (1998) and Knight (2003) defined internationalisation in higher education as the process in which individual institutions respond to the globalisation of their operating environment. De Wit (1998) defines internationalisation as:

*“...the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution”.*

Knight (2003) added on this with the intent to better reflect current challenges and issues in the 21<sup>st</sup> century that requires continuing adaption and refinement with a broader context for internationalisation as follows.

*“Internationalisation at the national, sector and institutional levels is defined as the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education”*

Stockley and de Wit (2009) suggest that future transnational partnerships need to evolve from transactional to more transformational to be sustainable.

*“Strategic partnerships in research, teaching and transfer of knowledge, between universities and of universities with business and beyond national borders, will be the future for higher education, in order to manage the challenges that globalisation will place on it. Cooperation for competition and competition for cooperation: this will be driving higher education globally in the years to come”.*

## **1.8. Research Context and Objectives**

The study will investigate the operating environment in Singapore with relation to:

### **1.8.1. Private Education Institutions (PEIs)**

As at March 2022, there were a total of 80 PEIs offering some 1400 TNE programmes in collaborations with 103 overseas universities ([www.tpgateway.gov.sg](http://www.tpgateway.gov.sg)). The study intends to conduct case studies on selected established and large private education institutions. Established PEIs will include foreign owned for-profit entities such as Kaplan Higher Education, local not-for-profit organisation such Singapore Institute of Management, LASSALE College of the Arts and Nanyang Academy of Fine Arts, and local for-profit public listed organisation such as Informatics Academy.

### 1.8.2. The Overseas Universities Partners under the PE Act framework (OUPs)

During the same period, there were a total of 103 foreign universities offering programmes in Singapore, of which 59 universities from UK, with 16 from Australia followed by the United States of America (8), China (4), France (4), Switzerland (2), Germany (1), New Zealand (1), Taiwan (1) and India (1) ([www.tpgateway.gov.sg](http://www.tpgateway.gov.sg)). The study intends to conduct case studies and reviews of the selected universities that have presence in Singapore for at least 20 years, reviewing the universities' strategies and future directions in programme offering, curriculum and the ability to move away from business and administrative programmes to applied programmes for relevancy and in-line with the government's focus. The universities with the top 10 highest students and alumni population from TNE programmes will include RMIT University, University of London, Murdoch University, Oxford Brookes University, James Cook University, Coventry University, University of Bradford, Curtin University, University of Hertfordshire and University of Newcastle, Australia.

### 1.8.3. International Branch Campuses and Branch Offices

With the presence of international branch campuses and international branch offices, the study will evaluate the role, viability and possible future models of such operations. International branch campuses offer and deliver programmes directly to students in Singapore, while the international branch offices partner with PEIs to deliver their programmes while maintaining the quality of the admission and delivery of their programmes.

The international branch campuses present in Singapore are:

- Ecole hoteliere de Lausanne (EHL)
- Ecole Superieure des Sciences Economiques et Commerciales (ESSEC)
- INSEAD
- S P Jain School of Global Management
- Curtin Singapore
- German Institute of Science and Technology – TUM
- Sorbonne-Assas International Law School
- DigiPen Institute of Technology
- James Cook University Singapore
- St Gallen Institute of Management in Asia
- Manchester Worldwide (South East Asia)
- Embry-Riddle Aeronautical University Asia
- Rutgers Business School Asia Pacific
- SJTU Asia-Pacific Graduate Institute
- Newcastle Research & Innovation Institute
- Newcastle Australia Institute of Higher Education

This study will conduct desktop data search and enquiries on the following international branch campuses to gain a better understanding of their operations:

- James Cook University of Australia;
- Curtin University of Australia;
- Manchester Business School, United Kingdom.

While international branch offices will include University of Newcastle, Australia and Murdoch University of Australia.

#### 1.8.4. CPE's "Raising the Bar on Quality" Quality Assurance directions

With CPE's direction on "Raising the Bar on Quality," with increased engagement and involvement from TNE providers, the more established providers are moving to find a solution in meeting these to raise quality and equity of outcomes equivalent to on-campus students. The PEIs are also reviewing the needs and efforts required to increase the capability of teaching and administrative staffs to improve the learning experience of the students.

#### 1.8.5. Impact of CUEP Beyond 2015 and ASPIRE recommendations

In CUEP's Beyond 2015 report, the private education sector with its TNE was mentioned as a possible route to cater for more places in tertiary education as PEIs are more flexible to meet the changing needs of students while public universities face constraints to build infrastructure and capacity to meet new demands. This demand driven system can adjust continuously to meet the changes.

However, with the expansion in the numbers of places in public-funded places to 50% by 2020, there will be significant impact to the PEIs in terms of the numbers as well as the pricing as the places in the public universities enjoy subsidised tuition fees.

The establishment of SIT and its emphasis for applied degrees or practise-oriented study in line with the ASPIRE report for students from the

polytechnics' pathways create competition for PEIs in target market and tuition fees.

### **1.9. Research Methodology Overview**

Setting out to investigate the research questions, this research relies heavily on qualitative data collection, focusing on TNE programme delivered by overseas university partners through local private education institutions (PEIs) and utilised a case study methodology (Yin, 2014). In particular, in-depth interviews were chosen as interviewing is “the best avenue of inquiry” (Seidman, 2006, pp.3-5), whilst focus group discussions help to shed light on students and graduates' perception of the benefits and drawbacks of TNE programme. As the research question does not aim to get definite answers but is crafted with a genuine interest in understanding stakeholders' experience and the meaning, they made of that experience.

Additionally, as this study focuses on evaluation of all the key stakeholders, namely students, graduates, lecturers and university partners, it is crucial to discover the interconnection in a shared context (Seidman, 2006). This is also in line with Ferrarotti's view (1981) that researchers have to inquire into individual experiences that build up the abstract to best understand educational and social abstractions.

The research conducted in this study will be exploratory in nature (Creswell, 2008); one that “seeks to find out how people get along in the setting under question, what meaning they give to their actions” (Schutt, 2012, p.13). The study will use qualitative methods in gathering and analysing the research data as these allowed different ways of exploring the rich understandings. More details on the research case study design and the justification can be found in Chapter 4.



Chapter 4 sets out the arguments for the research methodology needed to answer the research questions and thus accomplish the objectives of this study. In deciding the approach to this study, the potential contributions of both quantitative and qualitative methods were considered.

A good qualitative case study is used when 'why' and 'how' questions are being posed, when the researcher has relatively little control over events, and the focus is on a contemporary phenomenon within a real-life context. It is utilized to contribute to our knowledge of individual, group and organizational related phenomenon through researching a unit of human activity embedded in the real world (Gillham, 2000: 1; Yin, 2003: 1). A qualitative case study inquiry copes with technically distinctive situations in which there are many variables of interest, and utilizes a comprehensive research strategy that relies on multiple sources of evidence and the use of theories to guide data collection and analysis (Yin, 1989: 13; Yin, 2003: 31).

A qualitative case study is designed to investigate causal processes in the real world, and not in artificially created settings (Gomm et al., 2000: 5). Authenticity of the case study is based on the need to amplify the unique voices of those whose experience in and perspective on the world are unknown or neglected (Gomm et al., 2000: 67). In the words of Robert Stake (Gomm et al., 2000: 67):

*Case study needs be framed in such that everyday experience through which they learn about the world first hand is critical. The great strength in case studies is that they provide vicarious experience in the form of 'full and thorough knowledge of the particular'.*

Its purpose is to build up a body of real tacit knowledge as the basis upon which people's actions are understood (Stake, 2000: 20). According to Stake (2000: 19),

case studies are useful in the study of human affairs because they are down to earth and attention holding. In qualitative case studies, intentionality, empathy, episodic and holistic information are central to the comprehension of social problems, which are important for the 'experiential understanding' in the study of human affairs (Stake, 2000: 24). Eventually a qualitative case study through the sharing of experiences, thoughts and sentiments between the students, researcher and reader, as well as through logical analysis and inference, is able to produce 'empathetic understanding' on the researched issue (Gomm et al., 2000: 6-7).

### **1.10. Limitation of the Study**

It is recognised that this present study faces limitations in relation to its data source and the generalisation of the findings. By relying on interviews and documents as data sources, there was a risk of subjectivity from interviewees, writers of the documents, or even the researcher (Yin, 2014). Getting people to talk at length is challenging. Moreover, since "the process of answering questions in an interview.... can make people reconsider their views with resultant changes" (Simpson, 2008, p.60), some of them were not as valid as they could have been.

To establish the confirmability of the study, this research addressed rival explanations to minimise personal subjective opinions of the researcher (Yin, 2014). Combined with different and diverse groups, students and graduates in interviews and focus group discussions, this methodological triangulation (Denzin, 1985) hopes to use cross-examination of the different groups to check that evidence collected is accurate. In ensuring the trustworthiness of the current study, several strategies as suggested by Yin (2014), such as triangulation, member checking, theoretical

framework, interview protocol, and case study database were utilised. They are delineated further in Chapter 4

The findings of the current case study cannot be generalised like the quantitative study's generalisation (Creswell, 2012). This is because the sample selection was purposive; and thus, might not have been representative of different universities in general. However, the findings of the current study can provide in-depth, holistic, and contextual accounts of the case.

The orientation to seek out TNE providers from Australian Universities put a constraint to expand the scope of the study to include more comparison between the different strategies adopted by the international branch campuses of non-Australian universities, the larger international private education providers, the larger non-profit private education institutions and the smaller PEIs. This is deemed as a delimitation of this study.

The selection of participants for the interviews, case studies will be non-random in most cases as the research relies on the approval of the participants and the voluntary response to be interviewed. This process of participants' selection could have created an element of "survey bias" which is deemed a limitation.

In this qualitative study, data interpretations will be personal and will be different from another person's view. Additionally, with participants from multi-cultural backgrounds; there are risks of miscommunication during the interviews and focus group discussions, which I will attempt to address with my personal internationalisation background.

Lastly, this study is largely exploratory and qualitative, which may lead the findings to be inductive and judgemental that may not be appropriate for generalisation.

### **1.11. Impact of Study**

The study hopes to provide a greater understandings and possible solutions to issues such as;

- a) Extent of TNE provision increased or widened access to, and participation in higher education?
- b) What are the general perceptions about TNE (such as skills development, capacity building, and lower standards, second-class to public provision)?
- c) Generating insights for sustainable TNE operation;
- d) What processes can be adopted to be in line with the national push for “SkillsFuture”?

### **1.12. Definition of Key Terms**

The key terms used in this study are defined below with detailed description of each key term when introduced at each chapter of the study.

1.12.1. *Transnational Education* is defined as “whereby a learner studies in a programme in her home country with the awarding institution that is located overseas” (UNESCO and Council of Europe 2006).

1.12.2. *Internationalisation of Higher Education* is defined as the “process of integrating international/intercultural dimensions into teaching, research and service functions of the institutions” (De Wit 1999, p. 2).

- 1.12.3. *Globalisation* is defined as the “flow of technology, economy, knowledge, people, values and ideas across borders” (Knight 1997, p.6).
- 1.12.4. *Massification of Higher Education* is defined as “the global trends of expanding access for all by ensuring that the higher education systems provide for mass participation across different social, income and geographical groups” (Lee & Healy 2006, p. 3).

### **1.13. Outline of Study – Chapters Organisation**

This study will be organised in six chapters.

CHAPTER 1: INTRODUCTION – Provides a background on Singapore’s restructuring its economy to stay competitive and relevance in the knowledge-based economy in the globalised world. Education had been a key pillar to economic development since the nation’s independence and was restructured with the introduction of SkillsFuture Initiative and lifelong learning. The adoption of education as a tradeable service under GATS in 1995 and the restricted capacity of the local universities had given rise to transnational education being well represented in Singapore. In the fast-changing knowledge economy, the future of work and the relevance of the skillset of the citizens to new work could result in unemployment and underemployment for higher education graduates. Hence the problem question of TNE Relevance and Sustainability “Can transnational higher education programmes in partnership with Private Education Institutions continue to be relevant and sustainable in Singapore with the government’s drive with SkillsFuture Initiative?” This chapter then provides the background of the research design, defining the key terms, the delimitations and limitations of the study to meet the research objectives.

CHAPTER 2: DEVELOPMENTS OF HIGHER EDUCATION IN SINGAPORE - Being greatly influenced by global trends due to the nation's open economy in the globalised world and without natural resources, human capital development had been the foundation for the country's success since independence in 1965. This chapter traces the development of higher education in Singapore over the past 50 years, from the pursuit of World Class Universities in knowledge creation and the "Boston of The East" objective, the launch of Global Schoolhouse Initiative, the challenges faced by the globalised world and demand for HE and growth of TNE for capacity building, the review of CPR to 40% by 2020, and the creation of new Autonomous Universities over the past 10 years.

CHAPTER 3: LITERATURE REVIEWS – As TNE is closely linked with internationalisation and globalisation, literatures on these two key areas were reviewed with the aim at developing the foundations for the research, crafting possible propositions for the research.

CHAPTER 4: RESEARCH METHODOLOGY – This will be qualitative research taking research methodology using qualitative studies, case studies, interviews, focus groups and survey questionnaires. Survey questionnaires, focus group discussions and interviews were conducted with two groups of students, two groups of graduates, three lecturers and three university partners with offices in Singapore.

CHAPTER 5: FINDINGS OF SURVEYS, FOCUS GROUPS' DISCUSSIONS AND SEMI-STRUCTURED INTERVIEWS – Presenting the findings from survey questionnaires consisting of structured and semi-structured questions, focus groups discussions and interviews of the different stakeholders – students, graduates, lecturers and university partners. From the Porter's Five Forces framework and

SWOT matrix analyses, the major findings of the case studies are presented with interim proposal.

CHAPTER 6: CONCLUSION, LIMITATIONS AND IMPLICATIONS – Presenting a comparative analysis of the findings emerging from the case studies, focus groups discussions, interviews and questionnaire survey.

#### **1.14. Chapter Summary**

Transnational higher education programs offer great promise for increasing access to higher education for individuals throughout the world. A well designed and carefully implemented transnational education programs that meet the theme of the host nation holds the potential to greatly assist the host nation in expanding their intellectual infrastructure and complement the local institutions and government initiatives. These programs also hold the potential to increase the preparedness of graduates with 21<sup>st</sup> century skills to work collaboratively within and beyond their increasingly globalised societies.

With the background of the research study being provided in this chapter, the next chapter will examine the developments of Singapore higher education and the empirical support for transnational higher education and its role towards the nation's drive to develop a culture of lifelong learning in line with the SkillsFuture initiative in developing the manpower resources of Singapore to meet the challenges of a knowledge-based economy and the 21<sup>st</sup> century skills to cope with the fast changing work environments brought about by the disruption from the technology revolution.

## CHAPTER TWO: DEVELOPMENTS OF HIGHER EDUCATION IN SINGAPORE

### 2.1. Global Trends, Education Hub and Cohort Participation Rate Cap

#### 2.1.1. Global Trends

Since the 1990s, Singapore's objective to restructure itself into an innovation-driven and knowledge-based economy with world-class capabilities opened new opportunities and challenges for businesses as well as universities. Singapore's urban economy faces similar development challenges to those of Japan, South Korea, Taiwan, and Hong Kong; challenges that are framed by a context featuring the emergence of China as a low-cost industrial powerhouse and major attractor of foreign direct investment.

Table 2.1 – Chronological Order of various Economic Committees to transform Singapore into KBE (1985 to 2017)

Year	Name of Committee	Objectives
1985	<b>Economic Committee (EC)</b> Established on 8 <sup>th</sup> March 1985 and produce the report - <b><i>The Singapore economy: new directions</i></b> Education was identified as one of 18 service sectors for growth.	<ul style="list-style-type: none"><li>• Tasked to study the recession of 1985 and Singapore Recovery.</li><li>• To review the economic restructuring policy and the performance of the economy.</li><li>• Recommend that the nation become a developed nation by 1990s by being competitive as the West in the global economy and a <b>major exporter of services</b> with a focus on private sector initiatives and privatisation of state-owned companies.</li></ul>



		<ul style="list-style-type: none"> <li>• Singapore made a quick recovery in mid-1986 from the recession.</li> </ul>
2001	<p><b>Economic Review Committee (ERC)</b> Established on 3<sup>rd</sup> December 2001 and produce the report – <b><i>New Challenges, Fresh Goals: Towards a Dynamic Global City</i></b> This led to the launch of Global Schoolhouse Initiative and the promotion of knowledge economy</p>	<ul style="list-style-type: none"> <li>• Review long-term restructuring of the economy and propose short-term strategies to address immediate challenges due to recession of 1998 due the Asian financial crisis.</li> <li>• 5 key priorities -expand external ties; stay competitive and flexible as an economy; encourage entrepreneurship in a <b>knowledge economy</b>; promote manufacturing and services; and <b>develop people</b>.</li> </ul>
2009	<p><b>Economic Strategy Committee (ESC)</b> Established on 27<sup>th</sup> May 2009 and produce the report – <b><i>High Skilled People, Innovative Economy, Distinctive Global City</i></b> 2012 - The review of university places to 40% by 2020. 2015 – The launch of SkillsFuture Initiatives</p>	<ul style="list-style-type: none"> <li>• To develop strategies to maximise opportunities in a new world environment, by building capabilities and making best use of resources for sustained and inclusive growth</li> <li>• To growth skills, innovation, and productivity for a qualitative transformation of economy</li> <li>• <b>Boost skills in every job</b></li> <li>• <i>Deepen capabilities of local companies to seize opportunities in Asia</i></li> <li>• <i>Make Singapore a Distinctive Global city</i></li> </ul>
2016	<p><b>Committee for Future Economy (CFE) Convened</b></p>	<ul style="list-style-type: none"> <li>• To rejuvenate/reinvent the economy due to subdued global</li> </ul>

	<p>in January 2016 and produce the report – <b><i>Pioneers of the next Generation</i></b></p>	<p>growth, sluggish global productivity growth, changing value chains and rapid technological change due to shortened innovation cycles.</p> <ul style="list-style-type: none"> <li>• World shifting away from globalisation in 2016 and the impact of anti-globalisation on Singapore.</li> <li>• Ensure people, companies and industries stay relevant in the ever-changing world</li> <li>• Future growth industries and markets</li> <li>• <b>Acquire and utilise deep skills</b></li> <li>• Building strong digital capabilities</li> <li>• Developing and implementing Industry Transformation Maps</li> </ul>
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The 1985 economic recession was a driving force that sparked the Economic Committee (EC) in 1986 to push for a more rapid transformation of the economy oriented more towards the services sector - “the knowledge economy”. Adopting a broader push to re-model Singapore’s comparative advantage, policy thinking in the mid-1980s alternated between strategies to retain manufacturing by shifting to higher forms of value-added production, and towards developing service industries. The 1997 Financial Crisis subsequently increased the momentum of this restructuring (Ho 2003). Two policy strands emerged from this period. First, the Economic Review Committee (ERC) recommended a cluster-based approach to economic development, focusing on a strong services strategy. The second strand, the Singapore 21 Committee, formed in October 1997, introduced the idea of the

“foreign talent” and socialised the public into the inevitability of accepting the push to attract the highly skilled under conditions of globalisation, to further economic development. Such value-added economic development in the global knowledge economy can only be accomplished with a sufficiently large pool of high-quality workforce. In today’s knowledge economy, knowledge is now regarded as the most important factor contributing to the unprecedented, rapid and uneven pace of economic growth and development around the world. This led to policy changes over the last decade to position the university and research sectors to meet the knowledge challenge. The “Global Schoolhouse” project, for instance, aimed to transform Singapore into a “global knowledge enterprise.”

While conceding that “the world of globalised higher education is highly unequal,” Philip Altbach (2004, pp. 6-7) acknowledges that “a number of universities in Japan, Korea, China and Singapore, are approaching the status of world class research institutions”, helped in part by the policy-driven efforts of these developmental states. These national and global trends suggest that Singapore can take on the new initiatives in higher education practices by seeking to capitalise on its English-speaking colonial heritage, quality public education system and the flow-ons from its investment in the Global Schoolhouse policy to establish Singapore as an education hub.

### **2.1.2. Education Hub - Global Schoolhouse**

Singapore’s government has long aligned its education policies with the nation’s economic priorities. As such, education was identified in the 1986 EC’s report as one of 18 service sectors to be nurtured and promoted. Capitalising on GATS implementation, the government embarked on a plan to attract at least 10 World

Class universities to establish a presence in Singapore. With strong Transnational Education (TNE) growth globally, the 'Global Schoolhouse' project was launched in 2002 to increase the intake of foreign students from the region to study in Singapore.

The objectives were:

- Create an additional avenue to grow Singapore's GDP in line with growing the service sector of the economy;
- Attract top researchers to the world-class universities to build the creation of knowledge and innovation;
- Attract talents to remain after graduation to build the human capital pool for a knowledge-based economy.

This was driven for economic growth, led by the Ministry of Trade and Industry (MTI) and the various MTI's agencies, namely, Economic Development Board (EDB), SPRING Singapore, and Singapore Tourism Board (STB). To boost the economic initiatives and to create Singapore as an Education Hub, the "Global Schoolhouse" project targeted to attract 150,000 foreign students studying in Singapore in both the public and private education sectors by 2015. The Global Schoolhouse Initiative in 2002, comprised of a 3-tier pyramid. The apex tier comprises of the "world-class universities," with the middle tier being the "bedrock" local publicly funded universities and the base would be the "additional private universities" in the form of TNE. Marketed under "Singapore Education," it promotes education in Singapore to foreigners to study in Singapore's public and private education institutions as well as offering permanent residency for graduates upon securing a job in Singapore. Scholarships were awarded to attract talents. By 2007, over 1000 PEIs were

established, catering to 150,000 local and foreign students, studying in over a thousand higher education programmes.

In its early days, the Global Schoolhouse was dominated by research-intensive American institutions: MIT, Georgia Tech and Duke University were funded to run graduate level programmes, while Johns Hopkins University was to conduct biomedical research and provide doctoral training. The Chicago Graduate School of Business was assisted to establish a “campus” in the city-state’s major shopping precinct, and Wharton Business School was contracted to provide expertise in setting up Singapore’s third university, Singapore Management University. New York University’s Tisch School of Arts started classes in 2007. Diversification also involved the inclusion of non-American universities such as INSEAD, a European business school, and the Indian SP Jain School of Global Management.

### **2.1.3. Cohort Participation Rate Cap**

Being a highly competitive society, and with the economy pivoting towards a knowledge-based economy driven by innovation, the demand for higher education to be relevant in the new economy is high. Education is the engine that powers social mobility and has been at the heart of Singapore’s progress. Education is one of the key pillars in the government’s national development schemes and policies to improve the life of its citizens. Acquiring higher education has always been the aspiration of youths for a good career and social attainment. Each year, the education attainment of eligible students for higher education had consistently been high, consistently in excess of 90% since 2005 and reaching a high of 97% in 2021.

To meet these needs as well as the drive towards a knowledge-based economy, the Singapore Ministry of Education had been calibrating the numbers of places

available, known as cohort participation rates (CPR) in the public universities.

Singapore's university cohort participation rate has increased progressively from 20% in 2000, to 30% in 2015 and with the latest being set at 40% by 2020 or 16,000 places (Table 2.2). This was stretched to 42% or 17,500 places in 2021 to cater for students who had faced disruptions to their overseas study plans due to Covid19 travel restrictions.

Table 2.2. Cohort Participation Rate from 2005 to 2020

Year	CPR%	Year	CPR%	Year	CPR%	Year	CPR%
<b>2020</b>	<b>39.1</b>	2016	<b>35.5</b>	2012	<b>29.5</b>	2008	<b>24.8</b>
2019	<b>38.5</b>	<b>2015</b>	<b>34.0</b>	2011	<b>27.8</b>	2007	<b>25.1</b>
2018	<b>37.6</b>	2014	<b>32.4</b>	2010	<b>26.4</b>	2006	<b>24.0</b>
2017	<b>37.0</b>	2013	<b>30.8</b>	2009	<b>25.2</b>	2005	<b>24.3</b>

Source: Data from Ministry of Education, *Education Statistics Digest 2021*

(<https://data.gov.sg/dataset/>).

Since the last expansion of CPR levels planned in 2012 to aim for a 40% rate by 2020, there have been no further plans to increase the CPR level after 2020 as the government had changed its direction to launch the SkillsFuture programme instead, the national movement to promote lifelong learning. The programme encapsulates the impetus for Singapore to move towards an advanced economy and society whereby individuals go beyond competence to attaining expertise and mastery of skills. It provides every individual the opportunities to develop their potential to the fullest throughout their life, regardless of their starting positions. It envisages that the skills, passion and contributions of every individual will drive Singapore's next phase of development towards an advanced economy and inclusive society.

To cater for lifelong learners' needs to upgrade their skills to prepare for jobs in key areas of growth in a fast-changing economy, the Minister of Education announced in Parliament on 7 March 2022 that MOE is reviewing programmes for adult learners in publicly funded institutions. MOE is studying the mix at increasing the cohort participation rate to cater for more places to enable more adults to pursue a university degree over the course of their lives. Figures from all the Institutes of higher learning (IHLs) show that the number of adult learners had more than doubled from around 165,000 in 2018 to 345,000 in 2020. MOE will move towards using the term "lifetime CPR" to better reflect this growing segment of adult learners (*MOE Press Release – Investing on Our Learners for Life, 7 March 2022*).

Table 2.3. Percentage of P1 Cohort that progressed to post-secondary education vs CPR Percentage

Year	Percent	CPR%	Diff	Year	Percent	CPR%	Diff
2020	97.1	39.1	58.0	2012	95.5	29.5	66.0
2019	96.6	38.5	58.1	2011	94.6	27.8	66.8
2018	96.5	37.6	58.9	2010	94.0	26.4	67.6
2017	96.6	37.0	59.6	2009	93.3	25.2	68.1
2016	96.7	35.5	61.2	2008	92.3	24.8	67.5
2015	96.4	34.0	62.4	2007	91.8	25.1	66.7
2014	96.3	32.4	63.9	2006	90.8	24.0	66.8
2013	95.7	30.8	64.9	2005	90.9	24.3	66.6

Source: Data from Ministry of Education, *Education Statistics Digest 2021*

(<https://data.gov.sg/dataset/>).

As shown in the tables above (Table 2.2 and Table 2.3), there is strong demand to fill up the allocated places, with demand exceeding the target CPR (of 30%) by 4% in 2015 for example.

Since 2005, the number of students eligible for admission to higher education, consistently exceeded the 90% level, with a record high of 97% in 2021.

Consistently, a significantly large proportion of these qualifying students aspire to attain a university qualification. With only 16,000 places in 2020, there is a huge shortfall of places in the public universities as shown in Table 2. 3.

For the balance of some 17,000 eligible students, their choice of pursuing a degree will be seeking study with an overseas university, usually in Australia, United Kingdom, United States of America, Canada, New Zealand and some other English-speaking universities in the world. Going overseas is an alternative for those who can afford it, and this is evident with a yearly average of 8,000 students going overseas to study for a degree (<http://uis.unesco.org/en/uis-student-flow>). The availability of foreign degrees under transnational arrangements in Singapore offer the next alternative to meet the needs of the remaining group of students.

While the Global SchoolHouse project's focus was to attract foreign talent to build up the capacity for knowledge creation at the apex tier, the base tier of the 3-tier pyramid focused on the promotion of education to foreign students. However, the availability of TNE programme had created more access to locals seeking higher education as well.

While these developments in higher education took place, the government had been cautiously controlling the Cohort Participation Rate (CPR) for public universities. It was capped at 25% by 2011 and adjusted to 30% by 2015. This 2011 CPR rate was



in stark contrast with other similarly developed countries in Asia, including South Korea (almost 70%) and Taiwan (32%) over the same period. The 2011's CPR is only sufficient in catering mostly to students going through the GCE A level or IB pathways, a large portion of the same cohort of students - over 50% of the cohort - had chosen the pathways to polytechnics and Institutes of Technical Education (ITE) for their post-secondary education (Table 2.4). This shift in trend for pursuing a programme away from the GCE A level pathway, created a growing majority of diploma holders graduating from polytechnics, who still felt the need to “upgrade” to degrees, partly explained by the “Confucian” socio-cultural contexts of these East Asian countries that place a premium on educational qualifications.

Table 2.4 CPR Percentage of Admission for Post-Secondary Levels

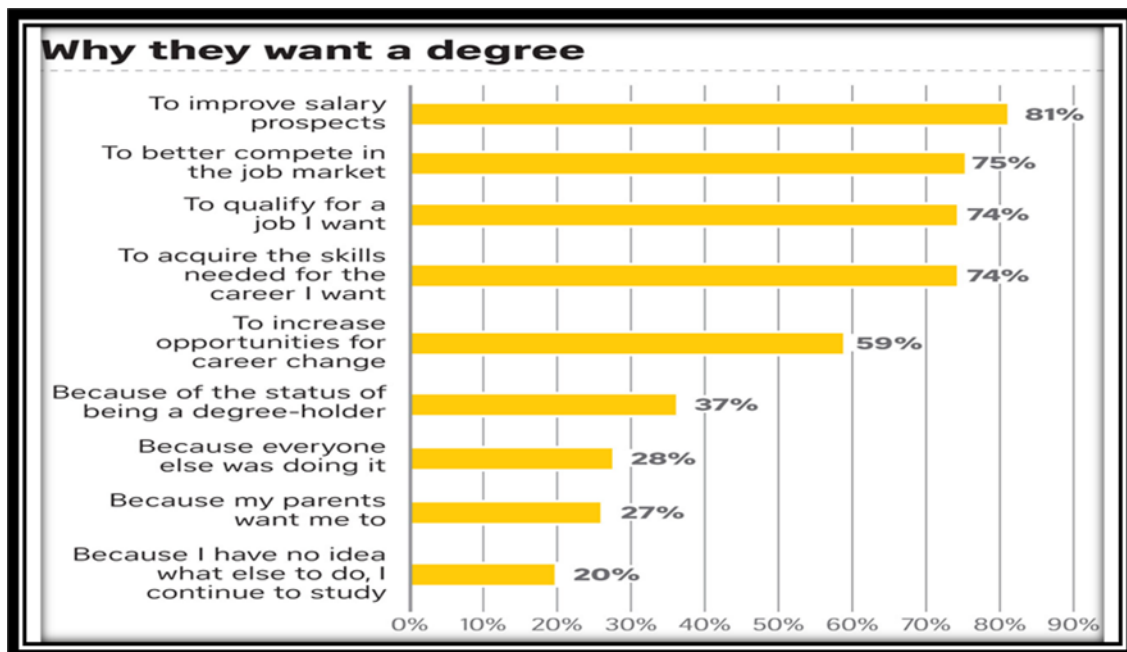
<b>Percentage of P1 Cohort</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Nitec/Higher Nitec (ITE)	22.4	23.5	24.2	24.2	24.7	24.7
Diploma (Polytechnic/Art Colleges)	47.8	48.6	48.2	48.3	48.0	48.8
GCE A Level/ IBP	28.1	27.9	27.7	28.3	28.3	29.3
<b>Degrees (AUs/Art College)</b>	<b>30.8</b>	<b>32.1</b>	<b>33.5</b>	<b>35.0</b>	<b>36.3</b>	<b>37.1</b>

*Source: Ministry of Education, Education Statistics Digest 2019.*

While the government managed the number of places in public universities through the CPR rate, the avenue provided by TNE effectively increased the CPR to well above the level. The CUEP 2015 report shows that Singapore has a CPR of closer to 50%. Demand for higher education is estimated at around 40,000 per year (CUEP 2012), while there are only 12,000 subsidised places in public universities. Thus, creating severe shortages and intense competition for a place. The alternative for students which is costlier, is an overseas tertiary programme in countries such as

United States, United Kingdom, Australia or Canada. Thus, TNE programmes offer an affordable alternative for many local students. In the CUEP 2015's recommendation, the CPR is to be raised to 40% by 2020. This will cater for 16000 students which is still a big gap to meet the aspirations of close to 40,000 eligible students. This excludes those who worked and seeking an upgrade in their qualification.

With strong A level, IB and Polytechnic results each year, there is continuous pressure on the government to cater for the aspiration of youths to acquire a degree in the local universities. A survey report in May 2019 by SUSS together with The Sunday Times summarises the underlying reasons behind youths seeing a degree in Figure 2.1 below which is in line with youths of other parts of the world.



Source: Singapore University of Social Sciences/ Sunday Times Survey- May 2019

Figure 2.1. Why they want a degree

## 2.2. Singapore Education System Overview and Landscape

### 2.2.1. Singapore's Ministry of Education's Desired Education Outcome

Singapore's educational goals: Students are supposed to emerge from the system as confident individuals, self-directed learners, active contributors and concerned citizens. (MOE Website, [www.moe.gov.sg](http://www.moe.gov.sg))

With the above goals, MOE's aspires that all Singaporeans going through the Singapore education system will possess the Desired Outcomes as follows:

- Good sense of self-awareness.
- Sound moral compass.
- Necessary skills and knowledge to take on challenges of the future.

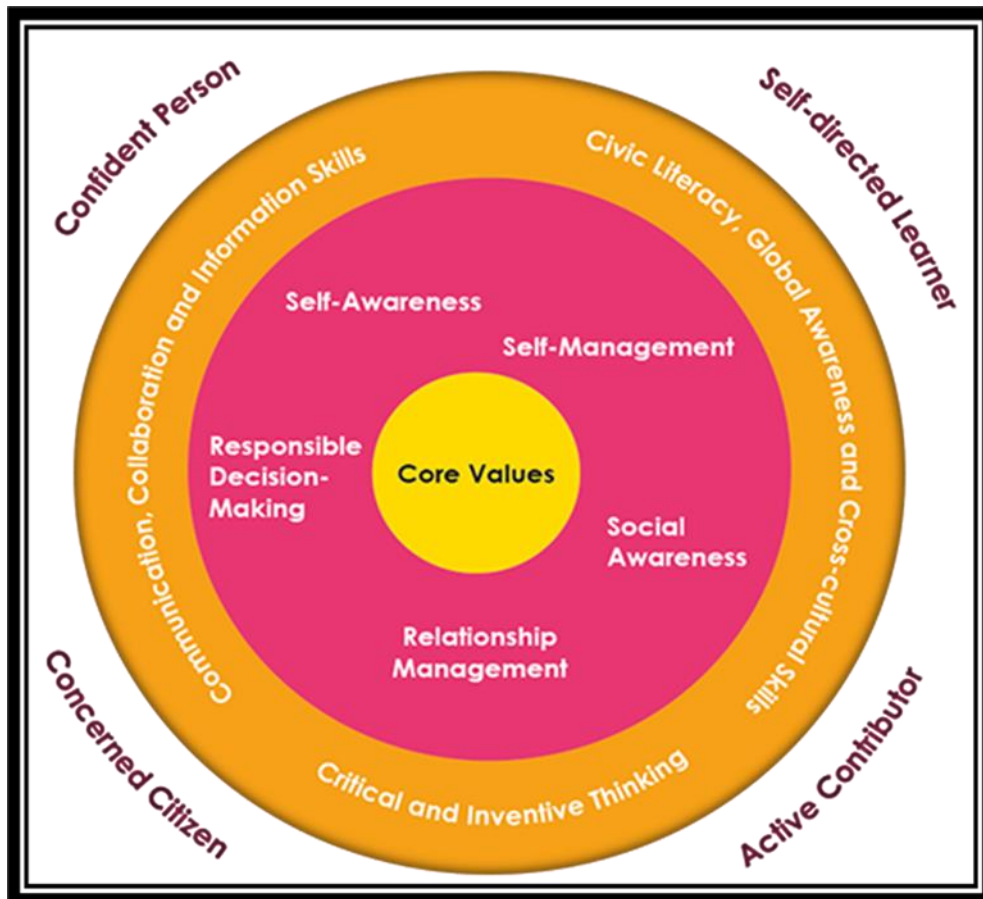
And, they should also be:

- **Confident persons** - having a zest for life, a strong sense of right and wrong, are adaptable and resilient, know themselves, are discerning in judgment, think independently and critically, and communicate effectively.
- **Self-directed learners** - take responsibility for their own learning and question, reflect and persevere in the lifelong pursuit of learning.
- **Active contributors** - able to work effectively in teams, exercise initiative, take calculated risks, are innovative and strive for excellence.
- **Concerned citizens** - rooted to Singapore, have a strong civic consciousness, are responsible to their family, community and nation and take active roles in improving the lives of others.

The Singapore's Ministry of Education (MOE) states:

"Globalisation, changing demographics and technological advancements are some of the key driving forces of the future. Our students will have to be prepared to face these challenges and seize the opportunities brought about by these forces. To help

our students thrive in a fast-changing world, MOE has identified competencies that have become increasingly important in the 21st Century. These competencies, represented in the following framework, underpin the holistic education that our schools provide to better prepare our students for the future.”



Source: Ministry of Education - Framework for 21st Century Competencies

Figure 2.2 MOE’s 21<sup>st</sup> Century Competency Framework

The MOE’s framework for 21st Century Competencies (Figure 2.2), depicts the core values and skills, that the education system seeks to instil to every Singaporean by the time they complete their formal education (MOE, 2015a). Together, these core values and competencies will help students embody the Desired Outcomes of Education so that they are able to capitalise on the opportunities of the globalised digital age.

Education policy-making in Singapore has evolved through several phases of reforms in the last 50 years: from a focus to produce basic literacy in a population, to being competitive in the global labour market with an emphasis on high quality, and ultimately to be prepared for 21st century skills, which are critical to succeeding in today's knowledge-based global economy. Singapore has a three-tier public higher education system consisting of local universities, art institutions and transnational education partners (which comprises of various models of TNE partnerships by Singapore Institute of Technology, collaborations by NTU, NUS and SUTD) to expand the degrees options for students.

With the advent of globalisation and the advancement of today's knowledge-based economy in line with its aspirations to be a regional education hub since the early 2000's, Singapore's strategy is not just to attract students but to restructure the higher education landscape via a range of policy reforms. Globalisation has triggered considerable changes to the higher education landscape in East Asia..." where countries have tried to make use of the globalisation discourse to address/justify the local policy/political agendas" (p.15, Mok & Lee, 2003). The Singapore higher education system hosts a number of prestigious institutions and international partnerships. In recent years, research and development spending has been ramped up, specialist research centres have been established and universities have become more research intensive.

The number of students in a cohort attending a university in Singapore annually has long been kept at only around 25%. This is due to the fact that the government had long resisted calls to expand the number of university places. This system has been maintained thus by policy design. Up till 2012, there has been a push for the government to expand the capacity of public universities to take in more students.

The Committee for University Education Pathways Beyond 2015 was convened in September 2011 to study and recommend ways to expand the university sector and recommended increasing the cohort participation rate to 40% by 2020, largely in reaction to the public demand for increased participation (MOE Press release, 28 August 2012 – Greater Diversity, More Opportunities in Singapore's university sector).

These additional places will be provided for through the new Singapore University of Technology and Design (SUTD) and Singapore Institute of Technology (SIT), and through expanding the existing SIM University (UniSIM), which in 2017 was legislated to be the sixth Autonomous University from the status of private university and renamed as Singapore University of Social Sciences (SUSS).

In his panel discussion at the 47<sup>th</sup> St Gallen Symposium, the then Singapore Minister for Education (Higher Education and Skills) Ong Ye Kung stressed the needs for the education system to be aligned with the structure of the economy, so that people will continue to be armed with the required skills to find jobs in the current age of disruption. This means capping the proportion of graduates in a cohort at about 30 to 40%, while training the rest for vocations in various industries. This approach, he added, has ensured there was no glut of graduates in Singapore, and kept graduate unemployment low, unlike in some Asian countries.

Singapore had an over-emphasis on academic qualifications in education, and to be successful in dealing with disruption, the education system needed to shift and adopt a "dual-education track", in which young people can become craftsmen in a wide range of fields which Singapore can learn from Switzerland and Germany. Mr Ong added:

*"Today there is a strong emphasis on skills, and there is a logic to that," he said.*

*"Information and knowledge are all on the Internet. You can Google everything in the world, but skills you get from experience, you can't Google for skills." (Straits Times May 4, 2017)*

Citing the SkillsFuture Initiative as an example of what the government was doing to encourage people to learn new skills, Mr Ong notes that creating an education system focusing on skills will help people find jobs and improve their lives. Education and employment will help address today's key challenges: rebuilding social compact in this globalised world.

### **2.2.2. Singapore Higher Education History, and Evolution**

This sector traces the growth and development of higher education in Singapore since Singapore's independence in 1965. Universities in Singapore have responded to changing national agendas of meeting the economic and manpower needs.

Beginning in the 1990s, with the drive to the knowledge-based economy, there is the need to equip citizens with creative and critical thinking and entrepreneurial skills to meet the new economic and manpower demands. IHLs adopt this direction in making Singapore more competitive and relevant.

Higher education development from the colonial days of Singapore had almost been non-existent since the founding of Singapore in 1819 by Sir Stamford Raffles, as there were only 3 noteworthy developments in higher education during the initial 150 odd years. The establishment of "The Straits and Federated Malay States Government Medical School" in 1905 which was renamed in 1912 as "King Edward VII Medical School" and changed once again in 1921 to "King Edward VII College of Medicine", along with the establishment of Raffles College of Arts and Sciences in

1919 to mark Singapore's Centenary, followed by the merger of the two colleges in 1949 to form the University of Malaya. This was followed by the establishment of Singapore Polytechnic in 1954 and then with donations from mainly Chinese businessmen, the first Chinese language university in South East Asia was established in 1955. The establishment of tertiary institutions was a carefully planned mission.

1955 Nanyang University (Nantah or NU) was formed in response to greater demand for higher education in the Chinese language medium.

1962 The University of Singapore (SU) was set up after its split from the University of Malaya campus in Singapore.

1980 The National University of Singapore (NUS) was established with the merger of SU and NU.

1981 The Nanyang Technological Institute (NTI) was established to produce practice-oriented engineers for the growing Singapore economy

1991 The NTI was re-constituted and merged with National Institute of Education to become Nanyang Technological University (NTU) to increase the number of university places.

2000 The Singapore Management University (SMU) was established as Singapore's first Autonomous University.

2005 Duke-NUS Medical School (Duke-NUS) was established as a collaboration between NUS and Duke University.



- 2005 SIM University (UniSIM) was established as a private university dedicated to adult learners, offering applied degree programmes.
- 2009 The Singapore Institute of Technology (SIT) was established to provide upgrading pathway for polytechnic graduates with applied degrees in partnership with nine overseas universities through a TNE arrangement.
- 2009 The Singapore University of Technology and Design (SUTD) was incorporated in collaboration with the Massachusetts Institute of Technology and Zhejiang University.
- 2010 Singapore's third medical school, The Lee Kong Chian School of Medicine (LKCSOM) was established between NTU and Imperial College London.
- 2011 Yale-NUS College (YNC) was established between NUS and Yale University to offer a liberal arts education.
- 2014 SIT attained the status of Autonomous University pioneering new applied degree pathway.
- 2017 UniSIM was renamed as the Singapore University of Social Sciences (SUSS) and attained the status of Autonomous University. Arts Institutions

#### *Arts Institutions*

LASALLE College of the Arts and the Nanyang Academy of Fine Arts (NAFA) are private institutions offering publicly-funded diploma programmes and government funding for select degree programmes offered in TNE partnership with reputable overseas universities.

- 1938 Nanyang Academy of Fine Arts (NAFA) was established as Singapore's pioneer arts education institution
- 1984 The St Patrick's Arts Centre, later renamed LASALLE College of the Arts.
- 1998 MOE began funding diploma programmes offered at the Arts Institutions
- 2010 MOE announced funding for selected degree programmes at the Arts Institutions, offered in partnership with overseas universities.
- 2021 Formation of University of the Arts by an "alliance" of NAFA and LASALLE

Besides the universities and art institutions, there are other government-affiliated educational institutions that offer industry-specific diploma, degree and graduate certificate programmes. These educational institutions offer TNE programmes at bachelor and master level specific to their industry's need. These educational institutions which are exempted from the PE Act include:

#### *2.2.2.1. BCA Academy*

The education and research arm of the Building and Construction Authority (BCA) – offers full-time diploma programmes, short courses, seminars and workshops, in construction, design and engineering for the Built Environment sector. It partners with the University of Newcastle of Australia offering bachelor degree programmes in Civil Engineering and Construction Management.

#### *2.2.2.2. Singapore Aviation Academy (SAA)*

Established in 1958, SAA is the internationally-recognised training arm of the Civil Aviation Authority of Singapore offering short courses, diploma, degree and executive programmes relevant to the aviation industry. SAA has TNE partnership

with several overseas universities offering aviation related degree and master programmes from Massey University of New Zealand, Embry-Riddle Aeronautical University of United States of America, and Cranfield University of United Kingdom.

#### *2.2.2.4 IP Academy (IPA)*

The education and training arm of the Intellectual Property Office of Singapore (IPOS), offers executive programmes, corporate training, and undergraduate and postgraduate courses, in intellectual property and innovation. It also partners with SUSS in offering Joint Master in IP and Innovation.

#### *2.2.2.5. Institute of Adult Learning (IAL)*

IAL - was originally established as an institute for continuous education and training (CET) under WDA. It was transferred to SSG after the restructuring of WDA into WSG and SSG. With the establishment of SUSS, it was moved to be part of SUSS to be an autonomous institute of SUSS for its role CET to focus on building capabilities and continuing professional development and to transform the Training and Adult Education (TAE) sector for an effective, innovative and responsive to the current and emerging challenges. IAL currently only retains their collaboration with Griffith University of Australia for the Master of Learning and Professional Development.

#### *2.2.2.6 Social Service Institute (SSI)*

The Social Service Institute (SSI) is a division of the National Council of Social Service (NCSS). NCSS is a statutory board under the Singapore Ministry of Social and Family Development. SSI is the CET centre for social services. It partners Flinders University of Australia to offer Bachelor of Education (Special Education)

### **2.3. Committee on University Education Pathways (CUEP) Beyond 2015**

Singaporeans enjoy a wide range of education opportunities in our institutions of higher learning, especially at the university level. In 2020, we have achieved the target CPR of 40%. This means that two in five students from each Primary One cohort obtain a place in one of Singapore's publicly-funded universities.

In 1965, the CPR was only 3% and grew to 14% in 1989. In the 1990s, the growth pace was relatively stable and reached to 21% in 1999. This was then comparable to participation rates in developed countries. The Singapore Government had consistently regulated and managed the CPR level to match the manpower planning so as to make education a valued social institution. Admission policies into universities are regulated and streaming into faculties and courses managed to produce the numbers and types of graduates for the industry until the decentralisation of the higher education sector in an effort to make higher education more competitive.

To meet the expanded intake, MOE has set up several new institutions:

- Singapore Institute of Technology (SIT) for polytechnic upgraders
- Singapore University of Technology and Design (SUTD)
- Yale-NUS Liberal Arts College (YNC)
- Lee Kong Chian School of Medicine (LKCSOM) in NTU

At the same time, to add more pathways for Singaporeans with different abilities and aptitudes, MOE began funding places for Creative Industry degree programmes by selected foreign institutions who partner the arts institutions. For example, the Royal College of Music will be partnering the Nanyang Academy of Fine Arts to offer subsidised music degree programmes.

In his 2011 National Day Rally Speech, arguably in response to popular demand following the ruling party's poor showing in the May 2011 general election, the Prime Minister addressed the need to further develop and expand the university sector which then capped the CPR of 30% in publicly-funded universities, beyond 2015. He acknowledged that current education system has been producing good students, leading to many students who aspire towards university education. Coupled with the economy growing in size, sophistication and complexity, there was a need for a larger pool of diversified talent and knowledge workers. The Ministry of Education (MOE) had therefore convened in 2011, a Committee on University Education Pathways beyond 2015 (CUEP 2015) to study and recommend ways to expand the university sector, in order to provide more opportunities and pathways for Singaporeans to obtain a university education. The committee's report released after extensive studies in 2012 recommended growing the university sector qualitatively and quantitatively with a more diversified university landscape with emphasis on greater diversity offering more choices and more opportunities and expanding the places to 40% of the cohort participation rate (CPR) by 2020. This adds an addition of 3000 places to the existing 13,000 places. In considering any expansion of the university sector, the Committee had been guided by several long-held government policy considerations.

### *2.3.1. Economic Relevance*

Any increase in the number of university places will have to be sustainable and supported by the economy. Increasing places too quickly can lead to an over-supply of university graduates, who may then either become unemployed or under-employed. This has been the experience in some countries which have gone for very high CPRs or expanded university places too rapidly.

Besides the overall increase in places, the mix of these places also matters. There is a need to ensure close alignment between the distribution of places across course disciplines, and the manpower needs of the economy. This will ensure that our graduates enjoy good employment outcomes.

### *2.3.2. Quality Education*

The Government has always placed great importance on a high-quality university education to equip our graduates with the necessary skillsets to seize opportunities. The existing institutions – the National University of Singapore (NUS), the Nanyang Technological University (NTU) and the Singapore Management University (SMU) are currently internationally recognised. Selecting reputable partners for new institutions, i.e., Singapore University of Technology and Design (SUTD), Singapore Institute of Technology (SIT), Yale-NUS College (Yale-NUS), Duke-NUS Medical School (Duke-NUS) and Lee Kong Chian School of Medicine (LKCSOM), also help to ensure that they start off with the right quality “peg” and are held to high standards.

### *2.3.3. Cost Effectiveness*

Cost-effectiveness is also a relevant consideration. Any expansion in university places will require significant government funding and the government, therefore have to ensure that good value from the investment of public resources in this area.

## **2.4. Cohort Participation Rate (CPR) Tension and Debate**

Internationally, there is a wide variance in the publicly-funded university CPRs. Countries weigh their own policy considerations, matched to their models of

governance, tax and spending policies, and the historical developmental paths of the higher education sectors.

While the publicly-funded CPRs in Asian jurisdictions tend to be fairly low, in the range of 10-20% in Hong Kong, Japan, South Korea and Taiwan, however, the number of students who enter universities in these countries are significantly higher, as the non-funded private university sector has emerged to meet the additional demand for university places pushing the CPR to be much higher.

The publicly-funded CPRs are generally higher in European countries, exceeding 50% in Nordic countries like Denmark and Finland. For example, Finland's publicly-funded CPR of about 70% comprises students entering both its universities and polytechnics. This CPR structure is underpinned by a socialist system of governance where education at all levels is effectively heavily subsidised by Finnish citizens through higher taxes.

While the 2012 CUEP Beyond 2015 report which had advocated to increase the CPR to 40% by 2020, was warmly welcome by the students and parents, there is a continued desire to see the CPR to be increased further, particularly given the high cost of alternative choices of higher education and the underlying aspirations for acquiring higher education qualification as a means of improving socio-mobility. Since the 2012 committee exercise, there was no further indication of reviewing the situation for such an increase. There were many disappointments with spirited public debate among some, including former Government of Singapore Investment Corporation, chief economist Yeoh Lam Keong, advocating that existing policy makers are underestimating the skill and education needs of the modern economy. There was comparison of higher CPR in advanced knowledge-based economies such as Japan with 50%, and many other OECD countries with much higher CPR.

Speaking in Parliament on 8th May 2017 when presenting the Bill to set up Singapore University of Social Sciences as the sixth autonomous university, he urged Singaporeans not to be “overly fixated” with university cohort participation rate. Stressing those skills would be sought by employers in the new economy, and not paper qualifications.

*“Degrees can become obsolete in a world where information and knowledge can be found online easily. Degrees do not enable people to earn a living... our ability to keep pace with changing needs of the economy is what helps us earn our keep”*  
(Todayonline, 8 May 2017)

Table 2.3 provides the numbers of students in the various post-secondary programmes. However, this numbers do not take into consideration of those students who had gone overseas to study nor students doing a TNE programmes in one of the local PEIs.

The above table will remain fairly within the range as the CPR is controlled and calibrated by the admission to degree at 40% CPR. With the majority of GCE A Level/IBP - around 70% progressing to pursue a degree in the AUs, there will be at least more than half of the diploma holders being denied admission to a degree at the local AUs (Straits Times 15 February 2021).

The setting of the cap at 40% CPR will not reduce the number of graduates in the economy. Students have the alternative to pursue higher education either by going overseas or studying in a TNE programme locally either on a full-time or part-time basis. From Table 2.3, the CPR rate for admission to degree programmes had been increasing constantly at around 1.5% per year since 2013. As at 2018, the CPR is already 37.1%, thus achieving 40% in 2020 is clear. (MOE had since stop publishing CPR percentage for admission after the 2019 edition). Including students studying



TNE programme and overseas university programmes, the CUEP 2015 report in 2012 estimated that CPR was already closer to 40% during the committee review period in 2012.

The CUEP 2015 report, recommended 40% CPR by 2020, which is equivalent to around 16,000 places for publicly-funded degree programmes. Table 2.4 below shows that the intakes in 2020 was 20,976, which greatly exceeded the 16,000 places for 2020. 2020 intake works out to be around 42% of CPR, exceeding the target of 40%. 2020 was special as MOE expanded the places to cater for students who are unable to travel overseas due to the Covid19 border closure, particularly for students who applied to study in Australia and New Zealand which typically account for about 4,000 students each year.

Table 2.5. Students Numbers for various post-secondary programmes

<b>Number of Student Intakes for year 2020</b>	<b>2020</b>
Nitec/Higher Nitec (ITE)	14,661
Diploma (Polytechnic/Art Colleges)	21,014
GCE A Level/ IBP	12,948
<b>Degrees (AUs/Art College)</b>	<b>20,976</b>

*Source: Ministry of Education, Education Statistics Digest 2021*

Based on CPE 2015 data, there were 25,293 students studying a bachelor programme, in a TNE programme with PEIs, which averages about 9,000 intake per year (averaging 17% CPR). According to UNESCO Institute of Statistics (UIS) in 2019, on international students, there were 23,773 Singapore students studying in an overseas university, giving an average yearly intake of 7,500 (averaging 14% CPR). Combining the TNE students and overseas study students, we are looking at

some 16,500 students studying for HE. Basing of the local AUs students of around 20,000 and the 16,500, Singapore need to provide some 36,500 places for HE. This will effectively bring Singapore's CPR closer to 70%. Therefore, there will be continuous debate and tension for the need to increase the CPR through more capacity in the existing 6 AUs or adding additional universities from overseas to establish campuses and granting subsidies to local students.

## **2.5. Singapore Global Schoolhouse and World Class Universities Project**

Education was identified as one of 18 service sectors to be nurtured and promoted in the Economic Committee report in 1986. Capitalising on GATS implementation, the government embarked on a plan to attract at least 10 World Class universities to establish a presence in Singapore. The ERC's recommendation called for the following to promote regional and global demand:

- a. Marketing our service industries more aggressively and systematically building up Singapore's branding as a world-class services hub. This is a key gap in our services development effort. For example, we do not have the equivalent of the British Council or Education Australia to market educational institutions to foreign students.
- b. Simplifying procedures and regulations to make it easy and convenient for foreign students and businessmen to come to Singapore to make use of our services. This includes easing entry requirements, expediting processing, and introducing 'green lane' privileges for selected low-risk, high value segments.

With strong TNE growth globally, the 'Global Schoolhouse' project was launched in 2002 (MTI, 2002) to increase the intakes of foreign students from the region to study in Singapore. There were several economic advantages for this vision and the objectives were:

- a. Create an additional avenue to grow Singapore's GDP. The ministry forecasted that Singapore was well-placed to gain a piece of the estimated US\$2.2 trillion world education market. An ambitious target of 150,000 international full-fee paying students was set for the year 2015, up from the then estimated figure of 50,000. The increase in institutional spending and the spending of the foreign students would fuel economic growth and create good jobs.
- b. Increase in institutional spending and the spending of the foreign students would fuel economic growth and create high-paying jobs.
- c. Attract talents to remain after graduation to build the human capital pool. The influx of foreign students would also contribute human capital to knowledge-based activities such as research and development. An increase in the number of education institutions as well as a greater diversity of courses would help stem the outflow of domestic students to overseas universities. In addition, foreign students would boost Singapore's pool of talented individuals and form a network of international alumni around the world.
- d. An increase in the number of education institutions as well as a greater diversity of courses would help stem the outflow of domestic students to overseas universities.

This was driven for economic growth, led by the Ministry of Trade and Industry (MTI) and the various agencies under its control. The report recommended that a three-tiered system to form the core of the global schoolhouse. At the apex will be the so-called 'world-class universities' that are the 'niche centres of excellence' focusing on research and development, while the next tier comprises of the existing local publicly-funded universities, namely the National University of Singapore, Nanyang Technological University and the Singapore Management University being the 'bedrock' universities that will be involved in research and development but also producing and supplying the bulk of university-educated manpower needed for the national developments as well as attracting regional students. At the base of the pyramid would be the "additional private universities." These universities would focus on teaching and applied research and cater to the bulk of the additional 100,000 full-fee paying foreign students envisioned in the global schoolhouse.

The global schoolhouse vision was a string of policy initiatives that highlighted the key role played by education in supporting national economic competitiveness. It also represented a move towards the marketisation and commodification of education.

In 1996, the then prime minister announced the government's intention to turn Singapore into the 'Boston of the East', with Harvard University and the Massachusetts Institute of Technology serving as role models for the National University of Singapore and Nanyang Technological University to develop into world-class universities, while the Economic Development Board (EDB) set out its plan in 1998 to attract at least 10 so-called world-class universities to Singapore within 10 years. This initiative managed to attract prestigious institutions such as Johns

Hopkins University, the University of Chicago Booth School of Business, and INSEAD, a French graduate business school, India's SP Jain School of Global Management, Australia's University of New South Wales as well as discussions with University of Warwick of United Kingdom. Marketed under "Singapore Education," it encourages foreigners to study in Singapore's public and private education institutions as well as offering permanent residency for graduates upon securing a job in Singapore. Scholarships were awarded to attract talents. The Global Schoolhouse project aimed to attract 150,000 foreigners to study in Singapore by 2015. By 2007, over 1000 PEIs were established, catering to 150,000 local and foreign students, studying in over a thousand higher education programmes.

While the project's focus was to attract foreign students, TNE's availability also attracted many locals to pursue higher education due to the shortage of places in public universities. Demand for higher education is estimated at around 40,000 per year, while there are only 12,000 subsidised places in public universities. This was limited by the 30% CPR cap by 2015, thus creating severe shortages and intense competition for a place. The alternative for students which is more costly is an overseas tertiary programme in countries such as United States, United Kingdom, Australia or Canada. Thus, TNE programmes offer an affordable alternative for many local students.

As at 2012, there were 120 overseas universities in partnerships with 76 PEIs. Together, they catered to 127,000 higher education students in some 900 undergraduate programmes (CPE PE Conference 2013). These numbers were more than double the total enrolment of 58,000 in the 5 public universities.

The then Minister for Trade and Industry, Mr Lim Hng Kiang told Parliament on 17<sup>th</sup> October 2012, that the global schoolhouse initiative, since 2009 had shifted its focus towards building industry-relevant manpower capabilities and helping to attract, develop and retain talent for our economy as global competition for talent has intensified. EDB has therefore encouraged the introduction of programmes which are relevant to our economy. EDB would emphasise quality of education and economic relevance rather than student numbers or GDP share.

The private education sector has seen significant consolidation after the establishment of the new regulatory regime under the Private Education Act in 2009. The number of private education institutions has fallen by 75% since 2009, While international student enrolment in the sector has decreased by about 11% - industry consolidation, coupled with more stringent regulatory standards, has generally benefitted students as well as the education sector as it has ensured that baseline standards are achieved across the industry. Mr Lim's statement was an implicit acknowledgement that the original target of 150,000 international full-fee paying students was nowhere in sight.

## **2.6. Transnational Higher Education in the Role of Capacity Building and Private Education Providers**

In the new knowledge economy, higher education qualification is becoming a powerful economic force. Demand for higher education qualifications continued to grow locally as well as in the East Asia region. This led to shortage of places in many local universities resulting in demand for studies with foreign universities either as international students on the universities' home campus or through a TNE qualifications hosted away from the universities' home countries.

The growing demand for access to higher education has placed tremendous pressure on governments to react and meet this demand for the aspiring young population to meet the competitive environment of the knowledge-based economy. These aspiring new cohorts are more diverse than their parents and they bring with them a wide range objectives and purpose, coupled with enormous variation in prior preparation, access to information, cultural orientation and economic resources. The traditional university model with strong academic orientation meets the needs and aspirations of only a small segment of the current enrolment, thus leading to the increasing roles of private education providers to meet the needs of the other segments, notably the increased participation of females and more mature/adult cohorts.

In the earlier days of meeting capacity building, in most cases, governments backed away from policies that attempted to manage enrolment and educational opportunities and allowed market forces, self-quality assurance and international trends to rule. A plethora of providers has emerged, many in an exploding private sector and, too often, with insufficient mechanisms to ensure the quality or relevance of provision.

The cross-border mobility of students, educational institutions and programs is a result of internationalisation and globalisation of higher education. Global connectivity, arising from better air transport connections, budget air services and internet services greatly supported the international mobility of students. Students, now have more choices to study away from home to meet their aspirations of acquiring a qualification that are either not available or do not have sufficient places

at home. The ability to gain opportunities to work at the destination of studies after graduation is another major attraction.

With the inclusion of trades and services under WTO's GATS Agreement in 1995, trade in education services grew with more universities adopting internationalisation as one of the pillars of strategic intent. Universities with various objectives of internationalisation had embarked on the mobility of their institutions, faculties and programmes, adding another dimension to the growth of transnational education.

The dominant feature of contemporary higher education has been the globalisation of universities, with institutions reaching out to new student markets in foreign countries by setting up local provisions, either directly in the form of an 'international branch campus' (IBC) or by working in partnership with a local organisation to franchise their degrees (Huang 2007, Altbach et al 2009, Knight 2012). The local organisations could either be a public university or a private institution with a not-for-profit or for-profit orientation.

The growth of cross-border or transnational education would complement and compete in the host country with the growing presence of foreign providers accelerating the development of higher education by improving the quality and productivity in the domestic higher education sector. For example, if the foreign providers integrate into the domestic sector, hiring and training local faculty in advanced educational pedagogies like 'flipped classroom' and problem-based learning, transnational education may grow the pool of talented educators and administrators, which benefits the domestic institutions. Competition between foreign providers and local universities may encourage the latter to be more innovative and efficient. There may also be a 'demonstration effect,' as foreign providers showcase



educational technologies like virtual learning environments and social learning commons which their local counterparts can adopt.

The extent to which transnational education positively impacts the development of the local higher education system depends on a range of factors, including its scale and the policy motivations and regulatory regime of the host government (McNamara and Knight 2014). Foreign providers will complement the capacity building of host countries by providing affordable access to students who had been restricted or limited by the capacities of the domestic universities, instead of traveling to the home campus for higher education. However, if the foreign providers enter the market purely for commercial purposes and are targeting potential students who cannot afford to enter (or are barred from entering) the domestic universities, then the transnational education may largely be in the form of cheap, low-quality courses.

In the 1990s, for example, much of the growth in transnational education in South-East Asia involved UK and Australian universities partnering with small private colleges to offer 'cheap and cheerful' business degrees, often part-time to working students (Altbach 2004). The domestic universities remained aloof from these developments, as the new foreign competitors recruited local students who were too academically weak or too economically disadvantaged to gain places in the domestic system. On the other hand, some countries, notably Qatar, have actively targeted the world's leading universities (including Cornell, Texas A&M and Carnegie Mellon) to set up campuses in the wealthy city state, believing that their presence would drive up standards and efficiency throughout their higher education system.

Some critics have questioned the benefits of transnational education for host countries, citing the short-term, commercial objectives of the foreign universities

involved which tend to minimise technology transfer and non-involvement in the long-term capacity building (Stella 2006).

In such TNE arrangements, it involves a partnership between an overseas institution that awards the qualification with a local institution in a host country that delivers the teaching and students services. The role of the two parties varies depending on the partnership arrangement. In most cases, the awarding institution provides all or most of the curriculum materials and in some arrangements full/partial or no teaching staff from the home campus traveling to the host country to deliver lectures for a few intensive days. For the reminding curriculum time, classes are conducted by local staff, closely following the course materials. The local institution is usually responsible for the recruitment of students and local adjunct staffs according to the university partner admission and selection criteria for both students and teaching academics. In some cases, there is a “twinning” arrangement, whereby the first part of the course is conducted in the host country and students travel to the home campus to complete their qualification.

## **2.7. Growth of Private Education Institutions (PEIs)**

TNE programmes in Singapore are offered both on a full-time and part-time arrangement and the programmes are offered either in semester or trimester schedules. Part-time programmes are typically offered either in evenings or in compressed weekend to cater to working students. With a trimester schedule, the entire course is shortened by a year, lowering accommodation and living expenses for foreign students whilst allowing students to graduate earlier.

Currently, Singapore has 314 Private Education Institutions (PEIs) registered with CPE as at March 2022. This is a big reduction from the pre-PE Act regime of around

1200 PEIs in 2007 before the 2009 introduction of the PE Act. The current numbers are closer to the 305 PEIs in 1997, prior to the launch to create Singapore as an Education Hub with the Global Schoolhouse project to attract world-class universities in knowledge creation for Singapore to be the “Boston of the East” as part of Singapore pivot towards a knowledge-based economy.

The regulatory regime for the private education (PE) sector prior to the introduction of PE Act started with a “light-touch.” The industry was nascent in the 70’s and 80’s with little demand and few players. Schools were registered when they met basic requirements such as approval for usage of premises and fire safety clearance and some rudimentary checks on school management and teachers. Registration did not represent endorsement or assessment of the quality of the academic programmes. Students were reminded to do their own due diligence when enrolling in these programmes.

Between 1987 and 1997, the number of private schools registered with MOE doubled from 150 to 305. Consequently, the Ministry of Trade and Industry facilitated the establishment of quality assurance schemes which the better private schools could aim to attain the CaseTrust for Education certification, administered by the Consumers Association of Singapore (CASE), and the Singapore Quality Class for Private Education Organisations (SQC-PEO), administered by then SPRING Singapore.

The number of private schools quadrupled between 1997 and 2007, from 305 to 1,200 as the private education sector attracts a large number of locals as well as international students who are drawn by the Singapore brand (MTI, 2009). Similarly, international private education providers and overseas universities were attracted to

establish operations in Singapore to meet the demand of students. This growth was also in tandem with the Global Schoolhouse Initiative where the Singapore Tourism Board was actively engaging the more established and reputable PEIs in overseas student recruitments and marketing campaigns, promoting the “Singapore Education Brand.” The number of full-time international students enrolled in the private schools also grew in tandem from 9,000 in 1997 to 37,000 in 2007(MTI, 2009). In 2008, there were about 120,000 students enrolled in these private schools of which 45,000 were from overseas (MTI, 2009).

The exponential growth of the sector has resulted in a highly uneven spread of academic and governance standards amongst the private education institutions (or PEIs). Some were found to have engaged in dubious or unscrupulous practices, which have adversely affected Singapore’s reputation. In the last few years, the closures of a few PEIs have also left their students stranded. The measures of CaseTrust and SQC-PEO certifications were no longer adequate, leading to the legislation of the PE Act to tighten up accountability and quality.

## **2.8. The Massification and Expansion of PEIs**

During the last five decades, the higher education landscape has changed significantly. Once the privilege of an elite social class for higher education, gross enrolment ratios (the participation rate for the cohort between 18-24 years of age) in tertiary education have mushroomed to more than 50percent in many countries.

There are multiple forces driving the rapid expansion of enrolments: the improved participation and retention rates of primary and secondary education, the demand for economic opportunity and social mobility, and perhaps most importantly, the shift globally from industrial to knowledge economies. The massification of tertiary

education, the emergence of the global knowledge economy and increasing national and international competition during the period and now into the 21st century have created an unprecedented “revolution” in higher education worldwide (Altbach, Reisberg, & Rumbley 2010).

Higher education has become a massive enterprise everywhere. Globally, close to 230 million students are studying in more than 22,000 universities in 2019 (<http://data.uis.unesco.org>). In most developed countries 60% or more of the age group studies in some kind of postsecondary institution, and many countries have reached 80%. The global tertiary-enrolment ratio went up from 14percent to 32% during the two decades up to 2012; in that time, the number of countries with access rates of more than half rose from five to 54. Expansion will continue, especially in developing and middle-income countries. The world has experienced a revolution in higher education access in the 21st century (Altbach, Reisberg, and Rumbley 2010).

At the same time, higher education has assumed a more central role in the global knowledge economy. While the top and traditional universities continue their central role in educating the professions and others at the top of their societies (Ben-David and Zloczower 1962), access to higher education is necessary for the larger masses that is needed for the more sophisticated knowledge-based economy. Higher education qualifications have become key to social mobility in much of the world, placing even greater pressures for expanding access.

Thus, higher education globally has been affected by the two tidal waves of massification and the global knowledge economy. These factors have placed unprecedented pressures on the bottom sector—the mass access institutions—and

at the top in the research-intensive universities that are central to the global knowledge economy.

Higher education is now central to the success of contemporary economies and an unrelenting demand of expanding middle-classes everywhere, as it imparts necessary skills and is a basic requirement for social mobility.

### **2.8.1. The pressures of massification.**

There are multiple forces driving the rapid expansion of enrolments: the improved participation and retention rates of primary and secondary education, the demand for economic opportunity and social mobility, and most importantly, the shift globally from industrial to knowledge economies especially for advanced economies. These pressures have produced a need for a diversification of higher education opportunities. While higher education was the domain of the public sector in most countries for a long time, private institutions are now responsible for a significant part of the current growth. Large international organisations such as Kaplan and the Apollo Education Group are some of the leading private education providers.

In Singapore, TNE through private education institutions (PEIs) offer TNE qualifications that fulfil the following needs of Singaporeans and foreign students:

- a) Qualified young school leavers who are not able to secure a place in the AUs due to cap and competition for the discipline of their choice.
- b) Young school leavers who are not able to afford either financially or socially to go to an overseas university.
- c) Young school leavers who opt to work and study part-time in a TNE programme.

- d) Mature working adults who seek to upgrade their education qualifications without having to incur the “opportunity cost” of leaving a job.
- e) Foreign students to have a TNE qualification in Singapore as Singapore’s environment would be closer to the home country in the socio-cultural context.
- f) Foreign students who find Singapore having more job opportunities after graduation.

### **2.8.2. Expanding opportunity: The private sector**

One of the characteristics that differentiates institutions within a system is how they are financed. Governments have limited options: they can create new public universities, allow the expansion of a private sector, raise fees in the public sector, or develop more non-university programs. Overall, globally there is a trend towards more for-profit higher education, to meet the growing demand both for young school leavers and mature adults seeking to upgrade to remain competitive and relevant in the labour market.

The consistently strong results from students eligible for university studies generate strong demand for more places in universities. This led to students seeking studies overseas as well as studying a TNE programme. In 2018, UNESCO reports that there were 23,752 Singaporeans studying overseas, with Australia being the most popular (7,977 students) followed by United Kingdom (6,976 students) and United States (4,164 students) (UNESCO, uis-student flow, 2018). The number of students going overseas is estimated to be 20% of CPR. Rapid growth of the private education sector has created more places and thus produced more graduates.

## **2.9. Past Issues with Private Education Institutions (PEIs)**

The rapid growth of TNE programmes from the private education sector has created more places, offering opportunities for both fresh school leavers as well as working adults who could not secure places in AUs in the past. While this helped to produce more graduates, as the majority of PEIs' partnerships are driven by commercial objectives of return on investment through cost minimisation, quality standards may be compromised.

Coupled with the light touch approach taken previously by MOE, there were less regulatory requirements to ensure compliance, providers' integrity as well as consistency of quality of programmes and teaching. This generated significant unevenness in the quality provision and quality of graduates. The earlier years of high growth in the private education sector had resulted in many incidents of dissatisfaction over programmes' quality as well as loss of fees to unscrupulous providers. These prompted MOE to tighten its regulatory framework and quality to protect students through corporate governance and quality assurance in the private education. The PE Act was passed in September 2009 by Parliament to strengthen the regulatory framework for private education.

## **2.10. Council of Private Education (CPE) and Regulatory Controls**

Under this Act, the Council for Private Education (CPE) was established as the regulator for this sector under the supervision of the MOE. (The Council for Private Education was renamed to Committee for Private Education in a revamp in 2016 and comes under the supervision of SkillsFuture Singapore, which is under the preview of MOE) CPE is thus entrusted to implement and regulate this sector with a strengthened registration framework under the compulsory Enhanced Registration Framework (ERF) and a voluntary quality certification scheme known as EduTrust. It



is also tasked to promote best practices to raise standards in the private education sector. This direction was a calibrated move from the early years of an economic-driven focus to a limited, selective, tightly controlled structured growth strategy for higher education.

All PEIs offering TNE programmes are classified as offering External Degree Programmes (EDP). As at March 2022 ([www.tpgateway.gov.sg](http://www.tpgateway.gov.sg)), there are 1,377 EDPs being offered. These EDP programmes are from 103 overseas universities partnering with 68 local PEIs. As all TNE partners are foreign universities, collaborations with overseas quality agencies counterpart agencies were initiated. Memorandums of Cooperation were signed to raise and share information and best practises on quality and audit reports of PEIs and their partnering universities from the respective countries. The agencies are as follows:

- Quality Assurance Agency (QAA) for Higher Education of United Kingdom;
- Tertiary Education Quality Standard Agency (TEQSA) of Australia;
- (iii) New Zealand Qualification Authority (NZQA);
- (iv) Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ);
- (v) Australian Skills Quality Authority (ASQA)

To further enhance the quality of TNE, CPE introduced new measures in October 2016, mandating that all PEIs with EDP programmes and/or programmes that articulate into EDPs must meet the following new requirements:

- (i) Attained at least a 4-year ERF registration period to qualify for EduTrust Certification;
- (ii) Achieved EduTrust (4-year) Certification by 1st June 2018;

- (iii) Mandatory participation in CPE Graduate Employment Survey;
- (iv) Minimum academic entry requirements for all EDPs
  - a. Admission to an EDP will require:
    - GCE A Level, IB Diploma, or equivalent pre-university certifications; or
    - Polytechnic Diploma or equivalent; or
    - PEI qualification that provides direct articulations into an EDP
  - b. Admission to a programme that articulate to an EDP will require:
    - GCE O-Level or equivalent; or
    - Nitec, Higher Nitec or equivalent

CPE together with overseas agencies collaborate closely to ensure that all TNE programmes meet their respective awarding countries higher education standards, with students in such programmes being equivalent to students who study on-campus.

QAA from UK and TEQSA from Australia will routinely conduct quality audits on university providers together with their local provider partners. Both are the most active as UK and Australia, between them, account for a total of 75 universities with UK having 59 universities while Australia has 16 universities.

QAA's "The Quality Evaluation and Enhancement of UK Transnational Higher Education Provision 2021-22 to 2025-26" report in October 2020, which introduced the method of quality enhancement, Quality Evaluation and Enhancement of UK Transnational Higher Education or QE-TNE, reaffirmed the importance of TNE to over 140 UK higher education institutions as well as its strategic value to the

Department for International Trade (DIT) for the global spread over 220 countries with over 650,000 students enrolled on UK TNE programmes each year. In 2018-19, more than 50% of the students were studying in Asia, followed by Africa, Europe and the Middle East. The top five host countries being China (12%), Malaysia, Singapore, Pakistan and Sri Lanka.

The excellence of the quality of UK TNE will be confirmed through independent evaluation by QAA.

TEQSA, created under Australia's Tertiary Education Quality and Standards Agency Act 2011, plays a vital role in the global quality assurance and regulation of Australia's higher education sector – protecting the reputation of this growing, vibrant sector, while safeguarding the student experience. In "TEQSA's International Engagement Strategy 2016- 2020" four-year plan, the principal objectives are:

- (i) the quality and reputation of Australian transnational higher education;
- (ii) supporting Australian transnational higher education activity and innovation;
- (iii) the promotion of collaborative networks of Quality Assurance Agencies

With Australian universities actively operating offshore in TNE activities, TEQSA operates in a global context to build and support all Australian universities and their host countries providers in accordance to their principal objectives. TEQSA's role is to assure that quality standards (the Higher Education Standards Framework (Threshold Standards) 2015) are being met by all registered higher education providers offering Australian qualifications

## **2.11. Current Challenges and Issues**

The boom times of pre-2009 by TNE and PEIs providers has faded and since then the sector faces several challenges, namely:

- Demographic changes with falling birth rate reduced the number of cohorts each year.
- The launch of SkillsFuture Initiative in February 2015 which promotes lifelong learning while shifting the focus away from academic pursuit of a degree. This initiative which (aims to tackle employment issues borne out of an overqualified workforce) also signals the future direction of education policy.
- Meeting the tightening of the regulatory requirements (CPE press release, 2016, with the latest revision in October 2016 to be complied by 1 June 2017 on all external degree programmes (EDP)
- The shift of focus for Global Schoolhouse in late 2012 as announced in Parliament by Minister of Trade and Industry, Mr Lim Hng Kiang. The Global Schoolhouse initiative will emphasise quality of education and relevance to the economy, and not student numbers or GDP share. This shift saw the end of government support in promoting the “Singapore Education” Brand by the Singapore Tourism Board (MTI, 2012).
- The recommendation by the Committee on University Education Pathways Beyond 2015 (CUEP, 2015) in August 2012, to increase the CPR for the public AUs to 40%. This move reduces the number of potential local students for TNE programmes.
- The passing of the Singapore Institute of Technology Bill in 2014, confer SIT as Singapore fifth autonomous university partnering 9 overseas

universities offering TNE programmes to build SIT capabilities while offering new applied degree in SIT name.

- On 8 May 2017, a Bill to formalise the autonomous university (AU) status of Singapore University of Social Sciences (SUSS) was passed in Parliament. With this, SUSS become Singapore's sixth AU, with a focus on lifelong learning, the social sciences and applied education.
- Changing the perception of TNE as “second chance.” In Oct 2017, Dr Sam Choon Yin, the dean of PSB Academy wrote in a commentary that private education providers need to remove the impression of second chance providers of education while offering more chances to individuals. In a Feb 2018 interview, Mr Dr Lee Kwok Cheong, CEO of SIM Holdings refers to SIM as a second-chance university for late bloomers to succeed. Both PEIs are among the top five in Singapore, but each seems to have a different approach to TNE
- TNE providers and PEIs need to improve on the Graduate Employment track records when comparing with the AUs. With the mandatory participation of the annual Graduate Employment from 2018, the perception of TNE among students and employers will be clearer.

Singapore’s PEIs faces mounting competition from different aspects as the private education sector enters a new phase in its evolution, and recruitment strategies now have to reflect the new reality. International student numbers are not the guarantee they might once have been, and increased competition from regional countries and their education hubs will make it more difficult for some of these private education institutions in Singapore to continue to compete.

Public versus private tensions, whereby the private education sector also faces competition from its public sector: the stellar reputation of public universities in Singapore, where more than 50% of students gain significant international experience during their courses, has been reinforced in recent surveys conducted by the Singapore Institute of Management. The Graduate Employment report showed significant gaps in job and salary outcomes exist between graduates of three of Singapore's six public universities – National University of Singapore, Nanyang Technical University and Singapore Management University – when compared with students with degrees from a variety of private colleges.

Work-ready, competency-based modules and programmes might be the way forward for some within the private sector. The trend may see a re-alignment of priorities both in the public and private sector educational institutes with a move towards more vocational skills. In short, private institutions need their students to be work-ready and the latest mandatory requirement by CPE to participate in Graduate Employment Survey announced in October 2016, to present their graduates are comparable to those from the AUs.

The fundamental shift in human capital development for Singapore appears to be the SkillsFuture Initiatives, and this could probably present the biggest challenge to all PEIs, hence the research question on the relevance and sustainability in the face of this initiative and the government direction towards more skill-based trainings. In the 2015 Budget announcement, the government launched a long-term strategy to drive Singapore to the next phase of development, marking 2015 as the start of SkillsFuture, the national movement to develop human capital by providing every Singaporeans with opportunities develop their fullest potential throughout life. Every

citizen above the age of 25 years old will be credited with a SkillsFuture Credit of SGD500, (equivalent to GBP280) with possible additional credits in the future, without expiry period for them to upgrade themselves.

SkillsFuture is a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting point, so that every individual will drive Singapore's next phase of development towards an advanced economy and inclusive society. SkillsFuture will be an integral part of Singapore's transformation. It will focus on skill mastery rather than academy qualification, building a high skills, high productivity and high wages eco-system. It is also one that focuses on lifelong learning.

Because of the rapidly evolving economy, new jobs will be created and old jobs will be lost. It is thus crucial to prepare for jobs and skills of the future in a timely manner, through guidance at an early stage and continuously through each citizen's lifetime with upgrading and lifelong learning. In this way, Singaporeans are more ensured of employability.

The four key thrusts of SkillsFuture are:

1. Help individuals make well-informed choices in education, training and careers.
2. Develop an integrated high-quality system of education and training that responds to constantly evolving needs.
3. Promote employer recognition and career development based on skills and mastery.

4. Foster a culture that supports and celebrates lifelong learning.

To meet challenges and achieve success, every Singaporean, every job, at every stage of life – whether in their schooling years, early career, mid-career or silver years – will find a variety of resources to help attaining mastery of skills. Skills mastery is more than having the right paper qualifications and being good at what you do currently; it is a mindset of continually striving towards greater excellence through knowledge, application and experience.

All the public higher education institutions had already initiated programmes to be part of the “SkillsFuture” movement with more training providers are being roped into this movement. The SkillsFuture Work-Study Degree Programme (WSDP) was launched in July 2019 as part of a suite of Work-Study Programmes offered by Institutes of Higher Learning (SSG-WSG, 2019). WSDP is a work-study programme that allows students to acquire deep, work-relevant skills, which will help students better transit to the workplace upon graduation.

With this initiative, the narrative is on –

***“Is a degree really all-important?”***

While the government is advocating a shift away from having a degree, the real situation is different as the number of graduates are increasing. Table 2.5 shows the qualification attainment of Singapore’s resident from the period of 2015 to 2021. The trend for degree holders is on the upward trajectory while those with qualification below a degree is either stagnating or decreasing during the same period. Degree holders occupy 41.3% of the population above 15 or almost 1 million.



Table 2.6 Singapore above 15 years old Residents' Education Qualifications

Attainment 2015 – 2021

Highest Qualification Attained	2015	2016	2017	2018	2019	2020	2021
Total ('000)	2,232.3	2,257.6	2,269.7	2,292.7	2,328.5	2,345.5	2,397.8
Below Secondary	407.3	411.5	398.9	365.0	352.0	334.8	311.6
Secondary	406.8	386.6	374.0	375.9	373.3	360.8	344.0
Post-secondary (non-Tertiary)	267.7	260.3	257.1	264.3	261.8	269.3	267.8
Diploma & Professional Qualifications	431.1	438.7	429.5	446.7	468.7	464.3	484.1
<b>Degree</b>	<b>719.4</b>	<b>760.4</b>	<b>810.1</b>	<b>841.0</b>	<b>872.7</b>	<b>916.3</b>	<b>990.3</b>
<b>Percentage of Degree Holders</b>	<b>32.2</b>	<b>33.7</b>	<b>35.7</b>	<b>36.7</b>	<b>37.5</b>	<b>39.1</b>	<b>41.3</b>

Source: Labour Force in Singapore 2021, Manpower Research and Statistics

Department, Ministry of Manpower, Singapore

While there is constant pressure for the government to expand university places to meet the demand for higher education, the government faces two challenges: preparing Singaporeans for the future economy and sustaining social mobility. This involves focusing on the future needs of the industries and shifting the education agenda away from producing graduates in two important moves, firstly moving towards applied learning and secondly to advocate for lifelong learning. These are in preparation for a future economy that will be different, sophisticated and diversified which is not yet invented where current jobs and knowledge could be obsoleted.

The Singapore Minister of Education, Mr Chan Chun Seng shared in Parliament on March 7, 2022 that MOE is reviewing programmes for adult learners in publicly funded institutions as there is the need for Singaporeans to upgrade their skills to prepare for jobs in key areas of growth in a fast-changing economy (Straits Times, March 7, 2022)

*"As we increasingly move towards interspersing working and learning throughout life, we should look beyond the proportion of each cohort that goes to university before starting work. We should focus instead on ensuring that Singaporeans can upskill continually, according to their needs and aspirations" (Chan Chun Seng, 2022)*

While the glut of graduates in many developed countries is a key concern for many governments, the latest figures from the Singapore Ministry of Manpower, shows that degree holders' unemployment compared to non-degree holders for the period between 2015 to 2021 did not show any significant increase as shown in Table 2.6. During the period, it ranged between 2.8 to 3.5%, which was within the range of total unemployment rate of between 2.8 to 4.1% and similarly with holders of other qualifications.

Table 2.7. Singapore Residents' Unemployment Rate by Qualifications Attainment 2015 – 2021

Highest Qualification Attained	2015	2016	2017	2018	2019	2020	2021
Total ('000)	2.8	3.0	3.1	2.9	3.1	4.1	3.5
Below Secondary	2.5	2.4	2.6	2.5	2.9	4.1	3.1
Secondary	2.7	3.1	2.8	2.8	3.5	4.6	4.1

Post-secondary (non-Tertiary)	3.0	3.2	3.8	3.4	3.6	4.9	4.5
Diploma & Professional Qualifications	2.9	3.1	3.3	3.1	3.3	4.7	3.9
<b>Degree</b>	<b>2.8</b>	<b>3.1</b>	<b>3.2</b>	<b>2.9</b>	<b>2.9</b>	<b>3.5</b>	<b>3.2</b>

Source: *Labour Force in Singapore 2021, Manpower Research and Statistics*

Department, Ministry of Manpower, Singapore

Singapore's then National Development Minister Khaw Boon Wan had this advice to students' request for more university places, during one of the dialogue sessions:

*"You own a degree, but so what? You can't eat it. If that cannot give you a good life, a good job, it is meaningless.... Can you have a whole country where 100 per cent are graduates? I am not so sure, what you do not want is to create huge graduate unemployment."* (Khaw, 2013)

The challenge is to focus on applied learning - integrating classroom learning and theory with real life applications and practice on-the-job - to apply what students learn in ways useful in their jobs. Embracing lifelong learning allows continuous upgrading of knowledge and skills that are needed when new job skills are discovered.

The then Minister for Education (Higher Education and Skills) Ong Ye Kung lamented during his panel discussion at the St Gallen Symposium that the Singapore society had an over-emphasis on academic qualifications in education. He advocates that the education system needs to be aligned with the structure of the economy, so that people will continue to be armed with the required skills to find jobs

in the current age of disruption. This means capping the proportion of graduates in a cohort at about 30 to 40%, while training the rest for vocations in various industries. This approach, he added, has ensured there was no glut of graduates in Singapore, and kept graduate unemployment low, unlike in some Asian countries. To successfully deal with disruption, the education system needed to shift and adopt a "dual-education track", in which young people can become craftsmen in a wide range of fields, an area that Singapore can learn from countries such as Switzerland and Germany (Straits Times, May 4 2017).

"Today there is a strong emphasis on skills, and there is a logic to that," he said.

"Information and knowledge are all on the Internet. You can Google everything in the world, but skills you get from experience, you can't Google for skills." Mr Ong cited the SkillsFuture initiative as an example of what the Government was doing to encourage people to learn new skills.

In OECD research and publications (OECD, Education at a Glance, 2020), access to tertiary education plays an essential role in developing young adults' skills so they can contribute fully to society. As students' profiles and academic aptitudes can be very diverse, addressing the growing needs of a diverse population, some countries have progressively adapted their tertiary-level programmes to ensure more learning flexibility to suit a wide range of students' skills and learning aptitudes. This includes building more pathways between upper secondary and tertiary programmes, including those with a vocational orientation, and also expanding the types of programmes available to first-time tertiary students: short-cycle tertiary programmes, bachelor's programmes or long first degrees at master's level.

OECD report (OECD Education at a Glance, 2020) shows a long-term trend that higher educational attainment increases the likelihood of being employed. On average across OECD countries, higher educational attainment increases are associated with higher employment rates for each age group. On average across OECD countries, the employment rate for tertiary-educated adults increases by a further 9 percentage points, compared to those with upper secondary or post-secondary non-tertiary education as their highest attainment. Adults with the most advanced qualifications (master's and doctoral) generally have the best employment prospects. Greater educational attainment brings increasing rewards. On average across OECD countries, those with a tertiary degree earn 54% more than those with an upper secondary education. Higher levels of education usually translate into better employment opportunities and higher earnings. The potential to earn more and see those earnings increase over time, along with other social benefits, is an important incentive for individuals to pursue education and training.

If current entry patterns continue, it is estimated that 49% of young adults (excluding international students) will enter tertiary education for the first time before the age of 25 on average across OECD countries. Most of them will enter a bachelor or equivalent programme. Access to tertiary education plays an essential role in developing young adults' skills so they can contribute fully to society.

## **2.12. Chapter Summary**

Singapore has instituted major policy changes aimed at re-making itself into a knowledge-based economy in order to remain a relevant actor in the regional and global economy. Singapore's knowledge economy aspirations and practices reflect its development trajectory. It has always demonstrated a historic openness to

embracing foreign ideas and foreign expertise, and its education policies have followed its broader economic development policies.

As such, education institutions, both public and private need to tune their strategies and direction towards a strong emphasis on graduate outcomes. As the majority of PEIs in TNE arrangements are not involved in knowledge creation through research, the teaching emphasis should be on producing graduates on meeting the new demands of the knowledge-based economy. The PEIs must ensure that they had the necessary programmes such as long and short programmes for lifelong learning for graduates to learn, un-learn and re-learn, and this is in line with SkillsFuture Initiatives' mantra of lifelong learning.

***“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn”. (Alvin Toffler)***

## **CHAPTER THREE: LITERATURE REVIEWS**

### **3.1 Introduction**

This literature review was approached and undertaken as a 'rigorous' review, where the researcher 'followed the principles of systematic reviewing, while allowing for the incorporation of evidence that might not pass the stringent standards of a full systematic review' (Oketch et al., 2014). In this literature review, the researcher focused on (i) offshore, (ii) transnational, (iii) borderless and (iv) cross-border higher education, which together form a thematic research field that captures these developments. The aim is to provide a systematic evaluative overview of the development of the field. In this chapter, the researcher will classify all the four terms and reviewed the literature as the topics of transnational education (TNE), primarily higher education as this is an attempt of linking the core ideas concerning TNE and the motivational theories that form a coherent conceptual framework and argument for the research study.

Transnational higher education (TNHE) is often used synonymously with cross-border, offshore and borderless higher education – particularly from 2000 onwards when the phenomenon took shape and more academic discussions took place. Some scholars prefer transnational higher education as the overarching term (Naidoo, 2009; Yang, 2008) while others term it as cross-border higher education (Knight, 2014; Marginson, 2014), offshore higher education (Chapman & Pyvis, 2006) or borderless higher education (Middlehurst, 2002). Or using terms simultaneously, such as offshore and transnational higher education (Knight, 2005; McBurnie & Ziguras, 2011) or cross-border and transnational higher education

(Healey and Bordogna, 2014; Stella, 2006; Woodhouse, 2006 (Nigel Martin Healey & Bordogna, 2014) or all three of them (Huang, 2008).

It is crucial to note that all four terms highlight the distinction between the traditional international mobility of students and academics across borders and new forms of global flows of programs, providers and institutions and new rationales for mobility. As Knight (2014) described, mobility has moved from people (students, faculty, scholars) to program (twinning, franchise, virtual) to provider (branch campus) mobility, and the concerted efforts by various governments, particularly in Asia, to develop education hubs.

### **3.2. Evolution of Internationalisation of Higher Education**

Higher education continues to be transformed by various kinds of internationalisation processes which operate in a constant flux of globalisation. As a result, internationalisation of higher education has developed an increasingly transnational approach (Knight, 2007). There is much debate on the link between the two terms of internationalisation and globalisation (Enders 2004). Some authorities regard internationalisation and globalisation as two radically different processes (Scott 1998, Altbach 2002). Internationalisation can be viewed as a process on how nation states dominate the world, while globalisation refers to the outcome of the dismantling of national boundaries brought about by advances in technology and the emergence of a world culture (Scott 1998). The internationalisation of higher education can be regarded as a response to globalisation. Internationalisation is changing the world of higher education and globalisation is changing the process of internationalisation (Knight 2003). Knight's position assists with the understanding of the diverse approaches taken by universities, countries and cultures. Her views also help to



explain the many activities and measures on internationalisation of higher education in different domains (Fok 2007).

### **3.3. The Global Market and International Trade in Higher Education**

Global tertiary enrolments reached 227 million in 2019 (UNESCO Institute for Statistics, or UIS). Key to the global tertiary education sector has been the growth in internationally mobile students with their number rising from 800,000 in the mid-1970s to over 5.6 million in 2018. According to UIS data, the distribution of destination countries for mobile tertiary students is concentrated in the US, UK, Australia, France, Germany, Russia, Japan and Canada. Together these countries account for 60% of total international students. Other countries play an important and increasingly large destination role at regional level: South Africa (Sub-Saharan Africa); Singapore, Hong Kong and Malaysia (South East Asia); and South Korea (North East Asia). In addition, transnational education (TNE) programmes have seen increasing popularity globally with both local and international students; however, data on TNE student numbers remain incomplete. The growth of the knowledge economy, movement towards lifelong learning and changing demographics has led to the increasing demand for higher education in most countries. While demand is growing, the capacity of the public sector is being challenged to meet this demand, partly due to budget constraints, the changing role of government, and increased emphasis on market economy and privatisation.

Concurrently, advances and innovations in information and communication technologies are providing alternate and virtual ways to deliver higher education, such as MOOCs. New types of providers such as corporate universities, for-profit institutions, media companies are emerging and the scenario is changed further by

providers - public and private, new and traditional - delivering education services across national borders to meet the need in other countries. Various types of cross border program delivery such as branch campuses, franchise and twinning arrangements had developed. All this, provides an exciting and rather complex, picture of higher education provision.

Demand for higher education has been increasing for many years with academic mobility for students, scholars, teachers and knowledge has been an integral part of higher education for centuries. However, the scenario is changing, as not only are more people moving; academic programs and providers are also moving across borders. Economic rationales, particularly as alternative sources of funding, are increasingly becoming the key motivation for a large part of the international or cross border supply of education. This commercial or profit motive applies to both private providers and public institutions. This business aspect of cross-border education is growing and is the focus of the GATS. Thus, it is crucial that educators and authorities are fully aware of the impact of trade liberalisation on higher education and are prepared in managing the risks while capitalising on the opportunities and benefits and minimise the threats to a robust and quality higher education system.

The international trade in higher education services has grown rapidly in recent years especially after GATS and had become a hugely significant aspect of higher education provision in the latter part of the 20th century and continues to grow in importance. The most common form of this trade is the movement of students to study in foreign universities, but increasingly this has been supplemented by the delivery of foreign higher education programs and institutions. Revenue generated by this trade runs to billions of dollars. The global impetus towards a more liberal

trade regime for education services has been pushed forward by the international services trade framework established by the World Trade Organisation, the General Agreement on Trade in Services (GATS).

Among the factors creating the demand for foreign higher education services are the excess demand for domestic higher education and the need for internationally recognised qualifications in emerging regional and global markets for highly skilled human capital. Several countries have also deliberately encouraged foreign collaborations to improve the quality of domestic higher education. While trade in education services is not a new phenomenon, it has grown in significance as the imperatives of the market and competition exert their influence over higher education sectors worldwide. It is also operating within a competitive market both the domestically and internationally. Traditional public good mandate of higher education services has been challenged by falling public subsidies, thus pushing the need for higher education institutions to diversify their income and boost the market value of their services. The liberalisation in the trade of education services, through the GATS and various other bilateral and regional trade agreements and partnerships, remains a sensitive and contentious issue.

The international trade in education services is now an important element in the global provision of higher education. The international market for staff, students, knowledge and innovation as well as the imperatives of economic and social development is influencing the primary functions of higher education institutions (HEIs) of teaching and learning, research, community service and technology transfer. The intellectual capital generated has become an integral part of the global knowledge economy with the output of universities increasingly viewed in global and

economic terms. Critics argue that removing the barriers to international higher education provision will increase the vulnerability of some countries to low quality foreign providers and curtail the ability of countries to regulate foreign provision as they see fit. Moreover, having higher education as a tradable commodity will undermine the public role and societal obligations of higher education in favour of market driven values. It also poses risk for developing countries lacking the resources and regulatory framework to ensure that the import of quality provision is responsive to the developmental needs of the country.

Nonetheless, this trade continues to increase and diversify due to the growing demand for foreign qualifications and increasing competition among industrialised nations in the higher education market and also the entry of more higher education institutions from developing countries, which can compete on both price and quality. The key challenges are to prioritise policy objectives, to choose among different options for achieving those objectives, including the judicious use of foreign provision of higher education, and to align regulatory mechanisms accordingly. As an example, Australia's education exports reached a record A\$31.9 billion (GBP 17.7 billion) for the year ended June 2018 - becoming Australia's third largest export – just behind iron ore and coal," (Australia Bureau of Statistics, 2018). Data released by the Australian Bureau of Statistics shows that universities and other tertiary education institutions generated A\$19.2 billion of that income.

A combination of drivers such demographic, economic, bilateral trade patterns, and shifts in inbound and outbound student flows linked to growing global competition and rapid expansion of tertiary education capacity, will re-shape the global higher education landscape in the next 5 to 10 years. The importance of economic growth

as a driver of future tertiary education demand is clearly illustrated by the strong relationship between GDP per capita at purchasing power parity (PPP) and gross tertiary enrolment ratios. Not only is the correlation positive and statistically significant, but more importantly, at low PPP GDP per capita levels, gross tertiary enrolment ratios tend to increase quicker for relatively small increases in GDP per capita.

Total global tertiary enrolments are forecast to grow by an average of 1.1% from the past trend from 2014 to 2019 where the total number of students grew from 213.1 million to 227.6 million. This compares with global tertiary enrolment growth of 5% per year in the previous two decades (and almost 6% between 2002 and 2009), which indicates a significant slowing down in growth rates of tertiary enrolments to 2020 (UNESCO UIS, 2020). This should be expected due to the sector maturing or slowing in some markets, and demographic trends no longer as favourable as a result of declining birth rates over the last 20 to 30 years.

### **3.4. Dimensions of Transnational Higher Education**

A simple definition of TNE is delivering education where, 'the learners are located in a country different from the one where the awarding institution is based' (Global Alliance for Transnational Education 1997, p.1). The Council of Europe defined transnational education that includes 'all types of higher education study programs, sets of study courses, or educational services (including those of distance education) in which the *"learners are located in a country different from the one where the awarding institution is based"*' (Council of Europe, 2002).

At the heart of these definitions is the fundamental 'principle of transnationality', namely that the student is in a different country from the university awarding the

qualification. Transnational education is thus essentially about the means by which the educational service is provided by the university in country A to students in country B. However, there are increasing numbers of students from country C studying a programme from country A in country B. Universities can deliver education across borders in a number of ways – for example, by online delivery, partnering with foreign colleges to deliver programs on their behalf or setting up their own off-shore campuses to provide the teaching directly.

The phenomenal growth of transnational education is generally seen as the most advanced stage of the internationalisation of universities. Universities start to internationalise their teaching activities by recruiting foreign students to their home campuses. This is sometimes termed as ‘export education’, as it is the educational equivalent of exporting services like tourism (where the foreign tourist has to visit the exporting country to consume the service). For universities in the most advanced export education countries like the United States of America, United Kingdom and Australia, a significant percentage of students of up to 20% are foreign (OECD 2016).

TNE is attractive to students seeking to gain a foreign qualification without moving from their country of residence, as these give them greater access to higher education in situations where the local higher education capacity is limited or restricted. It is also comparatively more affordable compared to traveling to the foreign countries providing the tertiary education. It can also be attractive to employers and governments looking at options for human resource development, including multinational corporations with a geographically dispersed workforce. Education providers seeking ways to expand their reach and access to markets

overseas are also attracted to the possibilities opened up by TNE. As such, TNE when delivered effectively and efficiently, can be a win-win for all stakeholders – students, tertiary providers and host governments and economies.

Since 2000, the number of international branch campuses (IBCs), representing the core element of TNE, had experienced rapid and steady growth globally. There are more than 300 IBCs in 72 countries around the world, compared to 24 IBCs in 2002 (Observatory on Borderless Higher Education, 2017). Overall, China and UAE remain the most popular host country (with 33 and 32 campuses respectively), and the US is by far the most popular source, accounting for 78 campuses worldwide, followed by the UK with 39 campuses. Reviews of global TNE show that Australia has one of the largest overseas presences of any country, and certainly the largest relative to the size of its domestic tertiary sector. Around a quarter of all Australian university campuses are located outside Australia. Its top partners for TNE degrees are China, Singapore and Indonesia, which are its near neighbours.

### **Models of TNE**

In transnational higher education, there are parallel stages of internationalisation similar to the commercial corporate business, but different terms are generally used to describe each stage. The TNE equivalent of exporting education to students who remain in their own countries is usually called 'distance learning', licensing is variously known as twinning or franchising and validation and foreign direct investment usually takes the form of setting up an IBC (Healey, 2008).

- a. Distance Learning - In higher education, the traditional equivalent of exporting has been for students to travel to the home campus to study. However, distance learning provides an alternative way of exporting

education directly to students in their own countries. Students located in another country can access online program materials, either independently or as part of an online, tutor-supported program (Quality Assurance Agency 2010). Universities have engaged in distance learning education for many years. The University of London pioneered correspondence courses in the 19<sup>th</sup> century (Harte 1986). The UK's Open University used the medium of national television to broaden the reach of distance learning in the 1960s. The internet and the spread of smart phones have dramatically reduced the costs of providing distance-learning, allowing universities to reach increasing numbers of students around the world without leaving their home campus. The recent emergence of 'Massive Open Online Courses' (MOOCs) and the huge global enrolments in popular courses have illustrated the enormous potential market for distance learning (Hoy 2014).

- b. Franchising - The origin institution licences a local institution to teach some or its entire course, so that students can receive the award of the origin institution without attending the origin campus. The local institution is responsible for delivery of the course. The origin institution makes the final award and has overall responsibility for content, delivery, assessment and quality assurance. Franchising involves entering a partnership with a foreign provider, under which the partner is licensed to promote and teach the home/exporting university's degree in its own country, with no curricular input from the host institution (British Council 2013). The precise terms of franchise agreements vary widely, but generally the partner is responsible for providing the physical infrastructure (the teaching



buildings, library, computing facilities), employing the academic and administrative staff who teach the degree, marketing and recruiting students and teaching and assessing the students. Importantly, students enrol with the local delivery partners (Drew *et al.* 2008). The university provides the intellectual property (i.e., the curricular content, learning outcomes) and oversees the quality of the teaching and assessment (British Council 2013). The partner bears most of the financial risk and normally pays the university a royalty fee per student, although financial arrangements also vary widely.

- c. Validation - Closely related to licensing. In most respects, the relationship between the university and foreign provider is the same as in a franchise. The main difference is that the curriculum (including the degree title) is developed by the partner and validated by the university (British Council 2013). If the proposed curriculum is deemed appropriate in terms of quality and meets the awarding university's degree standards, the university licenses the partner to market its own qualification as an award of the university. Validation allows the curriculum to be more closely attuned and localised to the context of the host country and the region, where students will find the content easier to relate and probably closer to the host country public universities. In some cases, the curriculum may be delivered in the local language, which makes the qualifications accessible to a much wider pool of students. The course is developed and delivered by the local institution. The awarding institution evaluate, assess and certify the local programme to be of appropriate quality and standards leading to the award under the awarding institution's name. The origin institution

determines the extent to which it exerts direct control over quality assurance aspects.

- d. Articulation - A transfer arrangement between an origin and local institution. The origin institution agrees to recognise and grant specific credit and advanced standing to applicants from a named programme of study pursued in the local institution.
- e. Twinning programme - This is where the origin institution has a local partner. The local partner teaches part of the origin institution's course, using their own staff. Students transfer to the origin institution's own campus to complete the course. Typical combinations are:
- 1+2 – the first year of the degree programme is delivered overseas followed by two years in the origin institution.
  - 2+2 – foundation and first year degree is delivered overseas and the final two years of the programme in the origin institution.
  - The origin institution will provide the course material to the local partner, or agree to accept the partner's own course as an equivalent. The local partner is responsible for course delivery. The origin institution is responsible for monitoring academic standards.
- f. Dual/joint award - The origin institution and local partner provide programmes leading to separate awards of both or all of them (dual award) or to a single award made jointly by both (joint award).

The American and Australian universities tend to engage in franchising while validation appears to be a uniquely United Kingdom practice. Joint programs are a variant of franchising and validation. Although multiple definitions of the 'joint program' exist, the QAA (2010) defines it as a program which allows offshore

students to complete the university's entire degree at a partner institution or to begin the program in the partner institution and transfer to complete the degree at the awarding university.

The programme being delivered at the host partner institution could, in principle, be either a franchise or a validation. For example, in the 1990s many UK universities offered their degrees through private Malaysian colleges on a '2+1' basis, where the first two years were studied in Malaysia and the final year was completed by students going to the UK. The Malaysia-based part of the program was typically a franchise, to ensure a seamless transition to the UK for students as they moved onto the final year of the same degree. This arrangement is not offered in Singapore, primarily due to commercial reasons. PEIs preferred to have their Year 1 programme taught under its own diploma and had their diploma being accepted and articulated under an advanced standing arrangement with the home campus as well as with many overseas universities to allow for credit exemption of between half to two years depending on the course of study. All the five public polytechnics in Singapore had such advanced standing arrangements for their diploma programmes with local AUs and universities overseas in United States of America, United Kingdom, Australia and New Zealand. Every Diploma from the polytechnics has an articulated pathway to a degree programme, subject to the prevailing admission requirements during application. There are a dozen universities from United Kingdom that offer a 1-year "top-up" to Singapore polytechnic diplomas, with another dozen universities offering advanced standing of 2 years for completion of their bachelor programmes ([www.overseaseducation.sg](http://www.overseaseducation.sg)).

The various models of TNE are primarily based on in-country delivery, collaborative provisions or partnerships. This in-country delivery is where the delivery mode is predominantly face-to-face for the complete programme or part of the programme. Teaching is usually delivered through a local partner institution or through a branch campus. Most of the teaching will be delivered through locally based tutors with some providers flying in their home faculty members to teach on block segment. The level of input into the programme and delivery from origin institutions can vary, depending on the contractual agreement between the two parties.

Models of in-country delivery include:

1. Branch Campus or International Branch Campus (IBC): The origin institution creates a campus in the host country. Staff may be recruited locally or brought from the origin institution, but they are staff of the provider. The origin institution is solely responsible for course delivery and all academic matters. IBC costs involved in the development and management of branch campuses is prohibitive to the majority of institutions. Within IBCs, there are different arrangements as seen in the following cases:
  - a) Wholly-owned IBCs – Universities wholly-owned the IBCs, responsible all the operations from infrastructure, academics and manpower. Examples of such in Singapore are James Cook University, SP Jain School of Global Management, INSEAD, ESSEC School of Business and Manchester University.
  - b) Partner-owned IBCs – Universities only owned the programmes and the name of the campus, with key management

representatives from the university to ensure the governance and quality of the programmes. All other aspects of operations vary on the partnership arrangement, namely the ownership of the infrastructures, local staffs and student recruitments. Curtin Education Centre is such an arrangement between Navitas and Curtin University of Technology of Australia.

### **Type of TNE Partnerships**

Several models of TNE partnerships can be found in Singapore ranging from government linked agencies, non-government organisations, foreign private education providers to local education providers:

- TNE partnership with AUs – this refers to the 9 overseas universities partnership arrangements with Singapore Institute of Technology, Singapore 5<sup>th</sup> AU. The overseas partners come from UK, USA, Germany and New Zealand, such as Newcastle University, University of Glasgow, TUM of Germany and Massey University from New Zealand.
- TNE partnerships with Singapore's 2 Arts Institutes, Nanyang Academy of Fine Arts and LASALLE College of the Arts in offering art degrees from Goldsmiths College and Royal College of Music from UK.
- TNE partnerships with government related agencies such as Building and Construction Academy which is part of the Building and Construction Authority, a statutory board under the Ministry of National Development, and Singapore Aviation Academy, which is part of Changi Aviation Authority of Singapore, an agency under the Ministry of Transport.

- TNE partnerships with non-for-profit non-government organisations such as Singapore Institute of Management (SIM), Management Development Institute of Singapore (MDIS) and several others.
- TNE partnerships with foreign international private education providers, such as Kaplan from USA and Navitas from Australia.
- TNE partnerships with local private enterprises, either privately held companies or publicly listed companies on the Singapore Stock Exchange
- TNE programmes from home campus with full ownership of the IBCs, such as James Cook University of Australia, SP Jain School of Global Management of Australia/India as well as ESSEC Business School from France.

### **3.5. Emerging Trends in Global Higher Education**

The changes taking place in higher education in broad terms, increased diversity in the types of provision, types of providers, types of delivery and types of ‘consumers’

The HE sector has expanded rapidly over the last two decades, in both developing and developed countries and the influence of the market has grown, placing new requirements and pressures on higher education providers and policy makers.

UNESCO reported in its 2007 Global Education Digest that there were 138 million tertiary students worldwide in 2005. Some expect this number to more than double in the next two decades – predominantly in non-OECD countries. This level of growth requires, and has prompted, new and innovative approaches to higher education provision and delivery. Online technology, flexible learning, different types of collaborative provision including public-private partnerships, and in some countries increasing provision by private and foreign providers, have developed in response to greater diversity and rising levels of demand for tertiary education. Undoubtedly, the

combination of an expanding sector, high levels of (unmet) demand and greater flexibility in delivery has underpinned the international market for higher education services. At the same time, widespread stagnation and declination in public funding for higher education is forcing institutions to diversify their income streams and engage more readily in revenue generating international activities.

Opportunities for global engagement in higher education are not limited to internationally mobile students. TNE and collaborative research partnerships are also expected to continue their growth over the next 5 years. Future opportunities for TNE, whether through joint or independent initiatives, include the total number (and growth rate) of tertiary enrolments, student mobility rates and a variety of practical barriers to TNE, from language issues to the legal and political framework in the potential host country. It is likely that TNE programmes will continue to be developed in established host country markets such as Malaysia and Singapore

### **3.6. Students and Jobs Mobility**

International mobility of students goes back many decades, where advanced economies opened their doors to students from less developed economies. Between 1950s and late 1980s, countries such as UK, Australia, Canada and New Zealand offered the Colombo Plan scholarships to top Singapore students as a form of aid to ensure a supply of qualified manpower to support Singapore's economic and social development. Many of Singapore's former cabinet ministers were Colombo Plan Scholars.

International students' mobility (ISM) in the present world had contributed significantly to the economies of United States of America, United Kingdom and Australia, boosting jobs and wages. The latest Australian Bureau of Statistics figures

– released on 2<sup>nd</sup> August 2018 – confirm international education income grew by \$3.8 billion in the financial year to June 2018 to reach A\$31.9 billion (GBP 17.7billion). Universities Australia Deputy Chief Executive Anne-Marie Lansdown said a record 548,000 international students were now studying in Australia, with the majority enrolled at universities, “and the A\$32 billion flows on into the entire Australian economy, generating jobs, supporting wages, and lifting the living standards of Australians.” Ms Lansdown stated international students are not just important to Australia’s economy, but also to its vibrant communities and its global outlook as a nation. Australians develop powerful personal and professional relationships, and long-lasting cultural, diplomatic and trade ties, when students from overseas spend their formative years here. International education is a modern Australian success story – built from the ground up over six decades to become the nation’s third-largest export and the envy of the world.” (Australian Bureau of Statistics, 2018)

OECD Education at a Glance 2020 reported that - “the global marketplace for tertiary education is likely to expand further as global demographic trends and a rising global middle-class spur demand and spending on educational products and services. Information and communication technologies (ICT) are also instrumental to this expansion,” concludes the report. “ICT not only reduce migration costs, but also increase the reach of domestic education. There are already an estimated 13 million cross-border online students, though the impact on the scope and patterns of international student mobility remains unclear.”



In 2018, there 5.57 million students studying overseas, with students from East Asia and the Pacific accounting for 27% of the total. The drop in 2016 could be attributed to the August 2015 devaluation the Chinese Renminbi amid an economic slowdown.

Table 3.1. International Student Mobility Numbers

<b>UNESCO UIS Data 2019 on ISM</b>				
	<b>World</b>	<b>East Asia and Pacific</b>	<b>South &amp; West Asia</b>	<b>N America &amp; W Europe</b>
<b>1997</b>	1,950,600	464,693	114,588	462,790
<b>2007</b>	3,097,098	835,203	274,500	521,033
<b>2014</b>	4,495,697	1,229,018	442,461	671,978
<b>2015</b>	4,786,200	1,297,741	501,643	692,651
<b>2016</b>	2,091,524	1,372,451	578,309	720,001
<b>2017</b>	5,332,355	1,442,867	629,620	750,235
<b>2018</b>	5,571,402	1,522,949	684,217	766,383

*Source: UNESCO, Education at a Glance, 2020*

### **3.7. Development of the Research Problems and the Research Propositions**

One of the objectives of this study was to conduct an in-depth investigation into the student experience in a TNE programme. The researcher conducted an exploratory study by taking a case-study approach using the Porter’s Five Forces Framework and SWOT Analysis.

A couple of related studies were referenced before the formulation of the research design. Pang (1999) used a well-developed questionnaire with a sample of 2460 students to investigate their views of the quality of school life and their reactions to the school. Lam (2003) examined student motivation. From the two studies, during the planning stage of the researcher’s pilot study, there were good reasons to launch

research through conducting questionnaires as the ideal way to gather data which would help to cast light on the experiences and motivation for TNE.

In the preliminary stage of the pilot study in 2012, a focus group discussion comprising of a group of 8 students from a mid-sized PEI was conducted. A set of structured questions were used to seek their view on their experience in their TNE journey, their motivation for the course, learning experiences and possible future plans after graduation. From this pilot study, the researcher decided to use the case study approach in a qualitative approach, adopting interviews and field observations in addition to questionnaires.

To some extent, the study is an evaluative, inductive and focused research, which investigates areas in which a great deal is already known to the research and there exists an already identified problem and questions. With the provision of background information of the PEIs and some of its strategies, this study could therefore launch to investigate how students and PEIs reacted to the ecosystem.

### **3.8. Chapter Summary**

In qualitative terms, it can be seen that the literature is at a stage of having to negotiate between capturing and legitimising transnational academic mobility and simultaneously having to adopt a sui generis focus on individual activities, such as quality assurance and institutional perspectives. Therefore, future research can focus more on specific aspects of transnational higher education, especially to address research gaps or topics that are still in a state of infancy, and noting that the following areas could benefit from more future research:

- Transnational higher education branding, image management activities and marketing: There is not much research in this field, but this has become increasingly important for higher education institutions due to increased global competition and the related need to differentiate themselves from other competitors (e.g. Drori, Tienari, & Wæraas, 2015; Hasse & Krücken, 2013).
- Massive Open Online Courses (MOOCs): Although seen as a technology fad and a disruptive innovation of high concern before Covid19 (Daniel, 2012; Yuan & Powell, 2013), it has since been acknowledged that online learning during pandemic is a legitimate alternative to face-to face teaching in physical premises on campus.
- Research function: Higher education institutions can make use of international research alliances, collaborations and partnerships to establish a global presence. This dimension of transnational education is important, especially in the case of IBCs (Wilkins and Huisman 2011). IBCs developing research excellence through the localisation of research areas can add an additional dimension to the research diversity and scope to home campus, and probably adds some competitive element to spur innovation.
- Impact on knowledge: The impact of knowledge transfer, diversity and localised collaborations in IBCs could add new knowledge creation and innovations.
- Student career paths: While there is a growing amount of research done on motivations of students to study at offshore campuses (Li & Bray, 2007;

Wilkins & Huisman,2011), there has been little or no rigorous study to trace the career paths of students who study TNE programmes.

## **CHAPTER FOUR: RESEARCH METHODOLOGY**

### **4.1 Introduction**

To address the research questions, this study utilised a case study methodology (Yin, 2014). The focus of the case study was on TNE programmes delivered through local private education institutions (PEIs). The research conducted in this study will be exploratory in nature (Creswell, 2008); one that “seeks to find out how people get along in the setting under question, what meaning they give to their actions” (Schutt, 2012, p.13). The study will use qualitative methods in gathering and analysing the research data as these provide different ways of exploring the rich understandings. More details on the research case study design and the justification can be found in this chapter.

Chapter four sets out the arguments for the research methodology needed to answer my research questions and thus accomplish the objectives of this study. In deciding the approach to this study, the potential contributions of both quantitative and qualitative methods were considered. Quantitative research is useful for studying particular characteristics of a large number of people and can sometimes be used to make generalisations if the data is based on random samples of sufficient size. However, quantitative research is typically less useful for documenting participants’ internal perspectives and personal meanings about phenomena in their lives (Johnson & Christensen, 2004). In contrast, qualitative research can sometimes provide more holistic insights into educational processes that exist within a specific setting and detailed information about why a phenomenon occurs. However, qualitative research is often based on small, non-random samples and is more

typically employed for exploratory or discovery purposes rather than hypothesis testing and validation purposes.

A good case study can be revelatory in that it is able to challenge traditional stereotypes and notions as to the existing order of things. It can offer an insight into people's lives to better understand issues and concerns (Gillham, 2000: 11). A qualitative case study is used when 'why' and 'how' questions are being posed, when the researcher has relatively little control over events, and the focus is on a contemporary phenomenon within a real-life context. It is utilized to contribute to our knowledge of individual, group and organizational related phenomenon through researching a unit of human activity embedded in the real world (Gillham, 2000: 1; Yin, 2003: 1). A qualitative case study inquiry copes with technically distinctive situations in which there are many variables of interest, and utilizes a comprehensive research strategy that relies on multiple sources of evidence and the use of theories to guide data collection and analysis (Yin, 1989: 13; Yin, 2003: 31).

A qualitative case study is designed to investigate causal processes in the real world, and not in artificially created settings (Gomm et al., 2000: 5). Authenticity of the case study is based on the need to amplify the unique voices of those whose experience in and perspective on the world are unknown or neglected (Gomm et al., 2000: 67). In it, rich data and information about true personal experience are presented to help one understand the social and personal experiences of others (i.e., research participants). In the words of Robert Stake (Gomm et al., 2000: 67):

*Case study needs be framed in such that everyday experience through which they learn about the world first hand is critical. The great strength in case*

*studies is that they provide vicarious experience in the form of 'full and thorough knowledge of the particular.'*

Its purpose is to build up a body of real tacit knowledge as the basis upon which people's actions are understood (Stake, 2000: 20). According to Stake (2000: 19), case studies are useful in the study of human affairs because they are down to earth and attention holding. They help people understand social phenomenon and problems by writing about the natural experience acquired in ordinary personal involvement. In qualitative case study, intentionality, empathy, episodic and holistic information are central to the comprehension of social problems, which are important for the 'experiential understanding' in the study of human affairs (Stake, 2000: 24). This 'experiential knowledge' is gained through the very rich experiences that vary from one context to another through a process of making meaning out of them (Donmoyer, 2000: 58). Eventually a qualitative case study through the sharing of experiences, thoughts and sentiments between the students, researcher and reader, as well as through logical analysis and inference, is able to produce 'empathetic understanding' on the researched issue (Gomm et al., 2000: 6-7). One argument against qualitative case study is that as the research focuses on only a case or few case, its findings has limited scientific 'generalization' in that it may not relate substantially to a broader environmental or social context, as the strength of the study to generalize has to do with whether it is too case specific and narrow, and therefore relevant only to certain phenomena and not readily applicable in other contexts (Bloor & Wood, 2006: 29). There is also a debate of whether the sample population is an accurate representation of other populations in society for the findings to be useful (Jankowski, 2002: 254). Validity of qualitative research also depends on the length and intensity of observation and interviews, which if

inadequate will not be able to generate sufficient data for good objective analysis and hence affects its external generalisability and usefulness (Jankowski, 2002: 254).

Another problem that is associated with qualitative case studies is that of 'biasness.' Among social science research methods, qualitative case studies have often been stereotyped as one that has inadequate quantifiable precision, objectivity and vigour (Yin, 2003: xiii). One argument is that it tends to allow biased views from participants' data or researcher's personal mindset, to influence the direction of findings and analysis. Bias will affect the degree of research validity due to the researcher's inclination to collect, interpret and present data which support results that are congruous with his own prejudgements or ideology (Bloor & Wood, 2006: 21). Since all researchers are part of the social world they study, it is inevitable that their own values and biographical experiences may influence their perception.

In order to minimize problems related to biasness from researcher, it is important that reflexivity is always considered in the research process, where there is constant reflecting upon ways in which our own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research (Hammersley, 2008: 42). There is therefore a strong need for a researcher to be rigorous and produce authentic representations of the world based on rigorous overall analysis of data, as well as the need to present data and findings in an open-minded way to provoke readers rather than to convey some closed messages (Hammersley, 2008: 133).

As for bias from participants, in order to justify the qualitative research method, it should be noted that the qualitative researcher is not a 'detached' scientist but an



observer who acknowledges both his/her role in the process of investigation and discovery, and his/her effect on the participants. He/she tries his/her best to minimize these undesirable effects through making them feel comfortable about providing honest data, based on a trusting relationship. Nevertheless, owing to the nature and demands of such an inquiry method, it must be recognized that he/she will still have to be present asking questions and collecting data in order to make good qualitative research (Gilham, 2000: 7).

To further explain how qualitative research can help discover truths despite the limited generalizability of its findings, researchers argue that human behaviour does not remain stable throughout and therefore the use of 'variable analysis' in quantitative research to predict behaviour or outcome would not always be accurate as the number of variables used will always be limited in covering all aspects of human qualities, and as such, a quantitative study that derives a particular theory, would not be able to uncover uniqueness and complexities that are always present in human environment as the world is too complex and diverse for a single theory to account for everything.

This chapter describes the research methodology used in this study to answer the research questions and its sub-questions cited in the Introduction. It outlines an introduction to qualitative case study methodology and guidelines for researchers conducting qualitative case studies and readers studying reports of such studies. It is followed by the rationale for using the case study method within the chosen paradigm. It includes consideration of the relationship between the nature of the research, and the research questions and the collection of data necessary to answer them. The content is based on the researcher's own experience from conducting and

reading case studies. The terminology and guidelines are compiled from different methodology handbooks in other research domains, in particular social sciences (Yin 2003, Robson 2002) and adapted to the needs in this study. The chapter describes the selection of the cases, the data gathering process and the analysis of the information, and the feed-back processes in the final stages towards closure. Thereafter the research design is explained and the chapter concludes with lessons learned and recommendations with respect to the use of case study as a research method.

## **4.2 Selection and Justification for Using Qualitative Case Study Method**

Qualitative research produces holistic understandings of rich, contextual, and generally unstructured, non-numeric data (Mason, 2002) by engaging in conversations with the research participants in a natural setting (Creswell, 2009). Qualitative methods, such as case studies, address theory construction and theory building, in contrast to the quantitative approach of testing and verifying theory (Bonoma 1985; Lincoln and Guba 1985; Tsoukas 1989). Much qualitative analysis, whether intra-case or cross-case, is structured by the 'method of constant comparison' (Yin 1984), with theory built by looking for similarities and differences within the data as well as possible future questions to be examined.

The feature of case study research is its focus on 'how' and 'why' questions being posed (Myers, 2009), when the researcher has relatively little control over events, and the focus is on a contemporary phenomenon within a real-life context. It is utilised to contribute to our knowledge of individual, group and organisational related phenomenon through researching a unit of human activity embedded in the real world (Gillham, 2000: 1; Yin, 2003: 1). A case study can focus on describing

process(es), individual or group behaviour in its total setting, and/or the sequence of events in which the behaviour occurs (Stake, 2005). It is an empirical method aimed at investigating contemporary phenomena in their context and seeks to explain causal relationships from qualitative or quantitative evidence, or a combination of both.

As a research strategy, case studies are used in a variety of contexts and disciplines, for example, in organisations in various businesses; in institutions for profit and not-for-profit; in small communities, households, families in psychology and social work; or in countries, nations or regions in political science (Davies, 2007; Mouton, 2001). The purpose of such case studies is to provide an intensive, holistic description and analysis of a single, bounded unit situated in a specific context to provide insight into real-life situations (Merriam, 2009; Pickard, 2013). For this reason, it is appropriate for descriptive and exploratory studies (Mouton, 2001).

The case study method sits within the critical realism paradigm that supports both inductive theories building research (Yin 2009) and theory testing (Eisenhardt, 1989). Usually no hypothesis is formulated but “general ideas” or “expectations” can act as a guide to the empirical research (Mouton, 2001, p. 150). It is a strategy which focuses on understanding the dynamics present within single settings (Eisenhardt 1989). The insights arising from case-based theory building research can be used as hypotheses or propositions in further research. However, the understanding of what constitutes a case study varies, and hence the quality of the resulting studies.

Robson (2002) calls it a research strategy and stresses the use of multiple sources of evidence, Yin (2003) denotes it as an inquiry and remarks that the boundary between the phenomenon and its context may be unclear, while Benbasat,

Goldstein, & Mead, (1987) make the definitions somewhat more specific, mentioning information gathering from few entities (people, groups, organisations), and the lack of experimental control. The following four questions (Benbasat, Goldstein, & Mead, 1987) can help to determine whether the case method is appropriate for a particular research situation:

1. Can the phenomenon of interest be studied outside its natural setting?
2. Must the study focus on contemporary events?
3. Is control or manipulation of subjects or events necessary [or possible]?
4. Does the phenomenon of interest enjoy an established theoretical base?

By its nature, exploratory research in transnational higher education partnership with PEIs (1) cannot be studied outside of its natural setting, (2) focuses on contemporary events, (3) the control or manipulation of subjects, in this instance the stakeholders/managers, and events is not possible, and (4) the theoretical knowledge on the phenomenon under investigation is limited and not yet mature. The case study method was thus a suitable method for this study. Furthermore, using case studies supports the relevance of this research since case studies are considered more persuasive to TNE PEIs stakeholders/managers than theoretical discussions (Levy & Powell, 2005).

Qualitative methods, such as case studies, address theory construction and theory building, in contrast to the quantitative approach of testing and verifying theory (Bonoma 1985; Lincoln and Guba 1985; Tsoukas 1989). Much qualitative analysis, whether intra-case or cross-case, is structured by the 'method of constant

comparison' (Yin 1984), with theory built by looking for similarities and differences within the data, which can give rise to future questions to be examined.

- Understanding and interpreting respondents' experiences and beliefs is achieved by becoming physically and psychologically closer to the phenomena of being investigated (Gilmore and Carson 1996). Previously unknown relationships and interactions can emerge from case studies, leading to a re-evaluation of the phenomenon being studied.
- By isolating and precisely defining categories, and then determining the relationship between them, researchers can uncover details of interrelationships, and the complexities of both processes and people's interactions (Bonoma 1985; Gilmore and Carson 1996; Perry 1998).

In the words of Yin (1981, p. 45)

*'a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries are not clearly evident and in which multiple sources of evidence are used'.*

Some argue that case study research relies on a wide variety of evidence (Yin 1981) accumulated from several interrelated methods and sources, such as archives, interviews, questionnaires and observations (Eisenhardt 1989), which might involve analysis of qualitative data. Viewing organisations as social constructions whose strategies and policies change as a result of human interaction, the use of qualitative research, such as in-depth case studies, to outline important dynamic dimensions of strategy development. Bailey (1982) notes the flexibility of interview studies and their

ability to facilitate more complex questioning of participants listing several advantages:

- response rate: higher than mailed surveys, and includes respondent involvement
- non-verbal observation: interviewer can assess respondents' body language and sincerity
- control over the environment: interviewer can focus on the topic
- question order: interviewer can control questions and their order
- spontaneity: the interviewer can catch the respondent's first answer, which can subsequently be probed
- respondent alone can answer: the responsibility to answer lies with the respondent alone
- completeness: all questions are answered
- time of interview: the context of the interview and relevant events can be recorded
- greater complexity: more complex questions and appropriate stimuli can be introduced.

An argument against qualitative case studies is that the research focuses on only a case or few cases, resulting in its findings having limited 'generalisation' which may not relate substantially to a broader context. There is debate of whether a sample population portrays an accurate representation for the findings to be useful

(Jankowski, 2002: 254). Validity of qualitative research also depends on the length and intensity of observation and interviews, which impact the ability to generate sufficient data for good objective analysis and hence affects the external generalisability and usefulness of data (Jankowski, 2002: 254). In contrast, findings from quantitative research that utilises large amount of data are deemed to be able to provide a higher degree of generalisability through using 'variable analysis' to derive patterns and trends, which are usually responses from questionnaires provided by a large number of participants who can represent a substantial segment of the population.

"Biasness" is another problem that is associated with qualitative case study and has often been stereotyped as one that has inadequate quantifiable precision, objectivity and vigour (Yin, 2003: xiii). Biasness can be from the researcher's personal orientation, participants' orientations or the complex two-way dynamic during the interview sessions, resulting in certain degree of subjectivity that can open the research to criticism and challenge. In order to minimise biasness from researcher, the importance of the researcher's reflexivity and the role to the participants as an observer who acknowledges the role and effects on the participants will shape the research (Hammersley, 2008: 42).

As to the argument of limited generalisation, qualitative studies aim at uncovering truth that are hidden under long held assumption and attaining a high degree of external generalisation may not be its main priority (Walford, 2001: 16). Qualitative case studies therefore offer different ways of seeing the same body of evidence and allow one to perceive the underlying processes which are the central focus of any social sciences. Qualitative research can provide a more informative picture of

culturally based processes and give depth to context-based explanation of events, processes and outcome; all of which ultimately affects future policy and practice. Qualitative research methods are essentially descriptive and inferential in character, and inference is important.

To conclude the proposition of the qualitative case study research methodology, it has to be acknowledged that no research is perfect for there are always limitations. Qualitative case studies are after all not to produce generalisable findings, but to provide depth and richness of data in order to illustrate some issues which are critical to social sciences. Qualitative case studies utilise inductive reasoning; which involves making sense and meaning of what one finds in a case and applying them in a wider context. By presenting and discussing the above proposition, it is hoped that the choice for qualitative case study research methodology has been justified for the purpose of studying this topic.

#### **4.3 Justification for Working in the Interpretive Research Paradigm**

Qualitative research and case study research can be conducted within different research paradigms. This section justifies using an interpretivist research paradigm.

Positioning a research project within a paradigmatic framework will lead researchers to “reflect upon the broader epistemological and philosophical consequences of their perspective” (Perren & Ram, 2004, p. 95). Each research paradigm has certain assumptions, strategies, methods, and limitations, and the manner in which the quality of the resultant research is evaluated differs.

Interpretivism is based on a life-world ontology that argues all observation is both theory- and value-laden and investigation of the social world. Epistemologically, the



viewpoint of the interpretivist paradigm is that our knowledge of reality is a social construction by human actors (Burrell & Morgan, 1979). The interpretive research paradigm is characterised by a need to understand the world as it is from a subjective point of view and seeks an explanation within the frame of reference of the participant rather than the objective observer of the action as the interpretivist paradigm is more concerned with relevance than rigor.

The emerging nature of research in TNE is best suited to an interpretive qualitative approach that can yield a rich understanding of key issues by minimising the distance between the researcher and the key TNE decision-maker, the stakeholder/manager, in order to develop the practical and theoretical understanding and generate new and alternative theories and concepts (Bygrave, 1989).

Using qualitative interpretive case studies is thus justified for exploratory research.

The following section documents the research design incorporating discussion of the trustworthiness criteria where applicable.

#### **4.3.1 Research Design**

A research design links the research purpose and questions to the processes for empirical data collection, data analysis, in order to make conclusions drawn from the data (Bloomberg & Volpe, 2008; Rowley, 2002; Yin, 2009). In using interpretive case studies for exploratory research, key decisions concern the role of prior theory, the unit(s) of analysis, the number and selection of cases, the techniques to be used for data collection, and the method(s) by which collected data will be analysed (Eisenhardt, 1989). The sum of these decisions results in the case study protocol that helps to ensure uniformity in research projects where data is collected in multiple locations over an extended period of time (Maimbo & Pervan, 2005). The

following sections present the theoretical foundations for these key decisions together with the application to the research project.

#### **4.3.2. Selecting the Cases**

Eisenhardt (1989) states that the “random selection of cases is neither necessary, not even preferable” (p. 537) and relevance to the research questions rather than representativeness is the criterion in the selection of cases (Carson, Gilmore, Perry, & Gronhaug, 2001). The underlying principle in selecting appropriate cases is the preference for cases that are information-rich with respect to the topics under investigation, and therefore using purposive sampling is justified (Patton, 2002). With stakeholders/managers as a unit of analysis, access to at least one of the stakeholders/managers was an important consideration in the selection of cases. Following the advice of Hartley (1994) that contacts in industry, academia, and friendship can be helpful to establish a list from which cases can be selected using a sampling strategy of:

- personal networks and word-of-mouth referrals; and
- TNE providers located in Singapore associated with CPE, PEIs and the PE Act.

#### **4.3.3. Deciding the Number of Cases**

In interpretive research the number of participants is relatively small (Holloway, 1997). Yin (2009) highly recommends that novice researchers begin “with a simple and straightforward case study” (p. 162) because of the complexity of managing and analysing the large volumes of data. However, evidence from multiple cases is “often considered more compelling, and the overall study is therefore regarded as being

more robust” (Yin, 2009, p. 53) and provides a valid basis for understanding (Levy & Powell, 2005). Although there is no ideal number of cases, there are several recommendations:

- Eisenhardt (1989, p. 545) believes that between four and ten cases often works well.
- Crabtree and Miller (1992) advocate a sample size of six to eight subjects for homogenous samples.
- Curran and Blackburn (2001) indicate that case studies in small business research are often fewer than ten.

In this research project, between three and five TNE providers will be studied. Since not all the institutions contacted for inclusion might have agreed to participate in the research or proved to be suitable cases, more TNE providers will initially be contacted. The initial request for participation will be sent by e-mail to owner/managers of the firms and included a brief overview of the purpose of the research, the reason why their participation is important, and the involvement that would be required if they chose to participate. Four firms did not respond, of those that did two did not meet the selection criteria.

#### **4.4 Determining the Data Collection Protocol and Techniques**

One of the strengths of the case study method is its flexibility and adaptability that allows single or multiple methods of data collection to be used to investigate a research problem (Cavaye, 1996). A wide variety of data collection methods can be used including direct observation, participant observation, interviews, focus groups, documentary sources, archival records, and physical artefacts (Mouton, 2001,

Myers, 2009). Using multiple sources of data – and multiple participants (Maimbo & Pervan, 2005) – is preferable in order to triangulate data (Yin, 2009) and to allow significant insights to emerge (Myers, 1997).

The primary source of data in both qualitative research and in case studies (Yin, 2009, p. 106) is the interview. Secondary data can be collected from various sources, for example, annual reports and financial statements, public records, press releases, newspapers, organisation charts, and institutions' website (Myers, 2009). It is important to keep in mind that interviewing does not, however, automatically guarantee the collection of rich data and production of meaningful insights (Schulze & Avital, 2011).

In this research project, the objectives of data collection were to understand how the participants and institutions became part of the TNE ecosystem together with the subsequent developmental history of the industry, and to obtain insight into the plan to be relevant in the development of higher education in the context of SkillsFuture Initiatives. Here, using focus group discussions method in self-contained fashion with multi-methods use of individual survey questions followed by participant observation for my primary data source. Morgan (1996) viewed that in self-contained uses, focus groups serve as the primary means of collecting qualitative data, just as participant observation or individual interviewing can serve as primary means of gathering data. Morgan (1996) defines focus groups as “a research technique that collects data through group interactions on a topic determined by the researcher” (p130). This definition carries three critical features:

- A. Focus groups are a research and data collection methodology,
- B. Focus groups rely on group interaction as the source of their data, and

C. The researcher is an active part of this group interaction and discussion

Table 4.1. The Strengths and Limitations of Using Focus Group

Strengths	Limitations
Fast and Cost Effectiveness	Difficulties To Engage Large Group
Body Language Observation	Time Consuming Analysis
Deeper/Wider Engagement	Shy/Uncomfortable participants
Allow Observers	Tendency of Dominant/Socially Acceptable Views
Group Interactions	Unable to explore complex ideas of individuals in depth

As focus group is group interview-based research, it requires someone to interview the participants as well as provide guidance, usually called a moderator. The role of the moderator is of critical importance to the focus group process (Litoselliti 2003, Morgan 1996). The moderator fundamental task is to guide the group in discussions but not participate in them, nor share their views about the topic(s) being studied, not engage in discussion (Krueger 1998). The moderator must pay careful attention to participant responses, body language as well as encouraging all participants to be active and managing the time (Krueger 1998, Litoselliti 2003).

In these combined uses of qualitative methods, each will contribute to my understanding of the phenomenon under study. This often leads to an emphasis on research design. This study is based on:

- A. Four focus groups comprising of different participants who had studied or studying a TNE programme in Singapore.
- B. One focus group comprising of teaching staffs in a PEI environment

I reinforced with one-to-one survey and interviews with three TNE providers represented by their respective Pro-Vice Chancellors of each of the Australian universities based in Singapore. All three PVCs are very experienced with TNE and had been in Singapore, ranging from three to ten years.

Table 4.2. – Focus Groups over One-to-One Interviews – Key differences

	<b>One to One Interviews</b>	<b>Focus Groups</b>
Purpose	Probe experience	Generate ideas
Researcher Role	Interviewer	Moderator
Sample	Aim to reach theoretical saturation	Homogenous groups of 4 to 6 participants

In this study, I opted for structured and semi-structured interviews to keep the interviews focused and facilitate cross-case analysis (Carson et al, 2001) but also to provide room to explore new and relevant issues that emerge during the interview. The interview guide was designed to capture the context, content, and process with regard to the directions and decision-making in the selected TNE providers and its partnering PEIs.

This primary data gathering methods will be complemented by secondary data through documentary research looking at existing, historical and policy documents. Documentary research involves the systematic investigation and analysis of existing documents or records which can be written, visual, or audio materials. This form of data, evidence, and documentation had become more commonplace as qualitative and quantitative researchers recognise that they must appraise and ascertain the provenance of information (McCulloch, 2004). Documentary research adds additional dimension to the theorisation and construction of the meaning of a

document. Scott (2006) notes the transition of intended content from the author, the received content of the reader and the internal meaning of the transactional understanding.

The steps involved in conducting documentary research using a systematic methodology include:

- **Defining the research question**
- **Identifying relevant documents and its authenticity**
- **Evaluating the quality and credibility of the documents**
- **Collecting and organising the documents**
- **Analysing the documents and understanding their relations and social meanings**
- **Drawing conclusions**

Background information on the enterprises was gathered through sources in the public domain, for example, company websites and the CPE's institutions register. The various methods of documentary research for this study are as follows:

- **Systematic Searching** – conducting thorough and systematic search for relevant information.
- **Content Analysis** – analysing content for patterns, themes and other insights.
- **Historical Analysis** – analysing historical documents to understand past events, context and trends.
- **Case Study Analysis** -analysing specific cases and related documents to understand underlying causes and effects.

- **Comparative Analysis** – comparing documents from multiple sources or locations to identify similarities and differences.
- **Visual Analysis** – analysing visual media to understand meaning and context.

**Some of the advantages of Documentary Research are:**

- **Cost-effective** – less expensive than primary data collection methods such as surveys or experiments as it involves analysis of existing data.
- **Time-efficient** – Data are readily available and do not require time and resources with primary data collection.
- **Non-intrusive** – do not involve direct interaction with study participants.
- **Access to historical data** – not available through primary data.
- **Objective and unbiased** – existing documents are typically objective and unbiased which add credibility to findings.
- **Allows for triangulation of data** – existing data can be used in combination with primary data to triangulate and verify findings.

**Limitations of Documentary Research are as follows:**

- **Limited Control of Data Quality** – often historical data not designed for research purposes.
- **Limited Generalisability** – data sources are often specific to particular time period, location or context.
- **Limited ability to answer specific research questions** – data often does not provide answer to specific research questions.



- **Limited ability to explore causality** – difficult to explore causality as data is non-experimental.
- **Limited ability to explore complex phenomena** – data sources may not capture all aspects of phenomena being studied.
- **Limited ability to collect qualitative data** – data may not provide rich qualitative data.

#### **4.5. Collecting, Analysing and Interpreting Data**

When analysing data, the qualitative researcher attempts to make sense and interpret the phenomena in terms of the meaning the participants place on them (Creswell, 2009). A variety of qualitative data analysis methods such as content analysis, constant comparison and pattern matching can be used.

##### **4.5.1 Stage 1: Conducting Interviews**

The stage 1 process of inductively analysing data commences as soon as during the interviews when data collecting starts (Shaw, 1999). Alvesson (2003), stressed the consideration of the impact of the social setting in which the interview takes place (e.g., interviewee's background, experience, gender, age, and nationality), the physical setting, and the impact of language use in the interview, such as the use of terminology with which the interviewee is unfamiliar.

The face-to-face interviews were to be conducted over a 20-week period for the different groups. Each interview will last for about one hour and will be conducted face-to-face to establish rapport, build trust, and to identify any nonverbal cues that warranted further questioning. Interviews to be conducted at the participants' place

of work, normally a quiet office, unless requested that interviews be conducted in other location. Additional clarifications were conducted over virtually or telephone.

The first 5 to 10 minutes of the interview are usually spent discussing my background, the reasons for conducting the research, and what I hoped to achieve. This discussion allowed me to explain the purpose of the study and to discuss informed consent including confidentiality, anonymity, voluntary participation, the option to withdraw at any point and details on the university's approval of my research (the cover letter and informed consent form given to participants are included as appendices in my dissertation). At this point I also requested permission to record the conversation for transcription, that an account of the interview will be provided to verify accuracy and that notes will be taken (notes were taken as back-up in case of equipment failure where audio recordings were permitted).

#### **4.5.2. Stage 2: Transcribing and Capturing of Notes**

Stage 2 analysis entails the reading and review of each transcript and notes as well as making detailed notes to highlight potentially significant issues and experiences (Patton, 2002). This serves to familiarise the data (Easterby-Smith et al, 1991) and to prepare for the process of organising and structuring the data and that will increase awareness of the patterns, themes, and categories in the data. The interviews were transcribed in the same order that they were conducted (Peräkylä, 1997) as soon as I returned from fieldwork where all “idiosyncratic elements of speech (e.g., stutters, pauses, nonverbal, involuntary vocalisations) are removed”.

#### **4.5.3. Stage 3: Writing up Case Study Narratives and Within-Case Analysis**

During Stage 3 analysis, the transcripts and notes are developed into coherent and manageable write-ups for each case structured according to the descriptive framework to allow subsequent cross-case analysis. The structure of the case narratives will allow the transferability of the interpretation and the results to increase dependability. Case studies can be presented chronologically, thematically, or both. In my research project, the case study narrative will be both thematic and chronological because the narrative explains the use of data and information in relation to decision-making within the context of the stakeholders/managers' and the TNE providers' development over time. The following headings will be established as the key focal points for case narratives based on the interview guide:

1. Introduction and general background of the TNE providers;
2. Stakeholders/manager profile; and
3. Extent of participation in the SkillsFuture Initiatives.

This resulting summary of the interview will be shared with participants for confirmation that the narrative captured is consistent with what participants believe they had shared during their interviews and to eliminate any inaccuracies and misunderstandings on the part of the researcher or contents that they may be unhappy with for whatsoever reason, which they will inform me within two weeks of sharing. After which, this is assumed that they agree with the write-up of the interview. Such confirmation also adds to the credibility of the research (Creswell, 2009).

#### **4.5.4. Stage 4: Determining Findings through Cross-Case Analysis**

The fourth stage of analysis concerns with cross-case comparisons to seek out what is common and what is particular in the cases (Stake, 2005). This level of analysis can result in a unified description across cases, categories, themes, or typologies that conceptualise the data across all the cases, or in building a substantive theory that offers an integrated framework covering multiple cases (Merriam, 2009).

A frequently used method of cross-case analysis is qualitative content analysis. Qualitative content analysis involves identifying coherent and important themes and patterns in the data: the researcher looks for “quotations or observations that go together, that are examples of the same underlying idea, issue, or concept” (Patton, 1987, p. 149).

#### **4.6. Data Reliability and Validity**

Research by case study has been criticised for its lack of validity and reliability (Foddy 1993), and yet validity is an integral part of qualitative research (Lancy 1993, Steinke 2000). However, the terms 'validity' and 'reliability' are applied in a different context when used in either quantitative or qualitative research methodology (Becker 1970, p. 263). In qualitative studies, Schofield (2000) maintains that as long as researchers' conclusions are not inconsistent with the original account, differences in the reports should not cast doubt on their reliability or generalisability. Yin (1994) suggests that some of the criticism of case study research can be overcome with a more rigorous approach to four aspects of the methodology: construct validity, internal validity, external validity and reliability.

McKinnon (1988) argued that validity concerns both what the researcher is studying and what they intend to study. Thus, the researcher's personality, experiences and background have an impact on the research (Tosh 1991; Parker and Roffey 1997)

and can potentially introduce hidden assumptions or sources of bias (Barzun and Graff 1985).

**Construct validity** results from an appropriate choice of operational measures, so that the researcher is measuring what they want to measure and observer bias is minimised (Yin 1989). Yin (2003) further advises the gathering research data from multiple sources and corroborating the evidence through thorough auditing of each case, followed by systematic documentation and clear cross-referencing from the research questions across to the final report. Apart from interviews, major sources of data included documents, organisational literature and correspondence, thus establishing a chain-of-evidence. Thus, the validity of this study will be enhanced during the data collection, analysis and recommendation phases.

Construct validity can further be enhanced by asking key informants to review the draft analysis, to ensure that essential facts of the case had been presented.

Consequently, the reliability of information could be judged in its context (Yin 1984).

Using these processes will minimise threats to validity and enhanced reliability (Yin 2003).

Table 4.3: Yin's (2000) case study tactics

<b>Design Test</b>	<b>Theoretical explanation of the construct</b>	<b>Case study tactics</b>
Construct Validity	Secure the correct operational measures have been established for the concepts that have been studied (Yin 1994)	Multiple sources of evidence Chain of evidence Interview respondents viewing the draft of the case
Internal validity (Concerns explanatory or casual case studies)	Ensure that a causal relationship – those certain conditions lead to other	Pattern-matching Rival explanation as patterns Explanation building Time series analysis

but not for exploratory or descriptive case studies, which do not attempt to make casual statements (Yin 1994)	conditions – has been established	
External validity	To prove that the domain to which a case study's findings belong can be generalised (Yin 1994)	Specification of the population of interest Replication of logic in multiple case studies
Reliability	Demonstration that the findings can be repeated if the case study procedures are repeated (Yin 1994)	Interview protocol Clearly conceptualised constructs Multiple indicators Pilot testing Case study database

**External validity** refers to the generalisability of a particular set of results based on some broader theory (Yin 1994). On the basis that the findings can be replicated, the results might then be applicable to many other settings without the need to replicate the original study each time (Yin 1989). Case studies should be designed so that their generalisability is maximised and incorporate clear and detailed descriptions as a means of ensuring that qualitative studies are comparable with, and thus transferable to, other situations (Goetz & Le Compte 1984). This 'thickness of description' of the setting and context (Stake 1995) has been employed in the current study by recording detailed characteristics of the participant organisations and the context in which the episodes occurred.

**Reliability** relates to the researcher's confidence about the quality of information obtained during the research. Critics of qualitative studies compare the reliability of case studies with that of surveys; however, the rigor of the researcher's own thinking, the presentation of sufficient evidence and careful consideration of alternative

interpretations (Yin 1989) help provide validation for the case study. In addition, using the interviewees' own vernacular, their own terms of expressing the phenomenon as they see it, can shape the categorisation of the data (Lewin and Johnston 1997; Strauss 1997). The reliability of the current study has been enhanced by developing clearly conceptualised constructs, using an interview protocol and a coding schematic and collecting multiple indicators through in-depth consideration of each of the cases within its own context.

**Triangulation**, the use of multiple sources of evidence, has been described by Denzin (1978) as consisting of four types, each applicable to a different aspect of the case study methodology: data triangulation, investigator triangulation, theory triangulation and methodological triangulation.

Data triangulation concerns cross-referencing various data sources through undertaking a variety of methods, such as interviews, participant observation and document analysis. The current study uses all these methods. While triangulation of data sources and modes is critical, the results may not necessarily corroborate one another - for example, including or excluding outliers and extreme cases could alter the results (Miles and Huberman 1994). Thus, triangulation can uncover contradictions, lead to thicker, richer data, and lead to synthesis or integration of theories; therefore, triangulation may serve as the litmus test for competing theories by virtue of its comprehensiveness (Shaw 1999).

Investigator triangulation concerns the use of multiple investigators is not applicable to the current study. In this study the participants did, however, review the collected data to further verify the outcomes.

Theory triangulation concerns interpreting the results from a number of perspectives. Inconsistent or contradictory results need to be incorporated into a clear explanation by the researcher of the observed social phenomena (Denzin 1989). Indeed, the complexities of external reality and the limitations within the context of the researcher's own mind make triangulation essential for enhancing the validity of the data (Perry 1998).

Methodological triangulation concerns the use of multiple methods of study. The validity of the current study is increased by combining interview data with observational and other data, such as reports and electronic information (Eisenhardt 1989).

#### **4.7. Reflecting on the Importance of Focus Group Discussion**

Focus group discussion has been recognised as an important data collection tool for researchers in qualitative research in many fields and has multiple advantages for social science researchers. As qualitative research and focus group discussions deals with human behaviours and thoughts, it can be seen as an easier method for conducting in face-to-face environment. Having conducted all my focus group discussions prior to the pandemic of Covid19 with all sessions being in person, I do not face the restrictions arising from the pandemic. During Covid19 or future similar situation in future, researchers will face new prospects and obstacles with remote learning and social distancing ruling when conducting focus group discussion. There will be need for alternative tools for collecting data via online focus group discussions instead of in-person collection. The process of conducting qualitative research and focus group discussion which is more collaborative compared to other types of research as focus group discussion inspires a framework for stakeholders, providing



them a chance to express their feelings and opinions as well as group synergy. Perhaps a replacement of face-to-face interactions with online focus groups will be utilised progressively to implement the modified method to be more effective and successful should such situation arises. Likewise, the increasing presence of online platforms and social media, collecting secondary data will become increasing in the field of social science researches. The in-person dynamics and a virtual discussion dynamic will be very different. Observing body language will be greatly challenged and new method will be needed to ensure focus group discussion data collection continue to be an important tool.

#### **4.8. Limitations of the Study**

It is recognised that this present study had limitations in regards to its data source and the generalisation of the findings. By relying on questionnaire surveys, focus group discussions, interviews and documents as data sources, there was a risk of subjectivity from interviewees, writers of the documents, or even the researcher (Yin, 2014). To establish the confirmability of the study, this research addressed rival explanations to minimise personal subjective opinions of the researcher (Yin, 2014). In ensuring the trustworthiness of the current study, several strategies as suggested by Yin (2014), such as triangulation, member checking, theoretical framework, interview protocol, and case study database were utilised.

The findings of the current case study cannot be generalised like the quantitative study's generalisation (Creswell, 2012). This is because the sample selection was purposive; and thus, may not have been representative of different universities in general. However, the findings of the current study can provide in-depth, holistic, and contextual accounts of the case.

The orientation to seek out TNE providers from Australian Universities put a constraint to expand the scope of the study to include more comparison between the different strategies adopted by the international branch campuses of non-Australian universities, the larger international private education providers, the larger non-profit private education institutions and the smaller PEIs. This is deemed as a delimitation of this study.

The selection of participants for the interviews, case studies will be non-random in most cases as the research relies on the approval of the participants and the voluntary response to be interviewed. This process of participants' selection could have created an element of "survey bias" which is deemed as limitation.

In this qualitative study, data interpretations will be personal and will be different from another person's view. The researcher's limited experience in qualitative research may limit the research findings. Additionally, with participants from multi-cultural backgrounds; there are risks of miscommunication during the interviews and focus group discussions, which the researcher will attempt to address with the researcher personal internationalisation background.

Other limitations include:

- The rapidly changing nature of the developments under investigation and the timing of enquiries can therefore make a difference to the findings.
- The range of formal data sources that needed to be accessed.

- Diversity in the amount and validity of data may lead to a contrast between a lack of formal data and an abundance of informal and anecdotal, but not necessarily reliable, data.
- Potential difficulties in understanding the providing university from overseas in context at a distance and without country visits.
- The data gathered largely from government, agency and other official sources may represent a partial picture. To gain better insights in relation to 'impact,' the data need to be triangulated across different stakeholders, including relevant providers and students.

Lastly, this study is largely exploratory and qualitative, which may lead the findings to be inductive and judgemental that may not be appropriate for generalisation, thus this will be another limitation.

The first potential limitation of the study is that the conclusions are drawn from only three contexts. Each of the organisations, while dissimilar in terms of partnership structures, has similarities in its originating country, they are all from Australia and operates under Australian regulatory framework and quality audit under TEQSA. and commonalities in both students and business-to-business target audiences.

Secondly, the research was conducted from the point of view of the organisation and its employees, rather than the students.

The second limitation stems from the nature of the interview process itself. Extracting meaning is difficult for the qualitative researcher, in that it is an activity not a thing or a substance, making it difficult to grasp (Essy 2002). The interviewee's perspective needs to be interpreted. Qualitative techniques can be hampered by regulatory uncertainties to draw conclusions.

#### **4.9. Chapter Summary**

This chapter has examined the deductive and inductive research processes, the grounded theory approach to data analysis, and the qualitative case study methods of in-depth interviewing and documentary analysis, as well as the various issues associated with the research design for this study. It outlined the reasons for basing the research on the paradigm of realism and for choosing the case study methodology.

The case study design was described in the context outlining the necessary steps from the initial formulation of the research question to conclusion of the overall study and probing the theory behind the choices of methodology. The data collection methods of participant observation, the interviews were discussed. Finally, the ethical considerations of the study and its limitations were outlined.

**CHAPTER FIVE: FINDINGS OF SURVEYS, FOCUS GROUPS' DISCUSSIONS AND SEMI-STRUCTURED INTERVIEWS**

**5.1. Introduction**

Table 5.1 – Summary of Research Methods used for Data Collection

<b>Research Methods</b>	<b>Type of Data</b>	<b>Advantage/ Disadvantage</b>	<b>Applications</b>
Interview	Primary	<ul style="list-style-type: none"> <li>• Easy to gather extensive information</li> <li>• Flexible</li> </ul>	Adopted for the three universities' Pro Vice Chancellors based in Singapore.
		<ul style="list-style-type: none"> <li>• Time consuming</li> <li>• Respondent agreement</li> </ul>	
Questionnaire/ Survey	Primary	<ul style="list-style-type: none"> <li>• Easy and quick</li> <li>• Can be structured and semi-structured</li> </ul>	Sent to the 4 focus groups of students/ graduates, the lecturer group and the PVCs.
		<ul style="list-style-type: none"> <li>• Respondent can write anything</li> <li>• Respondent may find this too long</li> </ul>	
Focus Group	Qualitative	<ul style="list-style-type: none"> <li>• Flexible</li> <li>• Can gather much information</li> </ul>	Conducted with the 4 groups comprising of current students and graduates.
		<ul style="list-style-type: none"> <li>• Time consuming</li> <li>• Respondent availability</li> <li>• Dominant message/respondent</li> </ul>	
Internet Research	Secondary	<ul style="list-style-type: none"> <li>• Easy accessibility</li> <li>• Cheap</li> <li>• Quick</li> </ul>	Internet searches conducted for websites, articles, speeches, press releases, infographics etc.
		<ul style="list-style-type: none"> <li>• May have poor/false source</li> </ul>	
Library research	Secondary	<ul style="list-style-type: none"> <li>• Easy</li> <li>• Cheap</li> </ul>	<ul style="list-style-type: none"> <li>• Physical searches conducted in Durham University, Singapore public libraries.</li> </ul>
		<ul style="list-style-type: none"> <li>• Time consuming</li> <li>• Book may not be available</li> </ul>	

			<ul style="list-style-type: none"> <li>Universities' Online libraries search in Durham, Newcastle Australia and Macquarie</li> </ul>
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This chapter presents the findings and data analysis from the survey questionnaires, focus group discussions and interviews which consisted of four main sections.

Conducting surveys and focus group discussions with different groups of participants of different TNE programmes from students to graduates provide a longitudinal study to enable the researcher to collect a number of variables without trying to influence those variables. Conducting surveys and interviews with lecturers and leadership from the institutions provide data and investigator triangulation through cross verification of the different set of survey results.

Table 5.2. Sampling Process for Participants

<b>Groups</b>	<b>Number and profile of Participants</b>	<b>Sampling Process</b>
Focus Group One	<ul style="list-style-type: none"> <li>10 current students – 3 males</li> <li>All Singaporean</li> <li>Same university - UK, programme - IT/ Bachelor</li> </ul>	<ul style="list-style-type: none"> <li>Randomly by the PEI Student Administration Manager</li> <li>Completed the questionnaire</li> <li>Focus Group Discussion held</li> </ul>
Group Two	<ul style="list-style-type: none"> <li>7 current students - 2 males</li> <li>4 countries</li> <li>3 universities/Different programmes /Bachelor and Master</li> </ul>	<ul style="list-style-type: none"> <li>Random contacts at the selected PEI</li> <li>Referred by my contacts in PEI</li> <li>Interviewed individually by me</li> </ul>
Focus Group Three	<ul style="list-style-type: none"> <li>4 working graduates in Singapore – 1 male</li> <li>Graduated less than 2 years</li> <li>All Singaporean</li> <li>Different programmes/ Bachelor</li> </ul>	<ul style="list-style-type: none"> <li>Random contacts referred by my contact in PEI, SIM Global</li> <li>Focus Group Discussion held</li> </ul>

	<ul style="list-style-type: none"> <li>• Universities - Australia and USA</li> </ul>	
Group Four	<ul style="list-style-type: none"> <li>• 5 working graduates in Singapore and China – 1 male</li> <li>• Graduated more than 2 years</li> <li>• 3 Singaporeans, 1 China, 1 India</li> <li>• Different programme/ Bachelor and Master</li> <li>• Universities- Australia and UK</li> </ul>	<ul style="list-style-type: none"> <li>• Selected from 4 companies through my contacts in the companies</li> <li>• Interviewed individually in person by me</li> </ul>
Lecturer Group	<ul style="list-style-type: none"> <li>• 4 lecturers in PEIs – all males</li> <li>• Experienced and mature</li> <li>• Teach in multiple universities and PEIs</li> </ul>	<ul style="list-style-type: none"> <li>• Personally invited as personal contacts in the industry</li> <li>• Individually interviewed in person by me</li> </ul>
TNE Providers	<ul style="list-style-type: none"> <li>• 3 Australian universities</li> <li>• More than 15 years in Singapore</li> <li>• All 3 are PVCs level based in Singapore</li> </ul>	<ul style="list-style-type: none"> <li>• Reach out to my personal contacts in the TNE/PEI sector</li> <li>• Interviewed individually in person by me</li> </ul>

Section 5.2 presents data from the two groups of students' respondents studying a TNE programme. Group One consist of ten local Singaporean students in a same PEI doing programme from a similar university partner. Group two consists of seven international students studying in different institutions for their TNE programme.

The first part of the questionnaire provides student background information as descriptive statistics to provide a demographic overview. The key part of the questionnaire consists of 3 key questions regarding their rationale and journey with a TNE programme. (Refer to sample questionnaire in Appendix B). These data were used as a foundation for interpreting the results of the response analysis of the three key questions on their pursuit of higher education:

- **Question 1 - What are the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)**
- **Question 2 – How likely are you to recommend others to take a transnational programme?**
- **Question 3 - How much do you value these aspects of a transnational programme? (Rate them with your votes)**

Section 5.3. presents data from two groups of graduates from TNE programmes. The first group had graduated for less than three years while the second group have been working for more than three years and are all in full employment at different stages of their careers. The questionnaire here posed fairly similar questions as the student groups, obtaining background information and the three key questions with additional data on their employment status and further education intentions. (Refer to sample questionnaire in Appendix C)

Section 5.4. presents data from lecturers teaching in TNE programmes. The questionnaire consists of questions that seek to understand the background and demographic of the participants, followed by 3 questions that requires them to select their choices of the possible answer or answers and 6 open-ended questions for them to share their views and suggestions. (Refer to sample questionnaire in Appendix D)

The 3 questions with provided answers are:

- **Question 1- What are the main reasons for you to teach in a TNE programme? (Select all that apply)**



- **Question 2 -How much do you value these aspects of a transnational programme? (Rate them with your votes)**
- **Question 3- How likely are you to recommend others to teach in a transnational programme?**

The 6 open-ended questions were meant to obtain their feedback, views and comments on TNE programmes. The open-ended questions seeking their personal opinions and views were:

- **Open Question 1 - What in your opinion and experiences teaching in the PEIs, are the challenges of the private education institutes?**
- **Open Question 2 - What are your opinions of the students in a transnational programme?**
- **Open Question 3 - In your opinions, do you find the programmes offered by the various PEIs meet the relevance of the employment markets?**
- **Open Question 4 - In view of MOE focus on SkillsFutures Initiatives, expansion of the local universities' places and relevance of degrees, what are your views on the relevance of continuing having transnational programmes in Singapore?**
- **Open Question 5 - In your opinion, what is the ideal numbers of PEIs and programmes?**
- **Open Question 6 - What are the areas for improvement in the transnational education programmes?**

Section 5.5. presents the interviews of three university partners' leadership view on TNE. The questionnaires and interviews were responses from the locally based Pro

Vice-Chancellors, the highest office in Singapore of the 3 universities. All three PVCs have been in Singapore for over 3 years and their combined experience in Singapore within the TNE and PEIs sectors amounted to close to twenty years of experience in Singapore.

This questionnaire consists of two parts, part one comprises of the background questions on the university's history and the student population while part two focus on policy context questions covering students' experience of the programmes, contributions to communities, financial impacts, quality comparison to home campus, relevance of TNE to the local stakeholders and future plans. (Sample questionnaire in Appendix E)

Section 5.6. presents the qualitative analysis and summary of major findings of the perspectives from students, graduates, lecturers and TNE Providers. The findings of the triangulated data, mainly collected from the study of participants' questionnaire, focus group discussions, interviews, desktop document reviews as well as participants observations are summarised in this section and interim conclusions are also drawn from the findings. From the four groups of stakeholders' responses, the different data were compared and triangulated. Attempts were made to contact the regulator, CPE for sharing of insights, but was directed to refer to their regular press releases under the PEIs sector.

Section 5.7 deriving from section 5.6 interim conclusions, the case studies of three Australian university providers in their partnership arrangement in Singapore were conducted using SWOT matrix, Porter's Five Forces Framework analysis to analyse and evaluate the operating environment of a competitive business to assess their strategic position, sustainability and continued relevance.

Section 5.8 presents the Chapter Summary.

## **5.2. Students' Perspectives and Personal Expectations**

Perspectives from students were gathered from two groups of students that were studying in a TNE programme through a survey questionnaire and focus group discussions and individual interviews were conducted to verify the responses. An analysis of questionnaire data, including demographic details and responses to the key questions was conducted for students currently studying in a TNE programme (refer to Appendix B for the sample questionnaire). The compositions of the two groups were as follows:

- Group One consists of ten local students, all Singaporeans from the same PEI and university provider.
- Group Two comprises of a diverse group of seven international students from different countries, studying in three different PEIs doing different programmes from different university providers.

### **Group One – Ten Local Singaporean TNE Students**

A group of ten local Singaporean students studying a TNE programme with University of Portsmouth (UK) at a local established PEI, Informatic Academy. The students were invited from the Bachelor of Science (Honours) in Computing and Bachelor of Science (Honours) in Business Information System. Informatics Academy, the local PEI had been established since 1983 and had been known for programmes in the information technology discipline and has a sister company, NCC Education in UK.

The ten students were randomly selected by the student service manager of the PEI to complete a survey questionnaire (Appendix B) and invited to participated in a

focus group discussion on campus during my research period. Being the first group, this group selection had been narrowed to a particular university (University of Portsmouth) and two of its programmes within a PEI (Informatics Academy). This group acts as a pilot for me to finetune the process. The whole exercise was intended to gain a better understanding of the students' beliefs, expectations, relevance, student experience about the TNE programme.

University of Portsmouth had been one of the earliest providers of TNE programme in Singapore for the past 30 years and had over the years partnered with several different PEIs, differentiating the different PEIs with different disciplines. Their partnership with Informatic Academy focus on Information Technology related degrees while other partners, namely Kaplan Higher Education Institute and Management Development Institute of Singapore (MDIS) focus on other programmes. (Note- University of Portsmouth's partnership with Informatics Academy had ended and the programme had since teach-out by July 2020, while the partnership with MDIS will end and the teach-out by July 2023, leaving Kaplan Higher Education as likely the sole partner in Singapore after 2023.)

The focus group discussion was held in a classroom within the campus after their lectures for their convenience and familiarity. All the students' profile and background were fairly homogenous as they are in the age group of between 18 to 25 years, all had attained their GCE A level qualification with results of average grades and were in their first year of their three-year programme.

Table 5.3 Demographic of Students of Group One

Student	Gender	Age	Remarks
F1	Female	19	GCE A level / BSc Computing

F2	Female	18	GCE A level / BSc Computing – wanted to go overseas
F3	Female	18	GCE A level / BSc BIS
F4	Female	18	GCE A level / BSc Computing– want to go overseas
M1	Male	20	GCE A level / BSc BIS
M2	Male	21	GCE A level / BSc BIS– working part-time in F & B
M3	Male	20	GCE A level / BSc Computing
M4	Male	20	GCE A level / BSc BIS
M5	Male	21	GCE A level / BSc BIS – working part-time in F & B
M6	Male	20	GCE A level / BSc BIS– working part-time in F & B

The four female students were younger at either 18- or 19-year-old while the six male students were older at either 20- or 21-year-old as all male Singaporeans have to conduct full-time national service for two years before embarking on university studies.

All ten students were supported by their parents and/or older siblings for their financial obligations in their tuition fees and living expenses although three of the male students were working part-time in the food and beverage industry.

As the survey questionnaires were collected two days before the focus group discussion, the three key questions were analysed from the students' responses.

The findings are as follows:

**Question 1 – What are the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)**

The structured questionnaire listed eleven possible reasons with an open option of “others” to capture any possible reasons that were overlooked by me. Students were asked to select more than one answer that apply to their circumstances for embarking on a TNE programme.

The findings were summarised and presented in table 5.4 below. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group. In this group, the top 3 responses received five or more responses. The other reasons with less than five responses will be discussed during the focus group to verify the accuracy.

From the twelve answer choices, four of the choices did not receive any response.

They were:

- Able to gain advance standing for the Polytechnic Diploma – this reason does not apply to this group as they are all from the GCE A Level pathway.
- Night classes available – this younger group of students are all full-time day class and night classes are only for part-time students.
- Accept mature working adults – not applicable to this group.
- Other – no response from this group.

Table 5.4 – Summary of responses on rationale to take a TNE programme from Group One

Rationale for doing a TNE Programme							
Unable to gain admission into AUs							7
Cheaper than going overseas							5
Faster to complete a degree							5
Flexible time-tabling							4
To be closer to home							3
Able to work part-time while studying							3
To attain a foreign qualification							2

Wider choice of courses								1
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*Note- the remainder 4 reasons obtained zero responses.*

- a. Unable to gain admission to the local public universities (AUs) topped the list with 7 respondents. Being unable to gain admission to the local university was the common message repeated in the focus group discussions. Students shared their aspirations to pursue a degree to improve their career prospects as well as their perceived pressures from parents, siblings and peers. This response is in line with the expectation of. Thus, securing a degree in a TNE arrangement is the affordable and convenient alternative pathway.

All students in the group shared that they were envious of their classmates who had managed to get into the local universities or had gone overseas to pursue their degrees in the United Kingdom and Australia. Two of the females shared that they would like to go overseas but parental concerns stopped them. They expressed their aspirations to travel to UK to visit University of Portsmouth after they had graduated from the programme, and may consider pursuing their master's degree overseas for greater exposure. They shared that acquiring a Master degree is the next step after working for a few years as they consider the competition for career advancement will be high as there are many bachelor degree holders.

The capping of places in the AUs to a CPR of 40% had restricted the opportunity for many eligible students, leading to a situation where only those strong performing students at GCE A Level had a better opportunity to secure a place in the local AUs. Each year, it is a common occurrence for many GCE A students to be unable to secure a place in the local AUs in view of the strong results at GCE A Level, with more than 90% of the cohort achieving the

required grades for admission to universities. In the latest 2021 GCE A Level examination results, some 93.5% (10,353 students) out of a cohort of 11,070 students achieved at least 3 Higher 2 level passes with pass in General Paper or Knowledge and Inquiry, which qualifies them for university application (MOE, SEAB press release, February 22, 2022). This group of students falls into this category of being outside the 40% CPR but within the 90% of eligible students for university studies.

- b. Five out of the ten students listed “cheaper than going overseas” as a reason for studying a TNE programme. It is the best alternative in term of cost after being unable to be admitted to the AUs. For taking the TNE pathway, students are required to pay the full cost for a TNE programme, while students studying a programme in an AUs are eligible for the MOE Tuition Grant Scheme which Singapore citizens will receive automatically when they commence their studies in AUs. Thus, the cost of studying in a TNE programme is higher than studying a programme in the AUs.

During the focus group discussions, all voiced their disappointment that they are not eligible for the MOE Tuition Grant. During the CUEP 2015 reviews, the report noted the request for some form of grants for students in TNE programme, but there was no follow-through to this request. The male students voiced strongly as they compared themselves with their national service colleagues who went to AUs with grants while they are not able to, despite having served the same two years of national service.

However, the cost of TNE is significantly more affordable than going overseas to study at the same university that is available through TNE. Table 5.5 illustrates a simplified cost comparison of the three different options of studying



an undergraduate programme using the cost of studying in the University of Portsmouth as the basis to compare the cost of study.

Table 5.5 – Cost Comparison between overseas study, TNE and AUs

<b>Cost of university study comparison</b>			
<b>Location</b>	<b>Tuition</b>	<b>Lodging</b>	<b>Total</b>
UK	GBP54,900	GBP30,000	<b>GBP84,900</b>
<b>Singapore TNE</b>	<b>GBP30,000</b>	<b>GBP10,000</b>	<b>GBP40,000</b>
<b>Saving achieved from studying TNE vs UK</b>			<b>GBP44,900</b>
Singapore AUs	GBP18,000	GBP10,000	<b>GBP28,000</b>
<b>Additional cost of doing TNE vs AUs</b>			<b>GBP12,000</b>

*Source: Data of from University of Portsmouth website, National University of Singapore website and Informatics Academy website*

Table 5.5 sets out the cost comparison between overseas study, TNE and AUs. In this case, the total cost of pursuing a degree at the University of Portsmouth, UK, will be in the region of GBP84,900, covering tuition and lodging. On tuition fees alone, there is a major cost differential of GBP24,900 for students doing a similar degree from University of Portsmouth through the local PEI in Singapore. However, when compared to doing a programme in the public AUs, the TNE students actually incurred more cost as fees for TNE programme are higher by GBP12,000 compared to the local universities due to the MOE Tuition Grant given to local citizens. *(Exchange rate of GBP1.0 to SGD1.80)*

- c. Referring to the faster completion being one of their top responses during the focus group discussion, the male students were quite unanimous in their priority to get to the job market quickly claiming that this is the best means to recoup the higher cost incurred for TNE compared to AU. This will allow them to “pay-back” for their parents’ funding for the study. The faster completion time gives

them the edge to enter the workforce earlier than their male counterparts who either pursue a degree in an AU or those who go overseas for their study. The female students concurred with the male students that faster completion is a strong advantage as being in the workforce earlier gives them a head-start in the career being a year more senior than their same cohort of female students. The male students spoke about having “lost” two years to national service compared to the female cohort, as such the faster completion reduces the “lost” time to a year in their career. Thus, choosing to do a local TNE will allow them graduate faster.

For a 3-year degree programme such as the Portsmouth’s programme of 16 modules for 360 credits, students can complete the degree over 6 trimesters or in 2 years through a TNE. Each year, there will be 3 trimesters and each trimester, students are required to complete 2 to 3 modules to achieve 60 credits in each trimester.

Students in a TNE programme will thus be able to graduate faster and enter the workplace at least a year ahead of their peers from the local universities or those returning from overseas. As such, the higher tuition fees in a TNE programme are offset by wages drawn in the year. Using the median starting salary of GBP 1,600 per month for fresh graduates (the median salary in PEI GES 2019/2020), a TNE graduate will be able to draw an annual salary of GBP19,200 which is higher than the GBP12,000 difference between AUs and TNE. The difference in cost between the TNE and AUs is thus not a barrier for students to pursue TNE.

**Question 2 – How likely are you to recommend others to take a transnational programme?**

This structured question using a 5-point Likert scale, requires the students to specify the level of agreement to the question in five points: (5) Highly likely; (4) Likely; (3) Neutral; (2) Unlikely; (1) Highly unlikely; to recommend their friends to study in a TNE programme. The responses were summarised in Table 5.4. A rating of 4 and 5 will be deemed as a favourable response.

Table 5.6 – Summary of responses on recommending others to take a TNE programme from Group One

<b>Recommending other to take a TNE Programme</b>					
	<b>Highly Unlikely</b>		<b>Neutral</b>		<b>Highly Likely</b>
<b>Rank</b>	1	2	3	4	5
<b>Result</b>	0	2	2	3	3
	<i>Positive scale from Likely to Highly Likely (4 and 5)</i>				
	<i>Negative scale from Unlikely to Highly Unlikely (1 and 2)</i>				

This result was interesting as 6 out of the 10 students rated this question from likely to highly likely (refer to Table 5.6 for the result highlighted in yellow). During the focus group discussion, the rationale by the majority for this response is partly due to the perception that students doing a TNE programme are deemed as being given a “second chance” in life due to their failure to secure a local placement in the local university. The “stigma” seems to be apparent among the students and their counter-measure to eliminate the stigma is to recommend more students to TNE programmes, with the hope that this action will increase the presence of more TNE graduates in society, thus making it a norm to acquire a TNE qualification. (This ideology is evident and adopted by most PEIs in their student recruitment plans where there are attractive referral fees (between GBP100 to 150) being rewarded to

students for each student referred to the PEI. The students confirmed during the discussions that they were informed of such schemes and were encouraged to earn some income from this, and this could have influenced their survey results.

Triangulating the responses from students in Group Two, graduates in Group Three and Group Four, indicates that Group One is the outlier and the reasons given to increase the numbers of TNE graduates could be discounted.

**Question 3 - How much do you value these aspects of a transnational programme? (Rate them with your votes)**

Students were again asked used the 5-point Likert scale to rate from 1 to 5 for the ten aspects of their experience from the TNE programme in this structured question.

- 1 and 2 being Negative – Low;
- 3 being Neutral;
- 4 and 5 being Positive - High.

The findings were summarised and presented in table 5.7 below. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group votes for rating 4 and 5 for each of the 10 aspects of TNE programme.

Table 5.7 – Summary of responses on the different aspects of TNE programme from Group One

Aspects of TNE programme	Low				High
	1	2	3	4	5
Academic expertise			2	3	5
Quality of faculties				7	3

Quality of teachings			3	2	5
Variety of courses			4	3	3
Opportunity to move to on-campus	3		7		
Quality of facilities			3	4	3
Diversity of students	1	2	4	2	1
Flexible learning structure			2	6	2
Faster completion- 3 terms/year	1			6	3
Access to Home campus faculties	4		6		
<b>Overall votes (100)</b>	<b>9</b>	<b>2</b>	<b>31</b>	<b>33</b>	<b>25</b>
	<i>Positive scale from rating of 4 and 5</i>				
	<i>Neutral scale at rating of 3</i>				
	<i>Negative scale from rating of 1 and 2</i>				

From the responses received, there were positive rating of 4 and 5 for academics in terms of academic expertise (8 out of 10), academic quality (10 out of 10) and quality of teachings (7 out of 10). Rating of 4 and 5 received 58 votes (58%), while neutral rating of 3 received 31 votes (31%) and low rating of 1 and 2 received 11 votes (11%) (highlighted in total votes in the row highlighted in green in Table 5.7 above). These results will address the private education regulator's concern on quality and also serves as a testament of the stipulated regulatory process and guidelines on teachers' education qualification and experience to ensure PEIs strengthen teachers' quality as a key criterion for the approval to launch a programme by a PEI. It is also a testament of the teachers' training initiative of CPE. The PEI is among one of the better managed PEIs, having attained their EduTrust Accreditation from CPE. During focus group discussions, it was shared that they enjoyed the practical and real-life experiences that were used to illustrate the teachings by the adjunct lecturers who were all working professionals. The students enjoyed gaining industry

insights from their lecturers as both theory and its application in the real workplace were shared. The deployment of lecturers from the industry is a big advantage as majority of the adjunct lecturers have professional careers in the industry. Students also rated the variety of courses as positive (6 out of 10). Quality of facilities (7 out of 10) is another testament of CPE's quality enhancement through the regulatory requirement for approval of a PEI where there is a minimum space of one and a half square meter per student, to ensure decent classroom space, other facilities such as library, discussion areas etc.

Areas that are not on the regulatory requirements, such as diversity of students, opportunity to move to on-campus and access to home campus facilities received neutral ratings.

Personally, I would expect the opportunity to move to on-campus would be a strong incentive to do a TNE, gaining overseas exposure and experiencing cultural diversity in the learning process. During the focus discussion, the reluctance to lose contact with fellow students and additional costs were mentioned as the reasons for lack of interest as not all the students are keen on such opportunity.

Flexible learning structure (8 out of 10) and faster completion (9 out of 10) reinforced the responses in question 1. It had been a default structure within the PEI sector and had been one of the key appealing factors to many students, particularly for those who are working either full-time or part-time.

During the focus group discussion, all students echo two messages as follows:

*“Coming from the GCE A Level pathway where close to 90% of the cohort proceed to university, most of us choose to follow our peers in a race to the universities due to the **fear of missing out**, even though they do not have a*

*clear idea of what direction they want to take after graduating. A degree was on my list of things to do when I embarked on the GCE A Level pathway”*

*“The **default decision** for Singapore’s middle class is to get a university degree and my parents might felt like I am wasting my time if I did not get a degree”*

#### Group Two – Seven International TNE Students

This group consists of seven international students that attended different TNE programmes, namely RMIT University, Curtin University and SP Jain School of Global Management (all three universities are from Australia). They were given the survey questionnaire and interviewed separately during the author’s research period, which was intended to gain better understanding of their feedbacks, expectations, relevance, rationale for their choice and student experience about the TNE programme (refer to Appendix C for the sample questionnaire). They were the seven international students who responded to the survey out of ten international students invited for this research. The three Indonesian students from Curtin University declined to submit their survey.

These students originated from several countries, comprising of China (1), Indonesia (2), India (2) and Vietnam (2) and came to Singapore to pursue a university degree through the TNE pathway. Among the seven students, five were pursuing their undergraduate bachelor degrees and two doing their master degrees.

After the submission of the surveys, each participant was interviewed by telephone to verify and clarify and where needed, elaborate on the results.

RMIT University from Australia had been delivering their undergraduate programmes, ranging from aviation, business, built-environment and supply chain management under TNE structure with SIM Global Education since 1987, with close to 49,000 graduates. (<https://www.simge.edu.sg/programmes/university-partners-sim-ge/rmit-university/>).

Curtin University had also been in Singapore since 1986 through different educational providers in the earlier stages, before establishing its full-fledged independent campus in 2008 in partnership with Navitas Ltd. Curtin offer both undergraduate and postgraduates programmes in business, nursing, health sciences and humanities. The campus has a capacity for 4,500 students.

(<https://news.curtin.edu.au/media-releases/curtin-singapore-launches-today/>)

SP Jain Global School of Management was invited in 2005 by the Singapore Government to establish a campus in Singapore as part of the Global SchoolHouse project. The structure of course delivery is different from the others PEI and TNE providers as all its students in both the undergraduate and postgraduate programmes had to study and rotate among its 3 campuses, namely Dubai, Singapore and Sydney. Students studying in the Mumbai campus are excluded from this 3-campus rotation. ( <https://www.spjain.sg/global-campus/singapore>)

This group of students were diverse as they came from different countries, different institutions, different programmes, different study level and wider age group – 18 years to 35 years old as shown in Table 5.8.

Table 5.8. Demographic of students of Group Two

Country	Bachelor	Master	Institution	Gender
China	Yes		RMIT	Female



Indonesia	Yes		Curtin	Male
Indonesia	Yes		Curtin	Female
Vietnam	Yes		Curtin	Female
Vietnam		Yes	Curtin	Female
India		Yes	SP Jain	Male
India	Yes		Curtin	Female

The same three key questions were analysed from the students' responses. The findings were as follows:

**Question 1 – What are the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)**

Similar to Group One, the structured questionnaire listed eleven possible reasons with an open reason of others to capture any possible reason that were overlooked by me, being the final reason. Students were asked to select more than one answer that apply to their circumstances for embarking on a TNE programme in Singapore.

The findings were summarised and presented in the table 5.9 below. This group's responses were very narrow as only five of the reasons were selected with the remaining seven reasons not receiving any response. The five reasons were analysed and top three responses which secured more than 50% of the group (four or more) were discussed during the interviews in detail.

Table 5.9 Summary of responses on rationale to take a TNE programme from Group

Two

**Rationale for doing a TNE Programme**

<b>To attain a foreign qualification</b>							<b>7</b>
<b>Faster to complete a degree</b>							<b>6</b>
<b>Cheaper than going overseas (home campus)</b>							<b>6</b>
Flexible time-tabling							2
Wider choice of courses							2

*Note- the remainder 7 reasons obtain a zero response.*

Being foreign students, it is anticipated that their responses for the same set of questions could be different due to the different motivations, since diverse socioeconomic and cultural backgrounds will affect their perspectives and expectations.

Attaining a foreign qualification had been their main motivation to leave their home countries for a foreign qualification and in this case, Singapore as an alternative to the home countries of the universities. Their response had been unanimous as all seven students selected this reason for taking a TNE programme. In interviews, the driving force for acquiring a foreign degree is the prestige of an overseas qualification which will give them an edge in their career opportunities. They shared that career prospects are better with a foreign qualification back in their home countries, namely China, India, Indonesia or Vietnam. Having a foreign degree, which has wider international recognition, especially with a degree taught in English, widened their career choices compared to home university graduates, and studying in the local language will help them to be bilingual and will appeal to more foreign companies in their home countries. As all the 4 countries that they originated from attract high levels of foreign investment, their opportunities with the foreign companies will be enhanced with a qualification from overseas especially from USA,

UK or Australia. They will also increase the opportunities to remain in Singapore and work, again widening their career choices.

The faster completion feature presented the students with a bonus as there will be cost savings for food and lodging as well as earlier entry to the workforce. This reduces their cost incurred for study and the entry to the workplace earlier provides more income.

For the six students, apart for the student studying in SP Jain, coming to study in Singapore comparatively more affordable than going to Australia to study their university degrees. Being nearer to their home country and having a shorter duration to complete the same programme in Singapore compared to studying in Perth or Melbourne will reduce overall total cost. For students going to Perth or Melbourne, the study period is longer as the classes are conducted in the semesters format, in which they can complete only 2 semesters per year compared to the 3 trimesters in Singapore.

The only exception was the student from SP Jain as he needed to cover all the three campuses as required by the university. SP Jain conduct their study by semester format for all 3 locations, as such, there is no advantage to the students. In the interview, he chose to study in SP Jain as it gives him the advantage to access career opportunities in all the three locations, namely Dubai, Singapore and Sydney.

Wider choices to the students were shared during interviews comes in the form of the wide variety of programmes from different PEIs and different university choices in Singapore. This gives them the choice of different universities from different countries in a single location in Singapore. Singapore hosts many universities from Australia, United Kingdom and a couple from United States, Switzerland and France

help them to simplify their financial planning as the only variation will be the university tuition fees while the remaining cost remain constant regardless of the university that had been chosen.

**Question 2 – How likely are you to recommend others to take a transnational programme?**

This structured question requires the students, using the Likert scales to rate from a scale of 1 to 5 (5 being highly likely and 1 being highly unlikely) whether they will recommend their friends to study in a TNE programme. The responses were summarised in Table 5.10, rating one of the 5 levels of likelihood to recommend in the format similar to Group One. A rating of 4 and 5 will be deemed as a favourable response, while a rating of either 1 or 2 is classified as an unfavourable response.

Table 5.10 Summary of responses on recommending others to take a TNE programme from Group Two

Recommending others to take a TNE Programme					
	Highly		Neutral		Highly
Rank	1	2	3	4	5
Result	2	2	1	2	
	<i>Positive scale from Likely to Highly Likely (4 and 5)</i>				
	<i>Negative scale from Unlikely to Highly Unlikely (1and 2)</i>				

This question obtained mixed responses and oriented toward not likely. From interviews, the student’s country of origin and the city/town they originated had different aspirations for foreign qualifications due to socioeconomic backgrounds. Students from larger cities will aspires for foreign qualifications. As such, the inclination to recommend others to take a TNE programme will be more complex in their home country.

Being a diverse group comprising of different nationalities, this question is distinctly different from the responses from the students from Group One which were all from local, a more homogenous group.

**Question 3 - How much do you value these aspects of a transnational programme? (Rate them with your votes)**

Students were asked to rate using the Likert scale from 1 to 5 for the ten aspects of their experience from the TNE programme in this structured question.

- 1 and 2 being Negative – Low;
- 3 being Neutral;
- 4 and 5 being Positive - High.

The findings were summarised and presented in Table 5.11 below. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group votes for rating 4 and 5 for each of the 10 aspects of TNE programme.

Table 5.11 Summary of responses on the different aspects of TNE programme from Group Two

Aspects of TNE Programme	Low				High
	1	2	3	4	5
Academic expertise				4	3
Quality of faculties				4	3
Quality of teachings				2	5
Variety of courses		2	1		4

Opportunity to move to on-campus				4	3
Quality of facilities		2		5	
Diversity of students		2	2	1	2
Flexible learning structure		1	4	2	
Faster completion- 3 terms/ year	1			4	2
Access to Home campus faculties	1		2	4	
<b>Overall Votes (70)</b>	<b>2</b>	<b>7</b>	<b>9</b>	<b>30</b>	<b>22</b>
	<i>Positive scale from rating of 4 to 5</i>				
	<i>Neutral scale at rating of 3</i>				
	<i>Negative scale from rating of 1 to 2</i>				

From the responses, many aspects of TNE have positive value to most foreign students as shown in Table 5.11 and highlighted in yellow. Overall rating of 4 and 5 account for 52 votes (74.3%), while the low rating of 1 and 2 received 9 votes (12.9%), Neutral rating of 3 account for 9 votes (12.9%). The response of flexible learning structure received neutral response is line with the question 1 as not being the top three priorities. This partly arises from the immigration regulations under Singapore's Immigration and Checkpoint Authority for all foreign students holding Student Pass, being required during school terms to be present on campus daily for at least three hours and are not allow to work, unless they possess a Training Work Permit from the Ministry of Manpower. Only SP Jain is one of the few PEIs that has the privilege of obtaining Training Work Permit for their students which allows them to do paid internships as part of their programme for a duration of three months. These regulations thus negate any advantage of flexible learning structure to foreign students as they are unable to work.

### **5.3. TNE Graduates' Perspectives, Experiences and Expectations**

Perspectives from graduates were gathered from two groups of graduates that graduated from a TNE programme through a survey questionnaire and focus group discussions or individual interviews were conducted to verify the responses. The grouping was break into two categories.

- The first group classified as Group Three in this study, consists of graduates who had graduated from their TNE programme of less than 2 years and are employed.
- The second group, Group Four consists of graduates who had graduated more than 2 years and are employed.

Stipulating employment will ensure that responses will not be skewed due to the inability to secure an employment. Obtaining perspectives from graduates will provide a triangulation of the responses at the students' stage. An analysis of questionnaire data from graduates of TNE programme, including demographic details and responses to the key questions was conducted (refer to Appendix C for the sample questionnaire). The compositions of the two groups were as follows:

- Group Three consists of four local graduates, all Singaporeans from the same PEI and but with two different university providers.
- Group Four comprises of a slightly diverse group of five graduates from three different countries, studying in two different PEIs doing different programmes from three university providers.

**Group Three – Four Recent TNE Graduates of less than Two Years**

This group of four recent graduates (less than 2 years after graduation) from two different TNE programmes, namely RMIT University (Australia) and State University of New York (SUNY) University of Buffalo (UB) (USA) were invited to complete a questionnaire during the research period (refer to Appendix C for the sample questionnaire). Both universities partnered with SIM Global Education. Four responded to the survey out of six fresh graduates invited for this research. One local Singaporean graduate from another UB programme while the other, an Indonesian working in Singapore from University of Newcastle programme declined to participate.

University of Buffalo had been partnering SIM Global Education since 2004. Offering 28 full-time undergraduate degrees in Business, Arts and Social Sciences and Specialty disciplines.

The demographic for this group comprises of three male graduates from the RMIT University (RMIT) TNE programme and one female from the SUNY University of Buffalo (UB) TNE programme. All are local Singaporeans, in the 25 to 35 years age group and are all working either on full-time (3 of them) or part-time roles. All come from middle class family backgrounds. All four graduates graduated from the local polytechnics and were eligible for one year of credit transfer, thus all four commenced their TNE programme from year two of the 3-year bachelor programme offered by both RMIT and UB.

Table 5.12 Demographic of participants of Group Three

Working	Degree	Graduation	Institution	Gender
Full-time	Bachelor	2018	RMIT	Male
Full-time	Bachelor	2018	RMIT	Male



Full-time	Bachelor	2018	RMIT	Male
Part-time	Bachelor	2018	UB	Female

A focus group discussion was organised with this group to better understand their responses. Although the group size was small, the discussions were intense and spirited for more than four hours. They spent time sharing their experience during study and their current work role. Overall, the conclusion was that all of them enjoyed taking a TNE programme as they had the opportunity to be exposed to insights from overseas faculties when compared to the teachings during their polytechnic studies and feedbacks from colleagues who went through the local AUs pathways tend to be “group-thinking mentality” and lacking of fresh alternative viewpoints.

The same three key questions were analysed from the graduates’ responses. This was discussed during the focus group and the summary of findings were as follows:

**Question 1 – What are the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)**

Similar to the earlier two groups, the structured questionnaire listed eleven possible reasons with an open reason of others to capture any possible reason that were overlooked by me, being the final reason. The graduates were asked to select more than one answer that apply to their circumstances when they embarked on a TNE programme for their bachelor degree.

Table 5.13 Summary of responses on rationale to take a TNE programme from Group Three

<b>Rationale for doing a TNE Programme</b>				
<b>Unable to gain admission into local public university</b>				<b>3</b>
<b>Cheaper than going overseas</b>				<b>3</b>
<b>Faster to complete a degree</b>				<b>3</b>
<b>Flexible time-tabling</b>				<b>3</b>
<b>To be closer to home</b>				<b>3</b>
Able to work part-time while studying				1
To attain a foreign qualification				1
Wider choice of courses				1
Others - Able to do internship during school holidays				1

The findings were summarised and presented in Table 5.13 above. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group.

In this group, nine reasons were listed with two receiving no response. The top five responses were tied and were received from 3 out of 4 participants. The other four reasons received a single response, whilst the two without responses will be discussed during the focus group discussions to verify the accuracy.

Five of the reasons were tied with 3 selections for each of the reason as shown in Table 5.13 above.

- Unable to gain admission to the local AUs
- Cheaper than going overseas
- Faster completion
- Flexible time-tabling

- To be closer to home

As this group of graduates are all local Singaporean, a comparison with Group One consisting of students who are all local Singaporeans will be appropriate. Group Three is also comparable to the graduates in Group Four, which comprised majority of local Singaporean with one foreigner who had been working in Singapore for many years and had acquired his TNE in Singapore.

This question corresponds closely with Group One's responses which were very much the reflection of the general local Singaporean's rationale to study in a TNE programme – "Unable to secure admission to local AUs." This rationale becomes the foundation for the rest of the inter-related rationale for Singaporean students – "Cheaper than going overseas." "Faster to complete a degree" and "Flexible time-tabling," has been the default delivery structure for more than 90% of TNE programmes in Singapore. TNE programme thus provide the best alternative with the most cost-effective means to attain a degree for all students of "Unsuccessful admission to the local AUs."

The response of "Unable to secure admission to local AUs" came from the three male graduates of RMIT University. The graduate from University of Buffalo selected the reason of getting a foreign degree particularly a US degree, as she can gain admission to the local AUs, as she graduated from one of the top junior colleges with straight As in her GCE A Level examination. Cost and parental concern of going to US were the obstacles for her to attend the programme in US. She chose this programme for three features from University of Buffalo, namely its liberal art orientation, 50% taught by University of Buffalo faculties and the availability of SIM-UB Scholarships. This scholarship allows her to study a semester in University of

Buffalo to defray her total cost of the study. Tuition fees from University of Buffalo is about GBP2,500 per year, more than RMIT tuition fee.

Cheaper than going overseas is one of the key advantages of doing a TNE programme, a similar rationale shared in the Group One's discussion which was fairly similar to Table 5.5 Cost Comparison of Overseas Study, TNE and AUs in the earlier section of 5.2. Another strong advantage of undertaking a TNE programme, is the default structure of faster completion from the Trimester Structure of course delivery.

It was shared by three of the respondents in the focus group discussion, that whether the total cost for TNE programme being higher, is heavily dependent on the ability to secure a job immediately after graduation. All three of them secured a job within three months of graduation, which was comparable to graduates from the AUs. In this instance, they do not lose out as they enter the job market earlier and the amount of salary, they received for securing a job offset the difference between TNE and AU. Two of graduates secured their employment within the range of the PEI GES findings of SGD2,900 while the graduate working in the government sector draws a salary of SGD3,600, closer to the AUs median. Table 5.14 below to illustrate that studying a TNE programme is not necessary at a higher cost as the overall cost is effectively lower when taking into consideration of the opportunity cost of having a paying job that can result in some positive gain, which in this example, has a gain of GBP1,500 for 2 of them and GBP6,500 for the graduate in the government service, after taking into consideration for the earlier entry to the workforce and drawing salary for the duration. It is notable that being earlier in the career, they gain a year in seniority which again will improve their career advancement which equals to higher salary.

Table 5.14 Opportunity Cost of Shorter Duration of Study

	Tuition Fee	Study Duration	Salary- 12 months	NETT
<b>TNE</b>	GBP17,500	16 months	GBP19,000-24,000	+GBP1,500
<b>AU</b>	GBP16,000	36 months	GBP0	-GBP16,000

*Note- TNE based on RMIT B. Business for 2 years, AU based on NUS B. Business for 3 years (1 year of credit exemption for all these group of graduates for RMIT and NUS)*

**Question 2 – How likely are you to recommend others to take a transnational programme?**

This structured question, similar to the earlier two groups, requires the graduates, using the Likert scale to rate from a scale of 1 to 5 (5 being highly likely and 1 being highly unlikely) whether they will recommend their friends to study in a TNE programme. The responses were summarised in the Table 5.15 below, rating the 5 levels of likelihood in the format similar to Group One. Rating from 1 to 5 to indicate their likelihood to recommend. A rating from 4 and 5 is classified as favourable to recommend others to take a TNE programme, while a rating of 1 and 2 is classified as unfavourable.

The responses were spread across from 1 to 4, with each level being picked among the four of them, with one participant rating this question as favourable, likely to recommend while the other two participants opt not to recommend, the unfavourable option and one took the neutral path.

Table 5.15 Summary of responses on recommending others to take a TNE programme from Group Three

**Recommending others to take a TNE Programme**

	Highly Unlikely		Neural		Highly Likely
Rank	1	2	3	4	5
Result	1	1	1	1	
	<i>Positive scale from Likely to Highly Likely (4 and 5)</i>				
	<i>Negative scale from Unlikely to Highly Unlikely (1 and 2)</i>				

During focus group discussion, the two (RMIT graduates) who selected the response of unlikely to recommend shared that they felt that there were too many RMIT University's graduates in the market and they encountered competition in their expectation for a better package especially in small and medium enterprises. During the 2019 SIM-RMIT graduation ceremony, it was shared that the 32 years of partnership between SIM and RMIT had built a strong SIM-RMIT alumni of 42,000 members (extracted from *sim.edu.sg* – 27 Aug 2019). SIM Global Education website as at February 2022, listed 49,000 graduates, having added another 7,000 since 2019. Adding RMIT's graduates from Melbourne campus, it is estimated that there are some 60,000 strong, RMIT alumnus, making them the biggest Australian university alumni. The respondent who indicated neutral is the remaining RMIT graduate, who work in the government service, who did not feel the competition on salary package, while the University of Buffalo's graduate enjoyed the programme and strongly advocate others to take her programme for its liberal arts orientation and 50% faculties teaching model. Coincidentally, both of them graduated with High Distinction from their respective universities. The RMIT graduate had embarked on gain further qualification and been accepted into National University of Singapore, the local AU for his Master degree in Project Management. The UB graduate is planning to do an online programme from Coursera.

**Question 3 - How much do you value these aspects of a transnational programme? (Rate them with your votes)**

The four graduate participants were asked, using the Likert scale to rate from 1 to 5 for the ten aspects of their experience from the TNE programme in this structured question.

- 1 and 2 being Negative – Low;
- 3 being Neutral;
- 4 and 5 being Positive - High.

The findings are summarised and presented in table 5.16 below. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group votes for rating 4 and 5 for each of the 10 aspects of TNE programme.

The neutral and negative ratings will be clarified during the focus group discussions for verification as well as gaining greater insights into such outcome by the participants.

Overall, the responses were generally positive with the rating of 4 and 5, obtaining a total of 26 votes (65%) out of a total of forty votes (highlighted in yellow in Table 5.16 below), while negative rating of 1 and 2 only accounting for six votes (15%) with neutral rating of 3 receiving eight votes (20%).

Table 5.16 Summary of responses on the different aspects of TNE programme from Group Three

	Low				High
--	-----	--	--	--	------

Aspects of TNE Programme	1	2	3	4	5
Academic expertise			2		2
Quality of faculties				2	2
Quality of teachings			2	1	1
Variety of courses			2		2
Opportunity to move to on-campus	2			1	1
Quality of facilities			1		3
Diversity of students		1		1	2
Flexible learning structure				3	1
Faster completion - 3 terms/ year	1			1	2
Access to Home campus faculties	2		1		1
<b>Total Votes (40)</b>	<b>5</b>	<b>1</b>	<b>8</b>	<b>9</b>	<b>17</b>
	<i>Positive scale from rating of 4 to 5</i>				
	<i>Neutral scale at rating of 3</i>				
	<i>Negative scale from rating of 1 to 2</i>				

There were 5 aspects that garnered 3 votes or more for rating of 4 or 5, namely

- Quality of Faculties (all 4 votes);
- Flexible learning Structure (all 4 votes);
- Qualities of Facilities (3 votes);
- Diversity of Students (3 votes) and
- Faster Completion (3 votes)

As both RMIT and UB deploy faculty from home campus to deliver some of the modules, all the graduates shared that they enjoyed and appreciate the external perspective in looking at issues, giving them a global view which they considered as



important giving a strong rating of 4 and 5 for quality of faculties with 4 votes, 2 each for rating 4 and 2 for rating 5.

All 4 graduates like the flexible learning structure giving this aspect with 4 votes, 3 votes for rating 4 and 1 vote for rating 5. SIM Global Education offer both part-time and full-time delivery for the same programme, allowing students to mix and match their attendance for the modules.

Quality of facilities scored with 3 votes at rating of 5 is expected as SIM Global Education is the most established PEI and had a well-established and had been expanding their campus. With the 2014 expansion, the total campus size is about 111,000 square metres, comparable to the local AUs for facilities for students learning and social interactions (<https://www.simge.edu.sg/discover-sim-ge/modern-learning-spaces>)

As the most established and largest PEI, SIM Global Education had a dedicated international recruitment team and a list of reputable agents based overseas allowing them to recruit and attract many foreign students to study. Many of the students were mainly from China, India, Vietnam and Indonesia. They were attracted by the wide choices of reputable universities – 11 universities from Australia, United Kingdom, France and United States of America, offering over 120 programmes in full-time and part-time delivery. This give greater diversity of students and with a large campus, there are many opportunities for interactions between the different ethnic groups giving students a rich intercultural exposure. The intercultural experience is better appreciated by the more matured graduates, as they shared in the discussion that this exposure gives them better understanding and appreciation of colleagues from

other countries and ethnic groups in the work place. This is reflected by 3 votes for rating of 4 and 5 for diversity of students.

Faster completion is a default structure of TNE, as such, it is expected that this aspect will garner more votes (3 votes) This trend is consistent in all the four groups. The combined four groups consist of 26 participants, of which 22 participants, an average of 85% rated this aspect at 4 or 5. All four groups voted between 75% to 90% of the participants giving this aspect the higher rating.

There were two aspects that obtain low ratings from 50% of the participants were:

- Opportunity to move to on-campus and
- Access to Home Campus facilities

The choice of Group Three for the above 2 aspects is distinctly different from the other three groups. Apart from Group Two which comprises of all international students that rate these two aspects favourably, the other two groups, Group One and Group Four had maintained a neutral position, rating at 3. For Group Three, both aspects received 2 votes each, which is 50% of the group. When probed during the focus group discussion, additional cost for moving to on-campus was cited as the main obstacle. With on-campus being not crucial, the access to home campus is correlated, since they will not be on-campus, thus received lower rating.

#### **Group Four – Five TNE Graduates of Over Two Years from Graduation**

This group consists of five older graduates (more than 2 years after graduation) from three different TNE programmes, namely 1 female graduate from RMIT University, 3 female graduates from University of London (UOL) from UK and 1 male graduate from Victoria University (Australia) were invited to complete the questionnaire and an

interview during the research period (refer to Appendix C for the sample questionnaire). RMIT University and University of London Bachelor degree programmes were conducted by SIM Global Education while Singapore Institute of Commerce conducted the MBA programme of Victoria University, Australia. (Singapore Institute of Commerce which was established in 1947 had since closed in 2017 for its inability to meet CPE regulatory requirements for External Degree Programme.)

All five graduate participants in this group Four were in the age group of 26 to 35 years old and had graduated more than 3 years ago and had been working for the duration after graduation. Four of the participants are working at managerial roles while the 5<sup>th</sup> participant work in an executive role. All except the graduate from China are currently working in Singapore, while the Chinese graduate had move back to work in Guangzhou, China.

After the submission of the surveys, each participant was individually interviewed by me. The demographic is shown in Table 5.17.

All three UOL graduates were from the polytechnic pathways and as such had credit transfer, with advance standing of 1 year to fast track their studies, while the RMIT graduate had a diploma from BCA Academy, part of the statutory board, Building and Construction Authority under the preview of the Singapore Ministry of National Development. She too, had credit transfer, with advance standing of 1 year to fast track her Bachelor in Construction Management by RMIT University. The Victoria University MBA graduate had a degree from an Indian university in Chennai, Tamil Nadu.

Table 5.17 Demographic of participants of Group Four

Country	Degree	Graduation	Institution	Gender
China	Bachelor	2016	RMIT	Female
Singapore	Bachelor	2015	UOL	Female
Singapore	Bachelor	2016	UOL	Female
Singapore	Bachelor	2015	UOL	Female
India	Master	2010	Victoria	Male

**Question 1 – What are the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)**

Similar to the earlier three groups, the same structured questionnaire was used. The graduate participants were asked to select more than one answer that apply to their circumstances when they embarked on a TNE programme for their degree.

The findings are summarised and presented in table 5.18 below. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group. In this group, the top 2 responses received 3 and above responses. The others including the 4 without response will be discussed during the interviews to verify the accuracy.

Table 5.18 Summary of responses on rationale to take a TNE programme from Group Four

Rationale for taking a TNE Programme			
Cheaper than going overseas			4
Unable to gain admission into the local public universities			3

<b>Faster to complete a degree</b>				<b>2</b>
Wider choice of courses				1
Able to work part-time while studying				1
To attain a foreign qualification				1
Flexible time-tabling				1
Night classes available				1

*Note- No response from the other 4 reasons*

Cheaper to go overseas is the top the choice, given by the three local females participants and the participant from China. The cost of pursuing a degree in UOL in London, UK or a degree with RMIT in Melbourne, Australia will be much higher than doing the same programme in Singapore. The three Singaporean shared during the individual interview that cost was the main reason for them to pursue a programme with UOL compared to RMIT as both universities are hosted by SIM Global Education. They are able to save about GBP7,200 for the whole programme. The price differential between UOL and RMIT lies in the delivery of the course. RMIT deploy its home campus's faculties on "fly-in/fly-out" format for some of the key modules, while UOL programmes are fully taught by local adjunct staffs and supported by the academic staffs of SIM Global Education.

Again, consistently listed by Group One and Group Three, Group Four similarly picked "Unable to gain admission into the local public universities" as the next second highest rationale for taking a TNE programme. This selection is consistent when the participants are Singaporeans. Group One and Group Three consist of all Singaporeans participants. During the individual interviews, the three local Singaporeans participants shared that they were unsuccessful in their applications to

the local universities as they were not the top graduates from the local polytechnics, having graduated with average and above average grades. They shared that for polytechnic graduates to be admitted to the local universities, they had to have excellent grades, probably in the top 10% of the cohort to be successful as the admission competition is very intense. Prior to the expansion of CPR to 40% by 2020 as recommended in 2012 by the Report of the Committee on University Education Pathways Beyond 2015 (CUEP 2015), only 20 per cent of polytechnic graduates made to the six local universities. By 2019, this had increased to 30 per cent. (Straits Times, Jan 11 2021)

Faster to complete a degree arises from 2 factors; namely the trimester structure of programme delivery and the credit transfer given to polytechnic diploma holders allow polytechnic graduates to commence study from year 2 of the degree programme. The three local Singaporeans were graduates from polytechnics; thus, they only need to complete their studies over four trimesters or in 15 months under the trimester delivery structure instead of the regular 24 months or six trimesters for those students without credit transfer. For studies in the home campus of either UOL or RMIT, the duration will be on semester format which will take 2 years with credit transfer and 3 years for those without credit transfer.

**Question 2 – How likely are you to recommend others in taking a transnational programme?**

This structured question, similar to the earlier three groups, requires the graduates using a Likert scale to rate from a scale of 1 to 5 (5 being highly likely and 1 being highly unlikely) whether they will recommend their friends to study in a TNE programme. The responses were summarised in the Table 5.19, rating the 5 levels

of likelihood in the format similar to Group One. Rating from 1 to 5 to indicate their likelihood to recommend. A rating from 4 and 5 is classified as a favourable response, while rating of 1 and 2 is classified as an unfavourable response.

Table 5.19 Summary of responses on recommending others to take a TNE programme from Group Four

<b>Recommending others to take a TNE Programme</b>					
	<b>Highly Unlikely</b>		<b>Neutral</b>		<b>Highly Likely</b>
<b>Rank</b>	1	2	3	4	5
<b>Result</b>	2	2		1	
	<i>Positive scale from Likely to Highly Likely (3 to 5)</i>				
	<i>Negative scale from Unlikely to Highly Unlikely (1 to 2)</i>				

Responses from this group appear fairly consistent with group three, however, during interviews, the responses were as follows:

- Prefer to keep things to themselves as attending a TNE programme is nothing to boast. (2 respondents)
- Cannot be bothered (by the Master graduate)
- Was not interested in the referral incentives. (All five were not interested in this scheme)

Only the RMIT graduate from China was likely to recommend, giving a rating of 4. Her rationale was that she was proud to be associated with RMIT and SIM Global Education. She graduated with High Distinction in her cohort and is currently pursuing a Master degree with a reputable Chinese University, Central University of Finance and Economics.

This was a huge contrast to the responses from 2 of the UOL graduates who felt that doing a TNE is nothing to be proud or to boast about- an issue with the unconscious bias of having the “stigma” of being given a second chance. As highlighted in the article “*Changing the perception of TNE as “second chance”*” by Dr Sam Choon Yin, dean of PSB Academy in October 2017.

**Question 3 - How much do you value these aspects of a transnational programme? (Rate them with your votes)**

The five graduate participants were asked to vote from 1 to 5 for the ten aspects of their experience from the TNE programme in this structured question.

- 1 and 2 being Negative – Low;
- 3 being Neutral;
- 4 and 5 being Positive - High.

The findings are summarised and presented in Table 5.20 below. The responses were analysed and highlighted for discussions during the focus group in details, with particular focus on the top responses that obtained 50% or more from the group votes for rating 4 and 5 for each of the 10 aspects of TNE programme.

Table 5.20 Summary of responses on the different aspects of TNE programme from Group Four

Aspects of TNE Programme	Low				High
	1	2	3	4	5
Academic expertise				1	4
Quality of faculties				3	2



<b>Quality of teachings</b>				<b>2</b>	<b>3</b>
<b>Variety of courses</b>			<b>2</b>	<b>3</b>	
Opportunity to move to on-campus			<b>4</b>	<b>1</b>	
<b>Quality of facilities</b>			<b>2</b>	<b>3</b>	
Diversity of students	<b>1</b>		<b>2</b>	<b>2</b>	
<b>Flexible learning structure</b>			<b>2</b>	<b>2</b>	<b>1</b>
<b>Faster completion -3 terms/ year</b>			<b>1</b>	<b>3</b>	<b>1</b>
Access to Home campus faculties	<b>1</b>		<b>4</b>		
<b>Total Votes (50)</b>	<b>2</b>	<b>0</b>	<b>17</b>	<b>20</b>	<b>11</b>
	<i>Positive scale from rating of 4 to 5</i>				
	<i>Neutral scale at rating of 3</i>				
	<i>Negative scale from rating of 1 to 2</i>				

Overall, the responses were generally positive, with 31 votes (62%) having a rating of 4 and 5, (highlighted in yellow in Table 5.20), 2 votes (4%) having a negative rating of 1 and 2, while 17 vote (34%) were given a neutral rating of 3. There were 7 aspects that garnered 3 votes or more for rating of 4 or 5, namely:

- Academic expertise (all 5 votes);
- Quality of Faculties (all 5 votes);
- Quality of teachings (all 5 votes);
- Variety of courses (3 votes);
- Quality of facilities (3 votes);
- Flexible learning Structure (3 votes) and

- Faster completion (3 votes)

The responses from this group are consistent with the previous 3 groups where participants were satisfied with the quality of academic expertise, faculties and teachings. This correlated with 4 out of the 5 participants who did their studies with SIM Global Education with its purpose-built campus and with long term established university partnership. Choosing SIM Global Education thus allowed students to have a wide choice of programmes and universities as well as quality facilities.

Voting for higher ratings for flexible learning structure and faster completion is a default features for TNE programmes, these are one of the unique selling features of TNE programme and are widely promoted in all marketing and advertising campaigns for most PEIs.

Voting on neutral grounds were consistent with the other groups, namely Opportunity to move to on-campus; Diversity of students and Access to home campus facilities. During interviews, the general mindsets of the 3 UOL graduates were that they just want to get the degrees and were not bothered by many of the aspects, less so with the 3 aspects that they rated less favourably. In their words-

***“I just want to get the degree and move onto the workplace and hopefully with the degree, it will get me to be in a better position to be competitive in the workplace with a reasonable salary.”***

#### **5.4. Lecturers’ Perspectives, Experiences and Expectations**

This section draws insights from lecturers teaching in TNE programme. All these lecturers are approved by the local regulator, CPE under the Private Education Act as well as approved to teach by the respective university that they are engaged to

teach the modules, in accordance to the registration with CPE. In accordance to the Act, all lecturers must meet the minimum English language criteria and possess a qualification that is one level higher than the programme that they are approved to teach.

An analysis of all the completed questionnaires received from three existing teaching staffs teaching different TNE programmes with different PEIs. A fourth participant response of only the open questions were included in the analysis. Three existing teaching staffs with teaching experience ranging from two to twenty years in a TNE programme in various PEIs were invited to complete a questionnaire to share their experiences and views on TNE in the Singapore context (refer to Appendix D for the sample questionnaire).

The demographic of the three lecturers and the fourth participant is presented in Table 5.21. Two of the lecturers were sessional staffs, each teaching in 2 different PEIs, thus having experiences from 4 PEIs (East Asia Institute of Management, London School of Business and Finance, SIM Global Education (RMIT programme) and Kaplan Higher Education (Murdoch University programme) while the third participant is a full-time teaching staff in an International Branch Campus, EHL Campus Singapore, the Asia-Pacific branch of EHL (Ecole hoteliere de Lausanne)

While this group is small, with only three lecturers returning their survey out of five invited, the richness of the comments and feedbacks in the open-ended questions are valuable for this research. One participant returned with the Open-ended questions only as he had stopped teaching for many years after moving into senior management of two different PEIs as Chief Executive Officer and prefer not to answer the three structured questions directed at teachings and students.

Table 5.21 Demographic of Lecturers

Gender	Age Group	Qualifications	Years taught	Number of PEI	Status
Male	Over 60	Master	20	2	Sessional
Male	Over 60	Master	2	2	Sessional
Male	41-50	Master	15	1	Full-time
*Male	41-50	PhD	10	2	Stop Teaching

**Question 1 - What are the main reasons for you to teach in a TNE programme?**

**(Select all that apply)**

The structured questionnaire listed ten possible reasons with an open reason of others to capture any possible reason that were overlooked by me, being the final reason. The lecturers were asked to select more than one answer that apply to their circumstances when they embarked to teach in a TNE programme.

The findings of the three lecturers were summarised and presented in table 5.22 below. The responses were analysed and highlighted in the table, with particular focus on the top responses that obtained 50% or more from the group.

Table 5.22 Summary of response on rationale to teach in TNE programme from Lecturers

Rationale for teaching in TNE Programme				
Able to share my experience and knowledge	3			
As a profession	2			
To utilise my free time	1			
Additional income	1			

Wider choice of courses				1
Unable to gain admission to teach in public IHLs				1
Flexible time-tabling				1
Night classes available				1
Able to teach part-time while holding a day job				1

*Note- No response for 2 possible reasons inclusive of the open question*

In this group, only two reasons that received two and more responses and are highlighted in yellow. The two reasons that secure two or more responses were, namely sharing experiences and teaching as a profession, while the remaining seven only had a single response each.

All three lecturers are matured and had established their personal career successfully and this resonate with their reasons to teach as they are “Able to share my experiences and knowledge” being the top reason for all three lecturers. While two of them had been teaching between 15 to 20 years, the third person with two years of teaching is over 60 years old.

With two of the lecturers having taught for more than 15 years, they had treated this as a profession which was the second most responses for teaching.

**Question 2 - How much do you value these aspects of a transnational programme? (Rate them with your votes)**

Table 5.23 Summary of response on the aspects of a TNE programme from Lecturers

Aspects of TNE Programme	Low				High
	1	2	3	4	5
Academic expertise			1	2	
Quality of faculties			1	2	

Quality of teachings				3	
Variety of courses				3	
Opportunity to move to on-campus		1		2	
Quality of facilities			1	2	
Diversity of students		1	1	1	
Flexible learning structure		1		2	
Faster completion with 3 terms/ year		1		2	
Access to Home campus faculties		1		2	
<b>Overall Votes (30 votes)</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>21</b>	<b>0</b>
	<i>Positive scale from rating of 4 to 5</i>				
	<i>Neutral scale at rating of 3</i>				
	<i>Negative scale from rating of 1 to 2</i>				

The findings are summarised and presented in Table 5.23 above. The responses were analysed in detail, with particular focus on the top responses that obtained 50% or more from the group votes for rating 4 and 5 for each of the 10 aspects of TNE programme.

Overall, the responses were positive with 21 votes out of a total of 30 votes, with all three voted at a rating at 4 or 70% of the total votes. Majority voted positively for nine of the aspects with the only blip being diversity of students, receiving only a single vote.

Overall, this aspect received an average of neutral rating.

Five aspects received a single negative response rating of 2 for opportunity to move on-campus; diversity of students; flexible learning structure; faster completion and access to home campus facilities.

**Question 3 - How likely are you to recommend others to teach in a transnational programme?**

Table 5.24 Summary of responses on recommending others to teach from Lecturers

Recommending others to teach in TNE Programmes					
	Highly Unlikely		Neutral		Highly Likely
Rank	1	2	3	4	5
Result			1	1	1
	<i>Positive scale from Likely to Highly Likely (4 and 5)</i>				
	<i>Negative scale from Unlikely to Highly Unlikely (1 and 2)</i>				

The responses were summarised in the Table 5.24, listing the 5 levels of likelihood in the format of 1 being Highly Unlikely, 3 for Neutral, 5 for Highly Likely. A listing from 4 and 5 will be deemed as favourable to recommend others to take a TNE programme. In this group, 2 are in favour with 1 being neutral to recommend others to teach in a TNE programme.

The 6 open-ended questions were meant to obtain their feedbacks, views and comments on TNE programmes. These semi-structured questions allow wide ideas contribution compared to the earlier part of structured questions. The semi-structured open-ended questions seeking their personal opinions and views were:

**Open Question 1 - What in your opinion and experiences teaching in the PEIs, are the challenges of the private education institutes?**

Table 5.25 Feedbacks and Comments on PEIs' Challenges

Lecturers	Comments
Charles	<ul style="list-style-type: none"> <li>The standards and quality of students does not match the University Partners' (UP) expectations</li> </ul>
Felix	<ul style="list-style-type: none"> <li>Poor administrative support from PEIs;</li> <li>Unclear module descriptor in many cases;</li> <li>Poor English comprehension affect understanding of module</li> </ul>

<b>Natt</b>	<ul style="list-style-type: none"> <li>• Lack professionalism and support from full-time admin staffs for support of students, teachers, curriculum and liaison with University Partner</li> <li>• Staffs not trained or motivated compared to AUs</li> <li>• UP also lack motivation to support local partner, either slow or not helpful in sharing material and demanding.</li> </ul>
<b>John</b>	<ul style="list-style-type: none"> <li>• Abstain from this question</li> </ul>

Question 1 of the semi-structured open-ended question seeks to gather an overview information on the various PEIs that the lecturers are teaching with regards to the existing situations and challenges that they faced themselves as well as those faced by the PEIs and other stakeholders. The details in Table 5.25 above.

With Charles having over 20 years of teaching in TNEs, he has seen situations from the worst time in pre-Private Education Act period to the current situation where PE Act had been in place for more than ten years. In his opinion, he has seen improvements, but with a very competitive environments, his feedback and comment on the conflicts between the university expectation and the students' enrolments by the PEI is prevalent. This can be attributed primarily from the following:

- No limit/cap to the enrolment imposed by either PEI or University Partner – this result in maximising the commercial interests of both entities. The “massification” approach to recruitment is a major contrast to the cap of recruitment at the AUs due to the CPR cap of 40% guidelines by MOE.
- The “cream of the crop” is normally from the GCE A Level pathway and most of the students ultimately pursue admission to the local AUs or travel overseas to pursue a degree at top universities in countries such as Australia, United Kingdom or United States. Thus, most of the better performing students are found in the local AUs or in the Ivy league



Universities of USA, Russell Group universities of UK or the Group of 8 universities of Australia.

- University partners are similarly regulated for quality assurance by the regulatory agency in their home countries. in this case by Australian Government Tertiary Education Quality and Standards Agency (TEQSA) for the Australian universities of RMIT University and Murdoch University where he teaches.

This feedback resonates closely to the general attitude from the ten students in group one and the three graduates in group four.

Felix's experiences with the PEIs that he teaches, arises from the limited resources faced when teaching in a mid-tier PEI. Although both PEIs are fairly well established, they are not of the similar strength compared to the two PEIs that Charles teaches, which are the top two PEIs in Singapore, namely SIM Global Education and Kaplan Higher Education. The gap between the bigger PEIs and smaller PEIs are significant, in term of facilities, student enrolment and university partners. The bigger student enrolments ensure greater financial resources that allow better facilities, attract better staffs and better university partners leading to a virtuous cycle leading to favourable results and outcome. Whereas, the smaller PEIs tend to be in the opposite and tend to be in a vicious cycle of improving themselves with limited resources.

Although Natt is a full-time staff of an International Branch Campus, his experiences again reflect the size of the operations. EHL is a small and niche campus, thus catering to a niche target market. The campus may not be competitive to attract the staffs with sufficient experience to support students, academics and university

partners. Lacking economy of scale thus hamper staffs' training and development, thus entering a vicious cycle as well. University's resources are limited and outcome oriented, this a small campus will not be able to obtain the same level of resource to achieved the same level that the local AUs can offer to staffs for training and development.

**Open Question 2 - What are your opinions of the students in a transnational programme?**

Question 2 of the semi-structured open-ended question seeks to gather insights on the students in PEIs that the lecturers had interacted during the course of their teaching.

Table 5.26 Feedbacks and Comments on Students

Lecturers	Comments
<b>Charles</b>	<ul style="list-style-type: none"> <li>• Differing mindsets and not always prepared to work hard to complete their studies. Many not well equipped to study at university level especially from polytechnic backgrounds</li> </ul>
<b>Felix</b>	<ul style="list-style-type: none"> <li>• Chinese and South Asian students' comprehension of English pose challenge to teaching</li> </ul>
<b>Natt</b>	<ul style="list-style-type: none"> <li>• Poor command of English for international students, except the minority of IBP students</li> </ul>
<b>John</b>	<ul style="list-style-type: none"> <li>• No difference from other students</li> </ul>

The profile of students taught by Charles are majority from the polytechnics as both universities, RMIT and Murdoch are very popular with the polytechnics' graduates, due to the comprehensive and transparent credit transfer articulations with all the five local polytechnics. Many of these students are from cognate disciplines, thus, commence their studies from year two. Coupled with the curriculum of polytechnics

programmes are applied skills-based learning, students have less exposure to the academic and theoretical oriented curriculum of universities. The core objective of polytechnic programmes is to prepare graduates with practical knowledge of training on the basic level that can be applied straightaway in the workplace. On the other hand, the GCE A Level curriculum focus on preparing students for university study. The issues faced by Charles could be summed as follows:

- Different focus in preparing students for the workplace by the polytechnics and for university studies.
- Polytechnics' applied learning structure is a sharp contrast to the academic and theoretical learning structure.
- Advance standing leading to starting programme on year 2 took away the preparation phase of university life.
- Disruption of study for the local males due to national services of 2 years results in a gap and some of them had 'lost touch' with the foundation of their subjects.

Both Felix and Natt's experiences mainly arises from the command of English from the international students, particularly those from countries where English language is not commonly use, such as China, Indonesia and Vietnam. This is a common phenomenon among international students all over the world.

John's comment is pragmatic and practical as all institutions whether PEIs or AUs will have similar students faced by the 3 lecturers, it is a question of the extent and prevalence of such issues.

**Open Question 3 - In your opinions, do you find the programmes offered by the various PEIs meet the relevance of the employment markets?**

Question 3 of the semi-structured open-ended question seeks to gather an overview insight into the various programmes that the lecturers is teaching and correlated to their commercial experience on the relevancy and recency of the contents to meet the needs of the employment markets.

Table 5.27 Feedbacks and Comments on TNE Programmes meeting markets' needs

Lecturers	Comments
Charles	<ul style="list-style-type: none"> <li>Limited relevance but most part the foundational content is there</li> </ul>
Felix	<ul style="list-style-type: none"> <li>To some degree</li> </ul>
Natt	<ul style="list-style-type: none"> <li>PEIs do not have quality and relevance process built in and not regular updates. Probably due to lack of trained academics to manage the adjuncts and relax attitude in student evaluations</li> </ul>
John	<ul style="list-style-type: none"> <li>Generally, yes, but ROI on education is questioned in view of the focus on skills vs academic qualifications</li> </ul>

The response to this question shows some degree of relevance in meeting the markets' need. As majority of the programmes offered by most PEIs are in the business and administrative disciplines, such as marketing, accounting or human resource management, these programmes will have an easy fit to meet the needs of the workplace, as the change is gradual.

Technical programmes such as ICT and engineering will demand frequent programme refresh as well equipment investment to meet the ever-changing of technologies and skillsets.

**Open Question 4 - In view of MOE focus on SkillsFutures Initiatives, expansion of the local universities' places and relevance of degrees, what are your views on the relevance of continuing having transnational programmes in Singapore?**

Question 4 of the semi-structured open-ended question seeks to gather their sentiments on the government focus on skills through the SkillsFuture Initiatives and the increase places in the AUs that will impact the different stakeholders of the PEIs' ecosystem that include the management and staffs, the shareholders and their university partners.

Table 5.28 Feedbacks and Comments on TNE Continued Relevance in SkillsFutures

Settings

Lecturers	Comments
Charles	<ul style="list-style-type: none"> <li>TNE fulfil the demand for a degree but unable to gain entry to AUs</li> </ul>
Felix	<ul style="list-style-type: none"> <li>There is a market and also attractive to international students</li> </ul>
Natt	<ul style="list-style-type: none"> <li>Still relevant as SkillsFuture address a different need. Need to cater to the other left from the 40% CPR</li> </ul>
John	<ul style="list-style-type: none"> <li>There is a place for TNE but is getting more competitive. There will be more niche programmes as well as short/ executive programmes</li> </ul>

**Open Question 5 - In your opinion, what is the ideal numbers of PEIs and programmes?**

Since the launch of the Private Education Act in 2009, the Private Education sector had seen a drastic consolidation on the numbers of PEIs from the high of an estimate of 1,200 PEIs during the pre-PE Act to the latest numbers of 314 PEIs, of which only 68 PEIs, excluding the 14 IBCs offering External Degree Programmes in partnership with overseas universities as at March 2022. The remaining 246 PEIs are involved non-degree programmes, foreign schools K1 to K9 programmes and vocational programmes. The number of higher education programmes had also reduced to less than 1,377 against some 3,000 programmes before 2009. Question 5 of the semi-structured open-ended question seeks to gather the sentiments on the

ideal numbers of PEIs and programmes against the backdrop of some 80 PEIs with close to 1,400 programmes from 103 foreign universities including 14 universities with their own International Branch Campus.

([https://www.tpgateway.gov.sg/resources/information-for-private-education-institutions-\(peis\)/pei-listing](https://www.tpgateway.gov.sg/resources/information-for-private-education-institutions-(peis)/pei-listing))

Table 5.29 Feedbacks and Comments on Ideal Numbers of PEIs and Programmes

Lecturers	Comments
<b>Charles</b>	<ul style="list-style-type: none"> <li>Should not have more than 30 PEIs that offer no more than 20 programmes per PEI</li> </ul>
<b>Felix</b>	<ul style="list-style-type: none"> <li>No idea on the ideal number of PEIs and programmes</li> </ul>
<b>Natt</b>	<ul style="list-style-type: none"> <li>Ideally 30 large PEIs of college size with own purpose-built campus, not shopping malls or old MOE Buildings. Malaysia is a good example.</li> </ul>
<b>John</b>	<ul style="list-style-type: none"> <li>Market forces will correct and weed out the weaker PEI. Consolidations in the future with a few larger PEIs</li> </ul>

Both Charles and Natt opinions of having not more than 30 PEIs could be a feasible number as the numbers of large PEIs are less than 10. The large PEIs with more than 5,000 students, excluding those International Branch Campuses are the following:

- SIM Global Education (SIM GE) with 11 university partners offering 108 programmes.
- Kaplan Higher Education Institute and Kaplan Higher Education Academy, combine with 11 university partners, offering close to 100 programmes.
- PSB Academy with 13 university partners.
- Management Development Institute of Singapore (MDIS) with 11 university partners.
- Dimensions International Colleges with 5 university partners.

Among these 5 large PEIs, only SIM GE and MDIS had their own purpose-built campuses. Kaplan and PSB operates from commercial malls in the city precinct while Dimensions operate from multiple locations in vacated former MOE schools on short lease of 9 years from the Singapore Land Authority.

John’s opinion reflects the current trend and it is expected there will be further consolidations in the future with a smaller number of large PEIs, several International Branch Campuses and some niche programme PEIs.

With the two pushes by the government - the shift from academic qualifications to skills and lifelong learning, it is expected that many PEIs will pivot toward these two directions and possibly towards John’s suggestions of niche external degree programmes and short executive education. The mass market of external degrees will consolidate to a smaller group of larger PEIs and reduce number of TNE university providers from overseas.

**Open Question 6 - What are the areas for improvement in the transnational education programmes?**

This final open question seeks suggestions on areas for improvement to enhance the attractiveness, relevancy and sustainability of TNE programme.

Table 5.30 Feedbacks and Comments on Improvements to TNE

Lecturers	Comments
Charles	<ul style="list-style-type: none"> <li>Streamline offerings so that there is more focus in their position as a provider for certain disciplines. Most offer arts and humanities instead of professional or specifically management courses</li> </ul>
Felix	<ul style="list-style-type: none"> <li>Nothing to suggest* (Improve the quality of supporting staffs)</li> </ul>
Natt	<ul style="list-style-type: none"> <li>Invest in quality staffs, quality process, quality teachers and training.</li> </ul>

<b>John</b>	<ul style="list-style-type: none"><li>• More relevant programme to meet employment needs e.g., data analytics, digital marketing, UI/UX, software engineering</li></ul>
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All the suggestions are very relevant to improve the overall quality of both the programmes and the supporting infrastructure. Felix wrote nothing to suggest but added the suggestion to improve the quality of supporting staffs during the telephone conversation to clarify his position.

CPE as the regulator does not oversee the relevance of the programmes, leaving this to the market forces to influence the commercial viability for each of the programme. This is the key responsibilities of the university partners and the PEIs to evaluate each programme appeal and market needs.

Current requirements from the CPE only cover the minimum qualifications for lecturers to teach at each programme level and the suitability and training of lecturers is delegated to the approval of the university partners and the PEIs. For PEIs with EduTrust accreditation, CPE will assess the process and governance structure with emphasis on the protection of the interest of the students particularly on the fees and the integrity of the board of the PEIs.

The introduction of the mandatory annual Private Education Institution Graduate Employment Survey (PEI GES) for graduates from full-time bachelor's level External Degree Programmes (EDP) in 2016 aims to help prospective students to make informed decisions on their education choices. This survey is similar to the survey conducted for the graduates of the local Autonomous Universities, polytechnics and the Institute of Education. The latest summary of the GES survey comparing PEIs and AUs is shown in Table 5.31 below.



Table 5.31 Graduates Employment Outcomes of PEI 2019/2020 cohorts and AU  
2020 cohort

Employment Indicators	PEIs (Full-time EDP)	AUs (NUS, NTU, SMU and SUSS)
Employed	80.7%	93.6%
Unemployed	19.3%	6.4%
Median Gross Monthly Salary (Full-time)	\$2,900	\$3,700

Table 5.32 Employment Outcomes of Fresh Full-Time EDP by selected PEIs

Private Education Institution	Employment Rate of Fresh F/T EDP	Median Gross Monthly Salary	Respond Rate
SIM Global Education	85.7%	\$2,923	42%
Kaplan Higher Education	77.6%	\$2,800	46%
PSB Academy	71.9%	\$2,800	33%
James Cook University	64.1%	\$2,950	33%
MDIS	60.4%	\$2,700	44%

By providing such information to all prospective students, MOE hopes that better choices will be made and the market forces will reset the programmes from the PEIs and university partners. Table 5.32 above shows a breakdown of individual PEI performance in the PEI GES of 2019/2020.

While the above table gives some indication to the employment outcomes, the PEI need to work closer with the graduates to increase the respondents' rates as currently only 33 to 46% of their graduates responded to the survey for the five PEIs listed in Table 5.32. Overall, the respondents' rate for the PEI GES was 32.9% out of 9,289 full-time fresh graduates of EDPs (Media release, SSG, 12 April 2021).

[www.ssg.gov.sg/cpe/ges](http://www.ssg.gov.sg/cpe/ges)) There is an urgent need to increase the response rates to provide a clearer comparison with the AUs GES. The AUs respondents' rates for the 2021 GES was 75.2% out of 14,921 fresh graduates while the 2020 GES was 80.0% out of 17,466 full-time fresh graduates. (<https://www.moe.gov.sg/media/file/ges-2021>)

## 5.5. TNE Providing Institutions' Perspectives and Expectations

This section intends to seeks insights from the university partners with university representatives based in Singapore to support their TNE programmes. The Pro Vice-Chancellor, most senior member of each of the university representative based in Singapore was approached to be interviewed by me using semi-structured interviews (refer to Appendix E for the sample questionnaire) These three universities interviewed in this exercise are from Australia with significant presence in Singapore both in the numbers of students and with over ten years presence in Singapore. The three universities are Curtin University, Murdoch University and University of Newcastle, Australia. All the three universities will form the case studies for this research.

### A. Background questions

Table 5.33 Partnership Models and Singapore Presence

University	Presence in Singapore	Current Partnership Model	Remarks
Curtin	1986	Limited university staffs based in Singapore. Branch Campus operated by Navitas from Australia since 2008	With various partners prior to partnering Navitas with own Branch campus in 2008. Moving to new campus in July 2022. Student population -2,000

			with 60% international students and 70% full-time.
Murdoch	1991	Set up university branch office in Singapore since 2011 to oversee the regional activities. Franchise arrangement with Kaplan since 2007	With various partners prior to partnering Kaplan in 2007. Student population - 5,500 with 90% domestic students and 35% full-time.
Newcastle	2002	Set up university branch office with academic staffs since 2006 to support partners. Franchise with PSB since 2002, BCA in 2013 and concurrently having own campus for postgraduate and executive education	Partnered PSB since 2002 followed by BCA in 2013. Concurrently, established own branch campus in February 2022. Student population- 2,000 with 70% international students and 80% full-time

Table 5.33 provides = a snapshot of the background history of the three different universities from part one of the questionnaire. Table 5.34 below lists the advantages and limitations of their existing respective partnership models.

Table 5.34 Advantages and Limitation of Partnership Models

University	Advantages	Limitations
<b>Curtin</b>	<ul style="list-style-type: none"> <li>• Able to focus on academic matters</li> <li>• Lower risk compared to wholly owned IBC</li> <li>• Tap of partner's global network for marketing reach</li> <li>• No exposure to facilities and infrastructure cost</li> <li>• Limited staffs from Curtin on secondment</li> </ul>	<ul style="list-style-type: none"> <li>• Different business focus between partner and university</li> <li>• Can only focus on teaching and lesser room to establish research collaboration due to limited Curtin staffs</li> <li>• Lack control over marketing</li> <li>• Need to share fees</li> </ul>

<b>Murdoch</b>	<ul style="list-style-type: none"> <li>• Lower risks and commitments compared to wholly owned IBC</li> <li>• Tap on partner marketing reach</li> <li>• No exposure to facilities and infrastructure cost</li> </ul>	<ul style="list-style-type: none"> <li>• Co-exist and share campus with other universities of the partner</li> <li>• Less control over teaching faculties</li> <li>• Need to share the fees with partner and home campus</li> </ul>
<b>Newcastle</b>	<ul style="list-style-type: none"> <li>• Leverage on partners competency in marketing and infrastructure</li> <li>• Own academic staffs ensure consistent and equivalent quality with home campus</li> <li>• Own campus to focus on specialised programmes and research to project university's Asia-Pacific focus</li> </ul>	<ul style="list-style-type: none"> <li>• Higher cost structure</li> <li>• Need to share fees with partners and home campus</li> <li>• Need to comply with PE Act and local regulations for own campus</li> </ul>

Each university adopts a different approach to TNE arising from the home campus's strategy, financial strength and Singapore's ecosystem for students' recruitments and research opportunities.

Curtin University's branch campus approach to TNE involved partnering with education providers overseas such as in China, Dubai, Malaysia, Mauritius, Sri Lanka and Vietnam either with Navitas or other partners including local universities.

Murdoch University currently partners Navitas in Murdoch University Dubai since 2019 and with Kaplan for the Kaplan Myanmar University College since 2018 for their branch campus in the respective countries.

(<https://www.murdoch.edu.au/TNE/Overview-of-Transnational-Education-at-Murdoch-University>)

## B. Policy context questions

A total of six semi-structured questions formed the basis of part two of the questionnaire and the findings are listed in the six tables from Tables 5.35 to 5.40 listed below. In each sub-section of the question, I had added remarks for clarity of the response (highlighted in yellow)

Table 5.35 Student Experiences

<b>Q1. How and what are the student experiences in following areas of TNE</b>			
	<b>Curtin</b>	<b>Murdoch</b>	<b>Newcastle</b>
<b>Programme diversity and availability</b>	Limited programmes. To increase when move to new campus in July 2022	Greater flexibility but limited to business and ICT programmes	Limited offering based on commercial appeal by partners
Remarks – with close to 1,400 EDP programmes, each PEI will assess with the university providers to evaluate the commercial viability of each programme and compare to what is available among the competitions and the AUs.			
<b>Campus experiences and infrastructure</b>	Full stand-alone campus experience. New campus will be different as this will be in a shared building with others	Murdoch Edge provide student support. Kaplan modern Smart Campus. Easy access to F & B in the building. Good transport connectivity	PSB have 2 campuses housed in shared buildings. BCA has its own campus within the well-equipped facilities of its parent organisation
Remarks – Land cost is a premium in Singapore and the current focus of the economic agencies in Singapore place more priority to allocate land for foreign system schools (FSS) to bid as this schools are supporting the young children from K1 to 9 of the large expatriate workforces.			
<b>Faculties support / access / interactions</b>	Limited Curtin staff except online access to home campus	MU small team offer coaching and mentoring Access to home campus faculties	Full access with local based faculties and student support staffs
Remarks – Murdoch and Newcastle employed a small group of full-time local faculty and non-academic staff to support their PEI partners in teaching, quality assurance, student admissions and engagement. Newcastle's faculties are active			

in conducting research either jointly with the home campus or other universities in Asia as well as collaborating with large commercial organisations for applied research. Curtin had very limited faculty based in Singapore with restricted roles in academic support as all operational matters are handled by their operation partner, Navitas.

<b>Affordability</b>	Lower for some programmes. Cheaper for international students due to trimester format	40 to 50% lower than home campus	Lower than going to Newcastle in New South Wales
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Remarks – Comparing cost to home campus, the cost in Singapore to students are more affordable to both the domestic and international students

<b>Study Abroad opportunity</b>	Available but few took up the opportunity	Yes, to Perth. Annually 40 to 50 students took part. Plan to have Perth/Singapore/Dubai rotation along the lines of SP Jain	Available but few took up the opportunity
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Remarks – This should be a strong unique selling point for all universities. There is a conflict of interest between university and their PEI partners as any students who took the study abroad programme is a revenue lost to the PEIs as students will be paying the fee directly to the university. A win-win solution is needed to expand this feature.

Table 5.36 TNE Contributions to the communities

<b>Q2. What are the TNE contributions to the local communities</b>			
	<b>Curtin</b>	<b>Murdoch</b>	<b>Newcastle</b>
<b>Alternative to study abroad</b>	Building capacity during the early phase from 1986	Developing capacity building for both lecturers and students	Building capacity for the regions, especially during the Singapore Global SchoolHouse project.

Remarks – TNE provides an effective alternative for students who are unable to secure a place in the local AUs. In the earlier years, this was an effective capacity building alternative. Newcastle’s presence in Singapore started in 2002 when the 3<sup>rd</sup> AU, SMU was just established in year 2000, when CPR was about 20%. The Global Schoolhouse project was launched in 2002 when there was a push for more talent and building talent was the objective of the project.

<b>Provide greater access to HE</b>	During the early phase of 1986 till 2008, the various partners were focusing on domestic students seeking upgrading doing the programme, thus providing access and capacity building.	Being flexible compared to AUs, provide access to more domestic students especially those from the polytechnic pathways where admission to AUs is greatly limited.	Provide access to both domestic and regional international students
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Remarks- Besides as an alternative to studying overseas, the presence of TNE increased the access of HE both for the domestic students as well as the students from the ASEAN region.

<b>Address gaps in the labour market</b>	Programmes meet the market needs	Constantly assess new programmes to be brought to Singapore to address gaps, such as Data Analytics.	Programmes with BCA address the needs of the built environment sector as well as the workplace health and safety sector
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Remarks – The AUs due to the calibrated expansion will be limited in its ability to roll out new programmes. TNEs thus provide a complimentary role in meeting the needs of the markets

<b>Adds/promote intercultural and international understanding and competence</b>	Good mix with international students	Less visible due to high proportion of domestic students and majority on part-time programmes.	Good mix of international students from China, India and Asean region.
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Remarks – With international students and international faculty flying in to teach regularly, this adds diversity and intercultural understanding as well as alternative views

<b>Enhances capacity for collaborative research</b>	Limited by staffs	Builds bilateral relationship especially with the 20,000 strong alumni	Active in regional and domestic research collaborating with other institutions and corporate. Conducted more than 30 researches over the five years.
Remarks – Collaboration opportunities for international faculty when they are in town for teaching with local lecturers or other agencies. James Cook University had recently secured several significant research projects from the government agencies worth several millions SGD.			
<b>Role in SkillsFuture Initiatives</b>	Unable to participate due to requirement for only short courses	Assessing micro-credentials and employability short courses.	Setting up own campus to introduce short executive programmes independently as well as collaborating with existing SkillsFutures providers
Remarks – All university partners need to evaluate this opportunity closer at the senior level as this will enhance its role and position in Singapore.			

Table 5.37 Financial Impacts for Stakeholders

<b>Q3. What are the financial impacts for the stakeholders</b>			
	<b>Curtin</b>	<b>Murdoch</b>	<b>Newcastle</b>
<b>Generate incomes for PEI/support local economy</b>	Local faculties employment and revenue to Navitas	Local faculties employment and revenue to Kaplan	Local faculties employment and revenue to PSB and BCA
Remarks – Financial returns for PEIs and university partners are the crucial parts as there are no government fundings available for PEIs and university partners. The presence of TNE created the local education ecosystem where there are many local lecturers being engaged to teach, creating local employment.			



<b>High cost for student compared to local AUs</b>	Cost is lower than Perth but gap with AUs is closer with the latest increases at AUs	Cost is lower than Perth and other universities but gap with AUs is closer with the latest increases at AUs	Cost is lower than at Newcastle and American TNE. Gap with AUs closing with the recent rates increases at AUs
Remarks- For domestic students, a TNE programme will be higher due to the absence of MOE Tuition Grants provided for citizens and permanent residents. The faster completion time with the trimester format results in a reduction of at least 12 months, thus saving costs for international students, with a shorter stay overseas, whilst allowing domestic students to commence work earlier by at least 12 months. Including the opportunity cost, it may not be higher. Compared to campus in Perth or Newcastle, the cost will be lower with TNE.			

Table 5.38 Quality of Programmes vs On-Campus in Australia

<b>Q4. How does the Quality of programme compare to On-campus in Australia</b>			
	<b>Curtin</b>	<b>Murdoch</b>	<b>Newcastle</b>
<b>Limited Campus experience</b>	Reasonable activities on campus	Part-time students missed out	PSB and BCA have active campus activities
Remarks – Only part-time students may miss the campus experience as they are probably working adults while most of the campus activities are undertaken by full-time students where there are rich activities in all the 3 universities.			
<b>Global and intercultural experience</b>	Good interaction on local campus activities	Good interaction among domestic and international students including the matured part-time students	Good interaction on local campus activities
Remarks- With international students and home campus faculties flying in to teach in some of the modules, there is reasonable intercultural exchange between faculties and students			

<b>Employability of graduates</b>	University well known locally	MU Edge prepares students for the market	University highly regarded with the industry
Remarks – Employability is lower for all PEIs based on latest PEI GES 2019/2020 results. This could be a result of lower respondent rate of an average of 33% while the local AUs respond rate are over 75 to 80%. This may skew the data.			
<b>Lack official local recognition/accreditation</b>	No issue	Not an issue with the large alumni base	Not an issue with the high recognition inclusive of former cabinet minister and senior civil servants among the alumni
Remarks – The 3 universities listed here do not have an issue with this. Newcastle is well known due to the presence of many high-profile alumnus, including a former cabinet minister and several high-level civil servants in the various ministries.			
<b>Creates competition for students and staffs with local institutions</b>	Not direct, but with other PEIs	Some programme competes with SIT and SUSS	Not direct, but compete for academic staffs
Remarks – There will be some degree of competition for students especially those from the polytechnic pathways as there is the alternative with SIT and its TNE partners as well as its own degree. For part-time, the competition will be from SUSS. Since both AUs are eligible for tuition grants, the fee will be comparatively lower. Competition for academic and non-academic staffs will be presence too.			
<b>Employers are not aware of new TNE programmes</b>	University well known locally	Kaplan continuing with outreach and industry advisory boards	Newcastle is well known with many high-profile persons in Singapore
Remarks – All 3 universities are reasonably well-known in the industry.			

Table 5.39 Relevance of TNE arrangement to Stakeholders

**Q5 What is the relevance of TNE arrangement to the following Stakeholders**

	<b>Curtin</b>	<b>Murdoch</b>	<b>Newcastle</b>
<b>University Locally and home campus</b>	Financial returns, reputations, international presence, ranking	Financial returns, reputations, international presence, ranking	Financial returns, reputations, international presence, ranking
Remarks – Financial returns are crucial as there is no government fundings for PEI. Programme’s introduction needs detailed commercial evaluation.			
<b>PEI partners</b>	Financial returns, global network	Financial returns, wider programme choices	Financial returns, wider programme choices
Remarks – PEIs existence is for profit as all the different partners are measured by positive financial returns			
<b>Local Students</b>	Accessibility, flexibility of offers	Accessibility, flexibility of offers	Accessibility, flexibility of offers
Remarks – Domestic students including the part-time working adults will be the next phase of student recruitments as the declining demographics of fresh school leavers will be continued to be smaller. For matured and working adults, flexibility will be crucial in their pursuit of upgrading for continuous learning in the lifelong learning era.			
<b>International Students</b>	Affordability, Study abroad	Affordability, Study abroad	Affordability, Study abroad
Remarks – With international students’ cap at all the AUs of not more than 10% of annual intake, there will continue inflow of international students and being more affordable than going on-campus, there will be a consistent market.			
<b>Faculties members local and home campus</b>	Financial return to home campus and additional load	Financial return to home campus, additional load, loyalty of local	Financial return to home campus, additional load, loyalty of local
Remarks – Financial returns are crucial to ensure the quality of faculties both at home campus and the local campus.			
<b>MOE/SSG/WSG</b>	None	None	Plan to apply for Continuous Education & Training status
Remarks – There is opportunity similar to the increase focus on adult and lifelong learning as by the local AUs to train/re-train adults to maintain their relevant to the evolving new technologies and business models			

<b>Industries and Employers</b>	Industry panels, network and alumni	Industry panels, network and alumni	Industry panels, network and alumni
Remarks – Important to build and expand the industry panels and networks to allow continuous acceptance of graduates into the industry through internships and work-study collaboration			

Table 5.40 Future Plans in Singapore and TNE in the regions

<b>Q6 What future plans in Singapore and TNE in the regions?</b>			
	<b>Curtin</b>	<b>Murdoch</b>	<b>Newcastle</b>
<b>Singapore Status and regions</b>	Status quo but moving to new campus	Singapore status quo, plan for IBCs in the region	Upgrade Singapore to Asia Pacific Hub as IBC and Research Centre
Remarks – The university's forward strategy is crucial to the status of each university continued presence in Singapore. Newcastle's long-term strategy is to use the Singapore campus as the hub for Asia Pacific presence beyond teaching			
<b>Seeking Government Support</b>	Unlikely	Unlikely	Collaborate with government agencies for research
Remarks – Engaging the government support requires research collaborations with the different government's agencies, as seen in JCU's success in securing significant fundings for research.			
<b>Student recruitment and competition</b>	To increase domestic share	Demographic changes, Kaplan in control of recruitment	Closer partnership on marketing and outreach to polytechnics
Remarks – The AUs are capped at 40% CPR or around 16,000 places. There are sufficient numbers of students from the polytechnic cohort as SIT and its TNE partners are included in the 40% cap. 2019/2020, CPE reported that there were 9,300 fresh EDP graduates which were local. The local IHLs trained 345,000 adults in 2020 a big increase from 2018 of 165,000 through their CET programmes			
<b>Programme expansion and challenges</b>	To increase after the move to new campus	Newer programme to meet the market and replace old programmes	Newer programme to meet market needs and niche

			programmes and additional partners
Remarks – There must be regular introduction of new programmes to meet the fast-changing business environment. The engagement of industry panels will give insight to the new requirements			
<b>Industry engagement</b>	Increasing the engagement	Increasing the engagement	Increasing the engagement
Remarks – Closer engagement with industry benefit the university to better understand the needs and also as a pipeline for its graduates			
<b>Response to SkillsFuture Initiatives</b>	Unlikely to response, no interest from Navitas	Evaluating micro-credentials	To launch executive programmes independently and with new partners
Remarks – The growing training and re-training of adults will continue to grow at an exponential rate as such to participate in the SkillsFuture Initiatives is important for lifelong learning opportunities and funding of courses for trainees.			
<b>Participation in SkillsFuture Programmes</b>	No plan	Will evaluate	Will evaluate
Remarks – Need to be involved in the Work-Study Degree programme to link students to industry with the course fees substantial funded for the students			

## 5.6. Qualitative Analysis and Summary of Major Findings

The analysis of this chapter has provided significant triangulation of the data collected from the different groups of stakeholders' survey questionnaire responses, focus group discussion, interviews and desktop research. This data will provide the findings to answer the two of the three sub questions in this research.

### 5.6.1 Findings and discussion of the research first sub question

In this section, the students' and graduates' responses are compared and analysed to see if the perspectives generally provide the research direction for the sub question one –

***Will there be sustainable demand for TNE programmes in Singapore?***

Question 1 of the questionnaire on the rationale for taking the TNE pathway, provide the basis for the answer to the sub question. The responses to question 1 reveal three themes that were consistently being the top three reasons for taking a TNE programme. They are:

1. Cheaper than going overseas (Home campus)
2. Faster to complete the degree
3. Unable to gain admission to the local AUs

These top 3 rationales received more than 50% from the total of 26 respondents as shown in the Table 5.41.

Table 5.41 Combined responses for Top 5 reasons for taking a TNE programme

<b>Rationale of all 4 groups (26 respondents)</b>	<b>Responses</b>	<b>Percentage</b>
Cheaper than going overseas (home campus)	18	69
Faster to complete the degree	16	62
Unable to gain admission to AUs	13	50
To attain a foreign qualification	11	42
Flexible time-tabling	10	38

According to the 2021 Private Education Sector View Report by SkillsFuture Singapore, the number of PEIs students in 2021 remains close to 2008 figures of 121,000 and 120,000 respectively. These numbers remain fairly constant despite the reduction of PEIs from the peak of 1,200 in 2008 to **less** than 300 in 2021. This is an

indication of the demand for private education despite a reduction of providers. The numbers could have been better with international students, had international travel not been curbed due to the border closures from Covid19 pandemic. Further examination of the data reveals two trends:

- 40% are Singaporean or permanent residents – about 48,400 or two out of five students
- 53% enrolled in higher education – about 64,130 students

Cheaper than going overseas (home campus) and faster to complete the degree are reasons that will appeal to both local and international students, which reflects the strong responses from the survey questionnaire of 69 and 62% respectively. This probably accounts for the 60% of the international students choosing Singapore as the study location.

Unable to gain admission to the local AUs is primarily a local issue and it garnered 50% of the respondents. Political and social narratives are strong rationale for the need to have TNE programmes presence as an alternative to the local students, as the demand for higher education will be continued to be strong despite the drive by the government towards skills from academic pursuits. Social mobility and access to higher education are two crucial socioeconomic considerations for the government policy making.

The perception that a TNE degree education is a “second chance” for those not accepted into public universities could be prevalent among the general public, including administrators, educators and even TNE students themselves. There is a need to change this discourse of TNE as “second chance” towards seeing it as a

“socially viable” option by putting both graduates on equal footing (Cheng, CNA, 17 September 2017)

Limited information, stereotypes and old mindsets about the merits of public university education may have perpetuated negative views about TNE degree education.

On the flip side, some see TNE as meeting a growing demand for qualifications. TNE serves as an additional route to obtain a degree for those who did not manage to secure a spot in a local public university.

TNE also offers young working adults, including those who decided to enter the working world before returning to university, with flexible course arrangements to upgrade their qualifications. Taking a TNE pathway should be considered as one of the many pathways to success, similar to the trend of the swing towards polytechnic pathway for students who did very well in O Level, contrarily to past trend of going down the GCE A Level pathway.

Four points can be derived from the various desktop research that will illustrate the sustainability of TNE programmes –

- the numbers of students in PEIs remain constant;
- there is continue strong domestic demand for TNE;
- the reduction of the number of PEIs is a positive consolidation of the sector where strong players will survive and be sustainable;
- changing the mindset of TNE among domestic students that TNE is “socially viable” and is one of the pathways to success.



- the message from the government to upskills to meet the new economy for adult learners and the plan for “Lifetime CPR” are strong indicators for a continued role of TNE with the caveat that TNE provider must re-align their current approach so as to meet the needs of adult learners.

### 5.6.2 Findings and discussion on second sub question

In this section, selected data from the responses of students and graduates in the evaluation on the various aspect of TNE is analysed and evaluated. This is presented in Table 5.42 highlighting the top 5 aspects of TNE programmes., which meets the 50% of the total number of responses from the four groups.

These findings will give some directions on the enhancements for TNE to play a complimentary role to higher education landscape of sub question two-.

***What are the enhancements needed for TNE PEIs and University Partners to their capabilities to add value and play a complimentary role to the higher education landscape?***

From the combined results of the responses, academic matters covering quality of faculties, academic expertise and quality of teaching received more than 80% rating. This indicates that TNE academic quality had been consistently high and is probably comparable to the AUs.

Table 5.42 Combined responses for Top 5 Aspects of TNE programme

TNE Aspects of all 4 groups (26 respondents)	Responses	Percentage
Quality of Faculties	26	100
Academic Expertise	22	85

Quality of Teaching	21	81
Quality of Facilities	18	69
Variety of Courses	15	58
Diversity of Students	10	38
Opportunity to move on-campus (home campus)	10	38

Two aspects, namely quality of facilities and variety of courses can be improved from their respective rating of 69 and 58%. By enhancing these two aspects, it may meet similar targets with the AUs. Increasing the variety of courses could pose some challenges as commercial viability is crucial, or alternatively conduct more niche and specialised programmes to add the variety.

To fully distinguish TNE to be different from studying at AUs, the differentiation can be enhanced by improving the aspects of Diversity of Students and the Opportunity to move on-campus (home campus). These two aspects (highlighted in purple in Table 5.41) will create a distinctive difference for TNE from local AUs programme as all AUs are regulated to cap the intake of foreign students to less than 10%. Moving on-campus ideally could be made compulsory for a term to create a multi-campus approach to provide the international exposure for different cultures and experiences. This will uplift TNE status to the same level as students who return from overseas. The plan by Murdoch University to have multiple campuses experience is along this line which is currently practised with INSEAD, SP Jain and SMU's selected Master programmes.

While there are some perceptions of "second chance" labelling for TNE, the same qualification for a student who study a similar programme on-campus at RMIT or

Curtin does not attract such label. They are treated as on par with any of the local AUs qualification. Thus, adding a multi-campus element will raise the profile of TNE.

To further enhance the reputation of TNE, employment outcomes will add more weight to employers. In the PEI GES of 2019/2020 explained in section 5.4, TNE employment outcomes is lower than AUs, at 80.7% against 93.6% for AU (refer Table 5.31 Employment Outcomes) This can be attributed to the low response rate to the graduate employment survey. Only 32.9% responded to the survey compared to 75 to 80% response from all the AUs.

PEIs and university partners need to enhanced the respond rate from the PEI GES 2020/2021 survey onwards to raise the response rate comparable to AUs to better understand the market performance of TNE. To achieve an equal footing with AUs, such GES outcomes must be comparable and increasing the awareness among the graduates to participate will improve the overall outcomes.

The Singapore Association of Private Education should consider launching a regular awareness and outreach campaign to both the general public as well as employers.

### **5.6.3. Findings and discussion on third sub question**

In this section, data from the interviews of the university partners will provide some indication on the possible roles for TNE University Partners can co-exist and be of relevance with the SkillsFuture Initiative and the mantra for Lifelong Learning with regards to the third question.

***What are the possible roles for TNE University Partners and PEIs to contribute to the national movement in the SkillsFuture Initiative and towards lifelong learning?***

Among the three universities, Curtin University appears to be constrained toward active participation in SkillsFuture Initiative, probably a result of the different directions between the university and its education service provider, Navitas. From the interview, the indications were that the directions between the partners are not on the same path – one partner focuses on commercial returns as Navitas is a for-profit commercial education provider listed on the Australian Stock Exchange, responsible to ensure shareholder returns. Curtin’s goals are to be a global leader in research and to better their top 200 rankings.

While there are reasonable returns in being a SkillsFuture Training provider (known as Approved Training Organisation or Registered Training Provider), Navitas will need to be subject to another set of stringent requirements as most of the courses are funded and the compliance criteria is higher than being a PEI.

Murdoch University, on the other hand, with its branch office has more flexibility with its partner, Kaplan. With its exposure to large numbers of adult learners in this student population, they appear to appreciate this better and is looking at micro-credentials.

University of Newcastle (UON) having recently established their independent campus in February 2022 will be continuing their partnerships with their existing partners of PSB Academy and BCA Academy and concurrently is preparing for active participation in this segment. UON’s “Looking ahead” Strategic Plan 2020 to 2025 envisages Singapore be their Asia Pacific base for research and teaching. In Singapore, besides having plans for niche postgraduate programmes that are crucial for the future especially in the health-related focus programme, short courses such

as executive education will be targeted at adult learners for the lifelong learning journey.

As revealed in Parliament on March 2022 by the Minister of Education, Singapore's IHL trained some 345,000 adult learners in 2020, which is more than double the 165,000 in 2018. MOE is looking at "lifetime CPR" to cater for the growing segment of adult learners to pursue a degree over the course of their lives. Speaking at The Straits Times Education Forum 2022 – Evolving Roles of Universities, on 10 February 2022, the Minister for Education said the new generation will probably work in 10 different jobs in their lifetime, changing every four to five years on average, which will require regular topping up the knowledge and skills every time they change jobs. He added that the "Education system must gear up to retrain half a million adult Singaporean learners yearly" (Chan, 2022)

As such, instead of focusing on the challenges of falling cohort sizes due to slower birth rates, IHLs should actively seize the opportunity arising from an increasing number of adult learners who need retraining and upskilling. The skills to learn fast, unlearn and relearn become more important than getting a particular grade.

Acquiring a relevant qualification will be from stackable modules and micro-credentials at various point of their lives. Thus, IHLs must focus on continuing education and training (CET). This is a sector that UON will be embarking in 2023.

Being a CET will plug UON into the SkillsFuture movement and be part of the lifelong learning ecosystem and meeting the three key growth areas of Singapore identified in the inaugural report on Skills Demand for the Future Economy. The three pillars are Digital Economy, Green Economy and Care Economy. UON will skew toward the Care Economy in line with the University direction toward health-related focus.

## 5.7. Assessment of the three Universities for Relevance and Sustainability

Having conducted surveys, interviews and research into the three universities, using SWOT matrix and Porter's Five Forces Model, I conducted desktop strategic and situational assessment of the private education sector and each individual university for their longer-term presence in Singapore. This exercise provides a better perspective of the relevance and sustainability of each of the university in this case study for the problem question of this study.

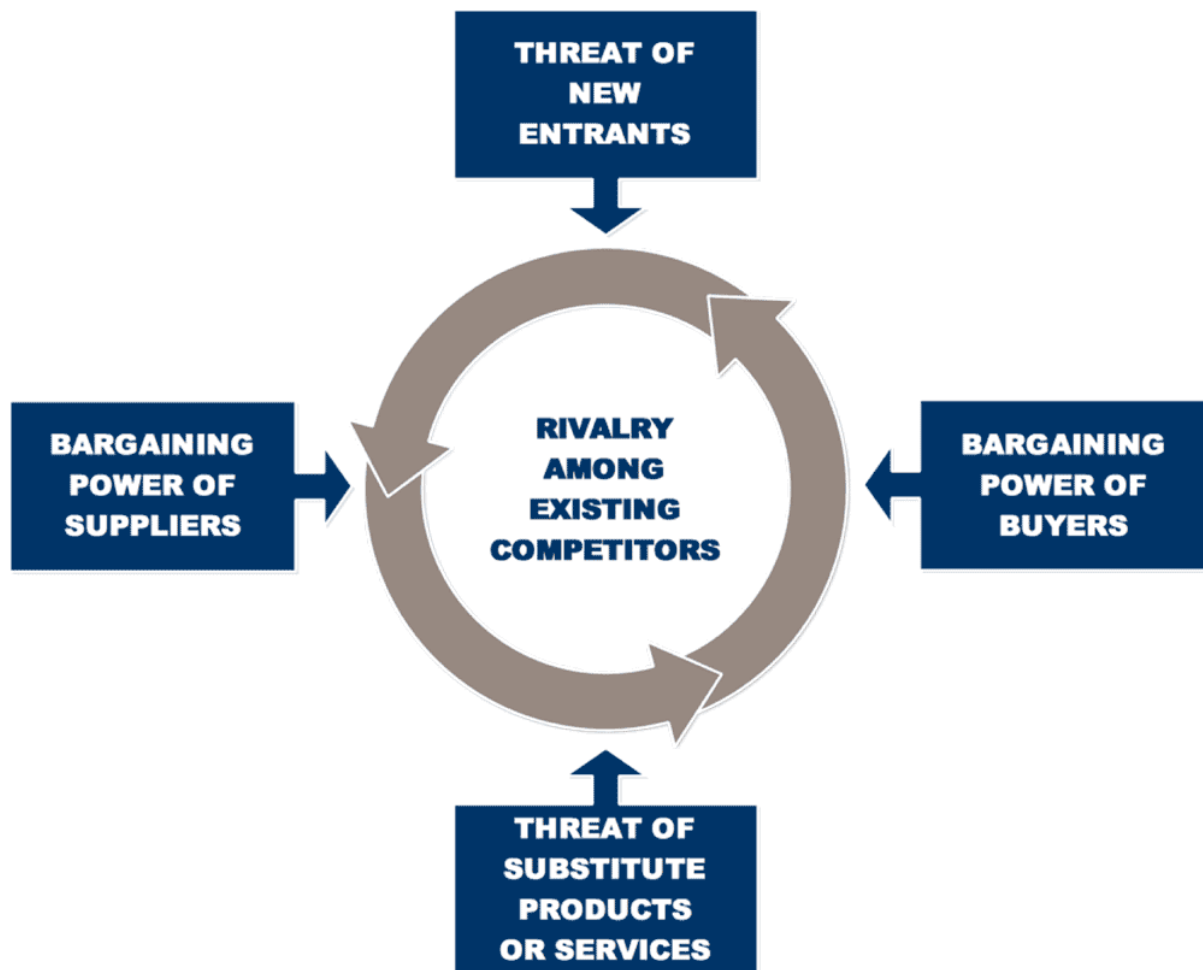
Table 5.43. Situational Analysis of each of the university's case

Techniques	Purposes	Applications
<b>SWOT Analysis</b>	<ul style="list-style-type: none"> <li>• Identify at the individual level of each university as a comprehensive audit covering micro and macro environment.</li> <li>• Focuses on the university-specific elements covering Strengths, Weakness, Opportunities and Threats.</li> <li>• To define strategy and direction from both an internal and external perspective.</li> </ul>	SWOT focus on the university in this case study its current position providing a snap shot of the existing and future opportunities for long-term growth and sustainability.
<b>Porter's Five Forces</b>	<ul style="list-style-type: none"> <li>• Conduct competitive analysis of the market forces within the TNE and PEIs sector in the face of SkillsFuture Initiatives.</li> <li>• Looking at the 5 important competitive factors in the TNE/PEI sector.</li> <li>• Analyse the attractiveness of the TNE/PEI industry, evaluate investment options and assess the competitive environment for long term growth.</li> </ul>	Porter's 5 Forces examine all the external factors that will impact each of the university in this case study for the long-term strategy

## **5.8. Porter's Five Forces Model of Competitive Position Analysis on the TNE sector**

This section draws from the interim conclusions from Section 5.6 to conduct an assessment of the market that the three Australian universities providers operate in. At the industry level, using Porter's Five Forces Model analysis helps the organisation to understand the factors affecting the TNE sector to derive informed decision to: (i) how to enter a specific segment; and (ii) whether to increase the programme offerings. This will allow them to develop competitive strategies. At the university level, using SWOT matrix to assess and evaluate the factors that may affect the viability of its continued presence in Singapore.

Using Porter's Five Forces Model of competitive analysis is an appropriate framework for assessing and evaluating the competitive strength and position of each of the three universities in the case studies in the TNE sector in Singapore (Porter, 1979). This model will identify the key factors of each competitive force that impact each of the university, evaluate the strength and importance of each factor for the university and lastly, to decide with informed decisions on the right strategies based on the collective strength of the factors.



*Figure 5.1 Porter's Five Forces Model*

### **5.8.1. Rivalry among existing competitors and among the three universities.**

All three universities are competing amongst one hundred other universities and the six local AUs for both domestic and international students for undergraduate and postgraduate programmes through their respective PEI partners. While all three universities tried to differentiate their programme offering, there are many undifferentiated programmes from many providers.

Differentiating by world ranking, Curtin and Newcastle are in the QS Top 200 Universities among the three, but there are total of 14 universities in the Top



200 offering their programmes in Singapore. However, the ranking does not seem to have a great impact to students as Murdoch University has the largest student cohort among the three in the study. Other universities such as RMIT and JCU, similarly have more students than the 14 universities in the Top 200 ranking.

### **5.8.2. Threats of new entrants**

While the introduction of the Private Education Act (2009) requires stricter registration requirements and compliances, it is not a formidable barrier to potential new entrants. While the regulator may adopt more interventionist policies at a later stage, it will adopt a pragmatic approach towards the private education sector in view of the continued relevance to society. Foreign universities new to Singapore can partner with an existing PEI to offer their programme, skipping the need to get through the administration and compliance requirements. As such, barriers to entry are fairly low.

### **5.8.3. Threats of substitute programmes**

Currently there almost 1,400 TNE programmes registered with CPE. CPE does not place any cap to the number of programmes to be available, thus, all existing universities present in Singapore, including the local AUs, can launch new programmes that compete with the existing programme available from these three universities. Over the past 12 months, there are more than 5 new PEIs registered.

Besides physical programmes offered, the availability of online programmes available through Coursera, Udemy and several others as well as stackable credentials are presenting a new challenge.

#### **5.8.4 Bargaining power of suppliers**

Suppliers refers to lecturers (full-time and part-time), PEI partners, research granting organisations and landlords for the premises. With the implementation of Private Education Act (2009), stricter controls on the deployment and qualification requirements for approved lecturers result in a smaller pool of available lecturers for the close to 1,400 TNE programmes apart from other 5,000 odd non-TNE programmes. Good and experienced lecturers will have higher bargaining powers.

With the consolidation of the numbers of PEIs from a peak of 1,200 PEIs in 2008 to around 300 as at March 2022, the stronger PEIs will be in a stronger bargaining position to partner with potential new university.

As TNE providers strive towards better infrastructure in the form of having purpose-built campus, land cost and rental are premium due to the stiff competition for alternative use of the space.

#### **5.8.5 Bargaining power of buyers**

As in any industry, this is arguably the most important and major force affecting the intensity of competition in the sector. Credit transfers make switching to another alternative programme is fairly easy and could be done without additional charges.

With over 80 PEIs offering closed to 1,400 programmes from 103 universities, students have many choices to choose the preferred TNE programme.

As all three universities had been in Singapore offering their TNE programmes for more than twenty years, they had built up a significant brand awareness and goodwill. While the industry is very competitive, the demand for TNE is still strong and holding its place despite the introduction of new direction towards skills-based learning instead of the traditional degree-based learning (SSG Private education sector report 2021)

### **5.9. Case Studies using SWOT Matrix on the Three Universities**

In this section, data from the semi-structured interviews and desktop research on the three universities will be analysed and using SWOT Matrix to evaluate their respective strategies for their TNE operations in Singapore.

#### **5.9.1 SWOT Analysis of Curtin University Operations in Singapore**

This section focuses on the case study on Curtin University operations in Singapore, evaluating the organisation with a SWOT matrix (Table 5.43 below) analysis to assess the short- and longer-term potentials and possible direction for the Singapore operations.

Strengths and weaknesses identified in the SWOT Matrix analysis will be assessed for potential action to develop long-term target to link to the vision and strategic objectives of the university's Strategic Plan 2017-2022 and its 2030 Vision.

The strength matrix is reflecting the University 2022 Positioning in the Strategic Plan to "Secure our position as a leading global university in the top 200 globally and the top nationally" (<https://strategicplan.curtin.edu.au>). Curtin's strong and established

local presence of 36 years adds to the strong brand awareness in Singapore and the region that increases its attraction to international students from ASEAN, North Asia and South Asia. The long association in Singapore had built a strong and active alumni base.

With two international campuses in the region – Sarawak, East Malaysia and Singapore provide future potentials for multi-campus pathway programmes.

Table 5.44 SWOT Matrix of Curtin University

<b>SWOT Analysis on Curtin University</b>	
<b>2030 Vision: A recognised global leader in research, education and engagement</b>	
<b>STRENGTH</b>	<b>WEAKNESSES</b>
<ul style="list-style-type: none"> <li>• Top 200 ranking</li> <li>• 36 years presence</li> <li>• Strong brand awareness</li> <li>• Large active alumni base</li> <li>• International students base</li> <li>• Sarawak Campus</li> </ul>	<ul style="list-style-type: none"> <li>• Partner in control of most operations except academic quality</li> <li>• Limited expansion for university staffs</li> <li>• Lack prominent alumnus</li> <li>• Profits shared with Navitas</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
<ul style="list-style-type: none"> <li>• Multi-campus pathways</li> <li>• Close to research and incubation hub</li> <li>• Lifetime CPR</li> <li>• SSG 3 Skills Pillars</li> </ul>	<ul style="list-style-type: none"> <li>• New campus within commercial building</li> <li>• Navitas' commercial priority</li> </ul>

The area of concern is the weaknesses matrix which will need a long-term resolution and university's direction – the partnership with Navitas was renewed in 2017. The key features of this partnership were:

- Partnership responsibilities for campus activities would be categorised into academic and operational tasks. Curtin would be responsible for academic

tasks (for example, curriculum design and delivery, teaching and learning, assessment, etc.), and Navitas would be responsible for providing facilities and various administration processes, including specialised marketing services.

- Navitas would acquire an appropriate venue and refurbish it to the standard expected of a high-quality university campus.

The partnership agreement does not leave much room to enhance the university's vision of global leader in research unless Curtin expand its local team and establish research facilities. The current structure that is purely for teaching will not be able to add much value to research for the university vision.

The financial returns shared for Curtin University is expected to be smaller, with an estimate of about 30 to 35% in view of the large investment of SGD20 million by Navitas for the campus in 2008.

Moving from the current stand-alone campus to a multi-storey commercial building co-existing with other tenants in June 2022 could be a potential threat as the flexibility of a stand-alone campus will be severely restricted, which will hamper more active students' activities to provide the campus experience.

The new campus is located within one of Singapore's key research and incubation hubs and close to the National University of Singapore and National University Hospital. This provides opportunities for collaborations with researchers with the institutions at the research and incubation hub. However, these opportunities will not

be the priority nor of importance to Navitas. This may create potential tension between Curtin and Navitas.

To capitalise on these opportunities, Curtin University will need to reinforce their vision of being a global leader with a bigger and credible research and academic team in Singapore in the campus. James Cook University (JCU) had gained much support from the various government agencies for research collaborations and grants. JCU's Tropical Futures Institute receives grants for R&D from the Singapore Food Agency, a statutory board under Ministry of Sustainability and the Environment, for four projects out of twelve projects (worth SGD 23 million) in urban food production. With Curtin University's strength in research, there are good opportunities for such collaborations.

Two new developments from MOE and SSG, announced in March 2022 and December 2021 respectively, will create new opportunities to meet the training needs. Curtin may be able to plug into MOE's plan for retraining adult learners while leveraging on SSG launch of the inaugural National Skills Report on Priority Skills mapping out three core economy pillars: (i) Care Economy; (ii) Digital Economy and (iii) Green Economy.

Both Curtin University and Navitas need to build these two opportunities into their overall business strategy as these new developments will add value to Curtin University long term intentions in Singapore. It is crucial that Curtin University takes the lead in the eyes of the general public and the authorities.

### **5.9.2 SWOT Analysis of Murdoch University Operations in Singapore**

Table 5.45 SWOT Matrix of Murdoch University

<b>SWOT Analysis on Murdoch University</b>	
<b>Purpose: To be a creative force for current and future generations</b>	
<b>STRENGTH</b>	<b>WEAKNESSES</b>
<ul style="list-style-type: none"> <li>• Large students' population</li> <li>• 31 years presence</li> <li>• Large active alumni base</li> <li>• Dubai and Myanmar Campus</li> <li>• Large domestic student base</li> <li>• Kaplan – largest PEI</li> </ul>	<ul style="list-style-type: none"> <li>• Lack control over partner</li> <li>• Lack of prominent alumnus</li> <li>• Financial strength</li> <li>• Profit shared with Kaplan</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
<ul style="list-style-type: none"> <li>• Multi-campus pathways</li> <li>• Lifetime CPR</li> <li>• SSG 3 Skills Pillars</li> </ul>	<ul style="list-style-type: none"> <li>• Kaplan's multi-universities partnership focus and conflicts</li> <li>• Kaplan's commercial priority</li> </ul>

This section focuses on the case study on Murdoch University operations in Singapore using SWOT matrix (Table 5.44 above) to analyse and evaluating the organisation for the short- and longer-term potentials and possible direction for the Singapore operations.

Being present in Singapore since 1991, Murdoch University's student population had grown exponentially from 2008, building up a large alumni base locally. The largest domestic students pursuing TNE on a part-time basis, especially from the polytechnic pathways, create value to the local students seeks to upgrade their qualification to a degree.

Murdoch's large student population of over 5,000 could reasonably justify having a stand-alone campus owned directly by the university along the same structure of Jams Cook University with their wholly owned campus with about the same student population. The revenue generated by such a large cohort is estimated to be in the region of GBP30 million per year, but the revenue shared by Kaplan to Murdoch University will be much lower, estimated at around 30% of the total amount. The

weaker financial position of Murdoch University does not allow them to have the same model of James Cook University, being able to invest over SGD30 million for their branch campus. Partnering with Kaplan for a campus along the lines of Navitas and Curtin could be a possible direction to be taken to project the Murdoch University brand prominently along the same approach that Murdoch University adopt for their Dubai and Myanmar campuses.

Partnership with the largest PEI in Singapore brings strength in marketing and operation for Murdoch. However, there is the prevalent weakness in such partnerships as for Murdoch University does not have control over operational and administrative matters including the requirements for feeder students, as shown in the recent breach with CPE on the foundation diploma admission criteria. While Murdoch University was not implicated, the affected students' perceptions could have some impact on its image and programme planning.

Another potential threat may arise from Kaplan's multi-university partnership with possible conflicts of interest in commercial interests among the various universities partners that may affect the focus in marketing and recruitments. These commercial interest conflicts may affect the opportunities of multi-campus options arising from a loss of revenue to Kaplan when such students move to a different campus. With Dubai being operated by Navitas while the Myanmar campus is operated by Kaplan, and Perth campus being neutral, there will be conflicts in sharing the revenue and profits as well as the net student flows between the campuses.

While the two new developments from MOE and SSG are opportunities, Kaplan will spread out these to all their universities partners, thus resulting in a dilution of the opportunities.



In view of Murdoch University’s financial position, the longer-term strategy could be to work on the agreement with Kaplan when it is due for renewal to build the provisions for the opportunities with a hybrid stand-alone campus that will build the brand and smoothen the process of multi-campus studies for the students of all the four locations for their global approach.

### 5.9.3 SWOT Analysis of University of Newcastle, Australia Operations in Singapore

Among the three cases, University of Newcastle, Australia (UONA) TNE presence in Singapore is unique. It is probably the only university having partnerships in the following structure:

- with a PSB Academy, an established PEI and, a for-profit commercial entity
- with BCA Academy, part of the statutory board Building and Construction Authority under the Ministry of National Development. BCA Academy is exempted from the Private Education Act (2009)
- own PEI status registered under the Private Education Act (2009) with the Committee of Private Education. (Registration approved on 23<sup>rd</sup> March 2022)

Table 5.46 SWOT Matrix of University of Newcastle, Australia

<b>SWOT Analysis on University of Newcastle, Australia</b>	
<b>Motto: I Look Ahead</b>	
<b>STRENGTH</b>	<b>WEAKNESSES</b>

<ul style="list-style-type: none"> <li>• Top 200 ranking</li> <li>• 20 years presence</li> <li>• Strong brand awareness</li> <li>• Strong active alumni base</li> <li>• Strong prominent alumnus</li> <li>• New campus within National Library in the education and cultural precinct</li> <li>• Active in research collaborations</li> <li>• Strong student support</li> </ul>	<ul style="list-style-type: none"> <li>• Partners in control of most operations except academic quality</li> <li>• PSB's multi-universities partnerships conflict</li> <li>• Lack students' diversity</li> <li>• Few part-time students</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
<ul style="list-style-type: none"> <li>• Research link with local IHLs and government agencies</li> <li>• Increase domestic students with part-time classes</li> <li>• Regional expansion</li> <li>• BCA research partnership</li> <li>• Lifetime CPR</li> <li>• SSG 3 Skills Pillars</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in University direction</li> <li>• Partnership termination</li> <li>• Home campus faculties support</li> </ul>

While UONA has the shortest history in Singapore as compared to the earlier two cases, it has probably the strongest brand recognition in Singapore. Being active during the early days of Singapore's independence of 1965, UONA had been receiving many students from Singapore under the Colombo Plan Scholarship programme. This had built a large number of Colombo Plan Scholars in Singapore, including former cabinet ministers, senior civil servants and many high-profile names in the community.

Their partnership with PSB Academy started in 2002, when PSB Academy was part of the Productivity and Standards Board, a statutory board under the preview of the Ministry of Trade and Industry. It was privatised in 2006 and was divested to TUV SUD in 2006 till 2013, before being divested to Baring Private Equity Asia and subsequently divested to the current owner Intermediate Capital Group in January

2018. During the 2006 divestment, PSB's joint-venture with James Cook University was divested to James Cook University, thus creating James Cook University Singapore to be a wholly owned entity of James Cook University in Australia.

While the current PSB Academy is a for-profit commercial entity, its core values in education had been consistent from the previous DNA of a government agency governance and compliance. Being one of the top five PEIs in Singapore, it had a strong reputation locally and, in the regions, thus attracting a large base of international students. UONA had benefited from their marketing and recruitment appeal overseas. UONA's strong brand name adds value to PSB, making them their largest partner (among the more than 10 partners), until Coventry University partnered with PSB in 2014. While UONA is now the number 2 partner with PSB in students' numbers with about 20% of their total student population, it is the most profitable partner for PSB, due to the premium tuition fees by UONA. UONA's QS top 200 ranking, strong brand awareness and strong student support from UON Singapore office adds to the value to PSB and the students.

While partnership with PSB has its strengths, its size and multi-universities partnerships also create potential weaknesses for UONA. There is less control over marketing priority, student recruitments and operations. UONA had to compete for the resources and priority within PSB among the many universities' partners. This probably caused the lack of students' diversity, lower domestic students and fewer domestic part-time students.

UONA's active research stems from its pool of quality locally-based faculty. Over the past five years, some twenty odd research projects were conducted locally, with regional universities, home campus and local government agencies and

corporations. It is a strength that UONA will continue to tap on the vast opportunities that prompt the setting up of a campus to deliver niche programmes which commercial entity such as PSB either do not find it commercially attractive or in direct conflicts with the existing university partners.

UONA establishment of its own teaching facilities registered with CPE under the name Newcastle Australia Institute of Higher Education was approved on 23<sup>rd</sup> March 2022. (It was not allowed under the PE Act to register the name university such as University of Newcastle, Australia)

This newly re-position wholly owned entity of University of Newcastle will deliver niche postgraduate programmes and short executive courses for the adult learners locally and from the region, thus tapping on the opportunities announced by MOE on the “Lifetime CPR” programme which all the local IHLs will be directed to start as well.

While there are many opportunities, potential threats are the following:

- Changes in University’s direction will hamper the plan for the local entity. This has been seen in many past cases, when there is a change in senior management in the home campus, there is a potential change in strategic as most strategic plans are for a fixed duration.
- Possible termination from the existing partners, either due to stronger conflicts of interests or change in directions at the partners
- Reduced home campus support especially from the faculties due to changes in policies on work-load and other priorities.

## **5.10. Chapter Summary**

The data have to be interpreted carefully, since the number of students, graduates, lecturers and institutional representatives were quite low. Consequently, they were only used for tendencies and as a guide to what research were to be explored further.

At this point, it has to be emphasised that the research methods as well as the chosen way of analysing the data both comprise certain limitations. The nature of the data leaves room for speculations, and the limitations of self-reports are to be discussed further. Students' and graduates' comments also varied in their quality ranging from very extensive descriptions to single-word comments.

To summarise all these findings, the survey results were compared. This form of triangulation allowed me to not only receive a greater number of results, but to actually confirm findings and to exclude certain validation threats (Sutton et al. 2007)

## CHAPTER SIX: CONCLUSION, LIMITATIONS AND IMPLICATIONS

### 6.1 Introduction

The scope of this study was to research the relevance and sustainability of transnational higher education from the different stakeholders' perspectives in the evolving trend towards mixing traditional degree-based learning, skills-based learning and career development programmes for lifelong learning. These aims were pursued in the three research sub questions; (i) assessing the sustainable demand for TNE programmes; (ii) considering the enhancements needed to add value to the higher education landscape and (iii) possible roles for TNE university partners to contribute to the national movement in SkillsFuture Initiative and lifelong learning.

These sub questions are:

- a. Will there be sustainable demand for TNE programmes in Singapore?
- b. What are the capability enhancements needed for TNE PEIs and University Partners to add value and play a complimentary role to the higher education landscape?
- c. What are the possible roles for TNE University Partners and PEIs to contribute to the national movement in the SkillsFuture Initiative and towards lifelong learning?

The answers to these questions were sought through surveys administered to students, graduates, lecturers and university senior representatives. Focus groups discussions and structured and semi-structured interviews were conducted to triangulated the findings.

Porter's Five Forces analysis was used to evaluate and analysis the TNE education sector and SWOT Matrix analysis was conducted on the three university case studies to formulate possible future directions.

## **6.2 Conclusion about the Research Proposition**

In this final chapter, the research reflects on the research proposition –

*Transnational Higher Education in Singapore - Relevance and Sustainability:*

*“Can transnational higher education programmes in partnership with Private Education Institutions continue to be relevant and sustainable in Singapore with the government’s drive with SkillsFuture Initiatives?”*

### **6.2.1 Main Findings**

- **Sub-Question a – Sustainable Demand**
  - Domestic students fresh from their GCE A levels and Polytechnic diploma, provides a consistent demand for a tertiary degree arising from the 40% CPR cap with an estimate of an intake of 16,000 each year in the public AUs, with the remaining 60% of the cohort estimated at 24,000 potential students. Basing on an assumption that another 40% of this cohort will progress to seek a degree instead of joining the workplace, there is an estimated number of about 9,600 students per year. This number corresponds closely with the 9,300 fresh graduates from TNEs in the PEI GES employment survey of 2019/2020. However, the actual number of TNE graduates will be higher than the 9,300 graduates as this survey only covers fresh graduates directly

after their GCE A Level or polytechnics and excludes those graduates who study a degree after a break for work or other activities.

- MOE move towards lifelong learning using the term “lifetime CPR” reflect this growing segment of adult learners. Adding these part-time students doing a TNE programme on a part-time basis as they are working will add another demand. With the government push for lifelong learning and upgrading, this sector will grow larger as seen by the increase numbers of adult learners from the public IHL over the past few years. Figures from all the Institutes of higher learning (IHLs) show that the number of adult learners had more than doubled from around 165,000 in 2018 to 345,000 in 2020. The flexibility of programmes from PEIs compared to the AUs will attracts more working adults to upgrade as PEI usually offer night classes or block teaching weekend classes. Such arrangements facilitate working adult learning.
- Singapore continued attractions to international students will continue to provide a sustainable demand especially with the young populations of Asean and their quest for better qualifications. We can project that there are significant numbers to keep TNE programme sustainable for the short and medium term. Out of the total 121,000 students in the PEI sector as reported by SSG Private Education Sector report 2021, there were 48,400 students in TNE programmes comprising of 40% being domestic students with the remaining being international students. The domestic shares of TNE students are likely to increase with the government promotion of lifelong learning

- **Sub-Question b - Capability Enhancement**



- In line with the push by MOE for micro-credentials and stackable degrees, all the local Aus had rolled out such programme to meet the needs of working adults who opt for specialised industry focus specialisation to meet their need in the job. All key TNE providers will need to need to roll out such to enhance their offering. The 3 universities in this case study had indicated their plans to be rolling out such programmes and I expect more TNE provider universities that are in Singapore will follow this trend.
- Establishing research facilities for knowledge creation will be another enhancement that TNE providing universities can contribute to the higher education space. All 3 universities in this case study had established or going to establish research centres to add to the knowledge creation. James Cook University moved their Tropical Futures Institute to their Singapore Campus to deliver world class research in science, health and social sciences. They partner the local authority Singapore Food Agency as part of the government initiative for food security particularly in aquaculture. Three pillars have been established to address local and regionally identified needs:
  - Pillar 1: Aquaculture focuses on sustainable production of aquaculture species.
  - Pillar 2: Healthy Ageing brings established excellence in public health, healthcare, and support services faced by aging populations denizen to the tropics.
  - Pillar 3: Tourism addresses both current and future tourism in the tropics.

- University of Newcastle, Australia will be setting up their Sustainability Research Centre in January 2024 to work with local IHLs, Sustainability NGOs and corporate partners in the areas of sustainability.
- **Sub-Question c – Roles in SkillsFuture Initiatives**
  - With the emphasis on adult learners, TNE University partners and PEIs like all AUs are not excluded from this scheme. The issue mainly lies with the partnering PEIs that may not have the mission to participate in this due to a lack of resources to implement and follow-up as the funding regime by SSG is stringent. With the right set-up, there are a few PEIs already participating in this scheme. Thus, the three universities in the case studies should re-look at their strategies and plan to be involved of the Initiatives to value add and be part of the ecosystem.
- **Relevance** – from the PEI GES 2019/2020 survey, the percentage of graduates securing employment within six of their graduation is at 80.7% with a median salary of SGD2,900, and this indicates that the relevance and acceptance rate of TNE graduates is reasonably good. While in comparison to graduates from AUs of 93.6% with a median salary of SGD3,700, the employment rate of TNE graduates lowered but it is not too big a differential to raise alarm.

Although the percentage and median salary were lower than AUs, there is sufficient relevance for the workplace to offer such levels of salary. Table 6.1 provides a comparison of the different median salary for different

qualifications. The difference of each qualification is one of the drivers for the pursuit of higher education.

Table 6.1 Median Salary Comparison of different qualifications

<b>Median Salary of Comparison for different qualifications</b>			
<b>AU</b>	<b>TNE</b>	<b>Polytechnic</b>	<b>GCE A Level</b>
S\$3,700	S\$2,900	S\$2,500	S\$2,000

The median salary of TNE of SGD2,900 is higher than fresh polytechnic graduates at SGD2,500. One of the underlying rationales for the trend towards taking the polytechnic pathway is the better salary than doing the GCE A Level in the event that the student needs to leave studies and start working after polytechnic or A Levels as a back-up plan in the event that they are unable to secure a place for a degree after GCE A Level. Although no survey was conducted for GCE A Level graduates as the number of such graduates in the workplace was low and the rate listed had been an industry benchmark to offer GCE A Level graduates at the rate of SGD2,000. These market practice thus creates the situation of those GCE A level graduate seeking a degree programme to enhance their career and salary, thus creating demand for TNE programmes. The pursuit of better salary and a better lifestyle had been the main social drivers for higher education and is in line with the report from UNESCO on higher education.

The actual result of the survey was hampered by lower response rate of only 39.2% compared to the response rate from AUs at 80.0%. The percentage of graduates still looking for a job after six months was 16.1% compared to 3.9% from the AUs.

To strengthen its relevance, university partners and PEIs must focus on the adult learners who already had a bachelor degree and will be motivated to upgrade themselves to be competitive and relevant in the workplace.

Currently many PEIs and their university partners focus on introducing MBAs resulting a highly competitive market for MBAs. They should instead introduce specialised or niche master programmes which are applied in nature and will have greater workplace applications compared to the generalist MBA.

Newcastle is certainly moving in this direction to bring in niche postgraduate programmes where it is more niche and a large cohort is not expected.

Postgraduate programmes in their pipeline for the next 24 months will cover niche industries with relevant specialised applications such as Master in Mental Health Nursing, Master in Data Science and Master in Special and Inclusive Education. All these programmes are not expected to have large student cohorts, but will meet the needs of Singapore especially within the three pillars of future skills.

### **6.3 Contribution to the research problems**

In conclusion, the researcher hopes that this study can contribute to TNE literature and body of knowledge to the PEIs and TNE University providers, especially in Asia by demonstrating that the evolution of degree-based learning and skill-based learning under SkillsFuture Initiatives can co-exist to meet the demand of higher education and lifelong learning, particularly with the impending introduction of the concept of “Lifetime CPR”, which will be an additional platform to TNE programmes.

From the research findings, the conclusion can be drawn that there is sufficient relevance and sustainability of TNE programmes in Singapore. In particular, UONA’s

new business strategy will be exciting and could prove to be successful to project their Asia-Pacific focus.

#### **6.4 Limitations and future research**

Findings of social research are only as reliable as the researched subjects are true to themselves. Known as the Hawthorne-Effect, students might have self-evaluated their skills, attitudes and knowledge higher than they are, knowing they are part of a research study (Sutton et.al.2007). When using the 5-point Likert scales and self-rankings, there is risks of overestimating their assessments and judgements. With “inflated opinions” especially in the context of formal education, respondents try to make themselves look better or at least to maintain their status and self-esteem. Self-reflections and reports bear the risk of not objectively showing what respondents had actually experienced and how they feel about it.

Further, Pavlenko (2007) listed the disadvantages about narratives, especially the overreliance of repeated instances, can lead the researcher overlooking some other themes as well as the focus on what is in the text as opposed to what is excluded, are applicable for this study.

The researched subjects of this study pose certain limitations in themselves as well. First, they are a self-selected group that possibly exhibit a higher motivation, knowledge, interest and maybe even attitudes towards TNE to start with. Therefore, a control group could have been a salient feature to verify many of the outcomes and measurements (Sutton et al. 2007). Avoiding TNE involved respondents as control groups may skewed the answers as well, such as conducting all pre-degree students or students from AUs or overseas universities, especially when most students want

to pursue a first degree either in the AUs or overseas. As such, the responses may be mostly negative.

Finally, the researcher's own TNE learning and corporate background, has to be taken into consideration when it comes to the analysis of qualitative data.

The findings of this study show the impacts and effects of TNE programmes on students, graduates and lecturers. Further studies could pick up on the findings and further explore the three stakeholders' perspective by expanding to a wider group of PEIs and also to include more non-Australian TNE segments.

Another area for research that this author still is keen on in the field of TNE will be in the areas of marketing, branding and image management. From Porter's Five Forces Framework, one enduring differentiation will be building brand equity to break out from the crowd. This will raise the profile of TNE to be equivalent to any degrees either from the AUs or overseas education graduates.

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## Appendix A



Shaped by the past, creating the future

22/05/18

Richard Bee Leng Soh  
[r.b.l.soh@durham.ac.uk](mailto:r.b.l.soh@durham.ac.uk)

Dear Richard,

**Transnational Higher Education in Singapore - Relevance and Sustainability**  
Reference: 2991

I am pleased to inform you that your ethics application for the above research project has been approved by the School of Education Ethics Committee.

May we take this opportunity to wish you good luck with your research.

Yours sincerely,

A handwritten signature in cursive script that reads "Nadin Beckmann".

Dr Nadin Beckmann  
School of Education Ethics Committee Chair

Leazes Road  
Durham, DH1 1TA  
Telephone +44 (0)191 334 2000 Fax +44 (0)191 334 8311  
[www.durham.ac.uk/education](http://www.durham.ac.uk/education)



**Consent Letter & Survey questionnaire (current TNE students)**

**Introduction and purpose**

This survey will assist me in understanding the satisfaction, quality, motivation, relevance and concerns in pursuing a tertiary education in a transnational arrangement. It is about university study (where students choose to study EITHER in their home country OR abroad, away from the country in which they normally live) and some of the issues that students consider when making their choices for either undergraduate or postgraduate degrees.

It is being carried out for the dissertation of my Doctorate's degree at Durham University. I, Richard BL Soh, am the researcher and my supervisors are Dr Julie Rattray AND Dr Jonathan Tummons, from Durham University School of Education.

Ethical consideration has been completed, and approval has been sought and granted in line with Durham University and Durham University School of Education research ethics process.

If you are willing and able to complete this survey, I am personally very grateful for your time and answers.

**What is involved?**

I need about 30 minutes of your time to complete this survey. Participation is voluntary and should involve no risks beyond those everyday living. If you should find any question invasive or offensive, you are free to leave the question unanswered. Also, should you wish to end the survey at any point after starting it you are free to do so.

**Confidentiality**

The survey will ask for some limited personal information (e.g., age, nationality) to enable me to make comparisons between and within groups. All responses collected will be confidential and all responses will be de-identified, and the results will be used to identify patterns and trends, and will be included in my EdD dissertation. This will be marked at a later date by Durham University staff and external examiners.

The data will only be seen by members of the supervisory and reviewing team from the university. All data will be stored in a secure-password protected storage area complying with our security policy and will only be used for research purposes.

**How will the information be used?**

Findings will be used for supporting and comparing various viewpoints of the research in the completion of the thesis that I am pursuing for my Doctorate in Education on Transnational Education with the University of Durham, United Kingdom.

Should you have queries regarding this study please contact me using the following details: Mr Richard BL Soh, +65 96369159, r.b.l.soh@durham.ac.uk

Given the information detailed above, are you willing to continue?

1. If you consent to participate, please mark “Yes” and signed and date this.

YES	
NO	
Signature/Date	

2. What are the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)

<input type="checkbox"/>	To attain a foreign qualification
<input type="checkbox"/>	Unable to gain admission into the local public university (AUs)
<input type="checkbox"/>	Faster to complete the degree
<input type="checkbox"/>	Cheaper than going overseas
<input type="checkbox"/>	Able gain advance standing for the Polytechnic Diploma
<input type="checkbox"/>	To be closer to home
<input type="checkbox"/>	Able to work part-time while studying
<input type="checkbox"/>	Flexible time-tabling
<input type="checkbox"/>	Night classes available
<input type="checkbox"/>	Wider choice of courses
<input type="checkbox"/>	Accept mature working adults
<input type="checkbox"/>	Other (please specify)

3. How likely are you to recommend others in taking a transnational programme?

<b>Highly Unlikely</b>		<b>Likely</b>		<b>Highly Likely</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

4. How much do you value these aspects of a transnational programme?

Aspects of TNE Programme	Low				High
	1	2	3	4	5
Academic expertise					
Quality of faculties					
Quality of teachings					
Variety of courses					
Opportunity to move to on-campus					
Quality of facilities					
Diversity of students					
Flexible learning structure					
Faster completion with 3 terms/ year					
Access to Home campus faculties					

Are there any other aspects of a transnational programme that you value?

---

5. How old are you?

	Under 18 years old
	18 to 25 years old
	26 to 35 years old
	36 to 45 years old
	46 to 55 years old
	56 years and above

6. What is your gender identity?

	Female
	Male
	Prefer not to reveal

7. Where is your home country?

	Singapore		China
	Malaysia		India
	Indonesia		Taiwan
	Vietnam		Korea
	Myanmar		Others(specify)

8. What best describes where you live in your home country?

	Inner City/Suburban
	Provincial/Regional
	Rural/Remote

9. What is your family combined pre-tax household income per year? (Optional)

<input type="checkbox"/>	Less than S\$50,000	<input type="checkbox"/>	S\$50,000 to S149,999
<input type="checkbox"/>	S\$150,000	to <input type="checkbox"/>	Above S\$300,000
<input type="checkbox"/>	Prefer not to reveal		

10. How are you funded for your studies?

<input type="checkbox"/>	Scholarship	<input type="checkbox"/>	Support by parents/relatives
<input type="checkbox"/>	Self-funding	<input type="checkbox"/>	Study loan

11. Are you currently studying?

<input type="checkbox"/>	Full-time	<input type="checkbox"/>	Part-time
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12. What was the school that you were studying before enrolling into the programme as your admission requirement?

<input type="checkbox"/>	Junior Colleges	<input type="checkbox"/>	Centralised/Art Institutes
<input type="checkbox"/>	Polytechnics	<input type="checkbox"/>	Overseas High Schools
<input type="checkbox"/>	Local Private Institutes	<input type="checkbox"/>	Overseas Institutes
<input type="checkbox"/>	Others (Please specify)		

13. What is the name of your institution?

<b>Name of Institution</b>	<input type="text"/>
<b>Name of local PEI</b>	<input type="text"/>
<b>Course of study</b>	<input type="text"/>
<b>Year of graduation</b>	<input type="text"/>

14. Do you plan to further your studies after this programme?

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
--------------------------	-----	--------------------------	----

15. If yes, what programme do you intend to study?

<input type="checkbox"/>	Master/	<input type="checkbox"/>	Other	<input type="checkbox"/>	Doctorate/PhD
<input type="checkbox"/>	Professional qualification		<input type="checkbox"/>	WSQ/SkillsFuture	
<input type="checkbox"/>	Another Bachelor		<input type="checkbox"/>	Other (Please specify)	

16. Which institution will you study for your next programme?

<input type="checkbox"/>	Another TNE provider	<input type="checkbox"/>	Local AUs
<input type="checkbox"/>	Local Training provider	<input type="checkbox"/>	Other (please specify)

Please provide your contact details in case I have any follow-up questions. (I will not share this with others, it is just a survey and it is optional)

Finally, please refer and encourage your friends who are studying or completed a degree under the transnational programme such as yours to contact me for their opinions.

Thank you for your time and participation.

<b>Name</b>	
<b>Email</b>	
<b>Mobile</b>	

Participation to this research is voluntary. This result is completely anonymous and confidential in the compilation of the thesis.

If you have any questions about the specifics of the study, please contact Richard Soh by email: [rblsoh@gmail.com](mailto:rblsoh@gmail.com) / [r.b.l.soh@durham.ac.uk](mailto:r.b.l.soh@durham.ac.uk) or phone: (65) 96369159. You are also welcome to contact the Project Supervisor, Professor Dr Julie Rattray at email: [Julie.rattray@durham.ac.uk](mailto:Julie.rattray@durham.ac.uk) or phone: (44) 191 33482349.

**Note:**

**Confidentiality:** The completion of the questionnaire is completely anonymous and confidential. No individual will be identified in any publication of the results. The only people who will have access to the data will be the supervisor and the researcher named above. Data will only be published in aggregation and in summary format. There is no chance and intention to trace data back to individual persons as the data are of very general nature.

**Consent of participation:** No written consent for participation will be obtained. It is assumed that the completion of the questionnaire represents consent of participation. Completion of the questionnaire can be interrupted at any times and there is no coercion whatsoever to participate in the research or to complete the questionnaire once started. Any refusal to participate or withdrawal from the research will not in any way prejudice the participant.

**Feedback:** Upon completion of the questionnaire, you are entitled to receive a summary of the research results. Note that this is optional. Your name and your email address will not be linked to your survey response in anyway.

**Consent Letter & Survey Questionnaires (for TNE graduates)**

**Introduction and purpose**

This survey will assist me in understanding the satisfaction, quality, motivation, relevance and concerns in pursuing a tertiary education in a transnational arrangement. It is about university study (where students choose to study EITHER in their home country OR abroad, away from the country in which they normally live) and some of the issues that students consider when making their choices for either undergraduate or postgraduate degrees.

It is being carried out for the dissertation of my Doctorate's degree at Durham University. I, Richard BL Soh, am the researcher and my supervisors are Dr Julie Rattray AND Dr Jonathan Tummons, from Durham University School of Education.

Ethical consideration has been completed, and approval has been sought and granted in line with Durham University and Durham University School of Education research ethics process.

If you are willing and able to complete this survey, I am personally very grateful for your time and answers.

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**Confidentiality**

The survey will ask for some limited personal information (e.g., age, nationality) to enable me to make comparisons between and within groups. All responses collected will be confidential and all responses will be de-identified, and the results will be used to identify patterns and trends, and will be included in my EdD

dissertation. This will be marked at a later date by Durham University staff and external examiners.

The data will only be seen by members of the supervisory and reviewing team from the university. All data will be stored in a secure-password protected storage area complying with our security policy and will only be used for research purposes.

**How will the information be used?**

Findings will be used for supporting and comparing various viewpoints of the research in the completion of the thesis that I am pursuing for my Doctorate in Education on Transnational Education with the University of Durham, United Kingdom.

Should you have queries regarding this study please contact me using the following details: Mr Richard BL Soh, +65 96369159, r.b.l.soh@durham.ac.uk

Given the information detailed above, are you willing to continue?

17. If you consent to participate, please mark “Yes” and signed and date this.

YES	
NO	
Signature/Date	

18. What were the main reasons for you to study an overseas programme in a transnational arrangement in Singapore? (Select all that apply)

<input type="checkbox"/>	To attain a foreign qualification
<input type="checkbox"/>	Unable to gain admission into the local public university (AUs)
<input type="checkbox"/>	Faster to complete the degree
<input type="checkbox"/>	Cheaper than going overseas
<input type="checkbox"/>	Able gain advance standing for the Polytechnic Diploma
<input type="checkbox"/>	To be closer to home
<input type="checkbox"/>	Able to work part-time while studying
<input type="checkbox"/>	Flexible time-tabling
<input type="checkbox"/>	Night classes available
<input type="checkbox"/>	Wider choice of courses
<input type="checkbox"/>	Accept mature working adults
<input type="checkbox"/>	Other (please specify)

19. How likely are you to recommend others in taking a transnational programme?

<b>Highly Unlikely</b>		<b>Likely</b>		<b>Highly Likely</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

20. How much do you value these aspects of a transnational programme?

<b>Aspects of TNE Programme</b>	<b>Low</b>				<b>High</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Academic expertise					
Quality of faculties					
Quality of teachings					
Variety of courses					
Opportunity to move to on-campus					
Quality of facilities					
Diversity of students					
Flexible learning structure					
Faster completion with 3 terms/ year					
Access to Home campus faculties					

Are there any other aspects of a transnational programme that you value?

21. How old are you?

	Under 18 years old
	18 to 25 years old
	26 to 35 years old
	36 to 45 years old
	46 to 55 years old
	56 years and above

22. What is your gender identity?

	Female
	Male
	Prefer not to reveal

23. Where is your home country?

	Singapore		China
	Malaysia		India
	Indonesia		Taiwan
	Vietnam		Korea
	Myanmar		Others(specify)



24. What best describes where you live in your home country?

<input type="checkbox"/>	Inner City/Suburban
<input type="checkbox"/>	Provincial/Regional
<input type="checkbox"/>	Rural/Remote

25. What is your family combined pre-tax household income per year? (Optional)

<input type="checkbox"/>	Less than S\$50,000	<input type="checkbox"/>	S\$50,000 to S\$149,999
<input type="checkbox"/>	S\$150,000	to	Above S\$300,000
<input type="checkbox"/>	Prefer not to reveal		

26. How did you fund for your studies?

<input type="checkbox"/>	Scholarship	<input type="checkbox"/>	Support by parents/relatives
<input type="checkbox"/>	Self-funding	<input type="checkbox"/>	Study loan

27. What was the school that you were studying before enrolling into the programme as your admission requirement?

<input type="checkbox"/>	Junior Colleges	<input type="checkbox"/>	Centralised/Art Institutes
<input type="checkbox"/>	Polytechnics	<input type="checkbox"/>	Overseas High Schools
<input type="checkbox"/>	Local Private Institutes	<input type="checkbox"/>	Overseas Institutes
<input type="checkbox"/>	Others (Please specify)		

28. What is the name of your institution?

<b>Name of Institution</b>	
<b>Name of local</b>	
<b>Course of study</b>	
<b>Year of graduation</b>	

29. Do you plan to further your studies after this programme?

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
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30. If yes, what programme do you intend to study?

<input type="checkbox"/>	Master/	<input type="checkbox"/>	Other	<input type="checkbox"/>	Doctorate/PhD
<input type="checkbox"/>	Professional qualification		<input type="checkbox"/>	WSQ/SkillsFuture	
<input type="checkbox"/>	Another Bachelor		<input type="checkbox"/>	Other (Please specify)	

31. Which institution will you study for your next programme?

	Another TNE provider		Local AUs
	Local Training provider		Other (please specify)

32. What best describes your current employment status?

	Student – part-time		Student - full-time
	Employed – part-time		Employed – full-time
	In transition		Not able to work
	Homemaker		

33. If you are employed, what best describes your current job title?

	Manager, department head, senior executive or professional
	Junior executive, administrative officer, technician
	Government employees, uniform service
	Teacher, health practitioner or clinician
	Others (please specify)

Please provide your contact details in case I have any follow-up questions. (I will not share this with others)

Finally, please refer and encourage your friends who are studying or completed a degree under the transnational programme such as yours to contact me for their opinions.

Thank you for your time and participation.

<b>Name</b>	
<b>Email</b>	
<b>Mobile</b>	

Participation to this research is voluntary. This result is completely anonymous and confidential in the compilation of the thesis.

If you have any questions about the specifics of the study, please contact Richard Soh by email: [rbsoh@gmail.com](mailto:rbsoh@gmail.com) / [r.b.l.soh@durham.ac.uk](mailto:r.b.l.soh@durham.ac.uk) or phone: (65) 96369159. You are also welcome to contact the Project Supervisor, Professor Dr Julie Rattray at email: [Julie.rattray@durham.ac.uk](mailto:Julie.rattray@durham.ac.uk) or phone: (44) 191 33482349.

**Note:**

**Confidentiality:** The completion of the questionnaire is completely anonymous and confidential. No individual will be identified in any publication of the results. The only people who will have access to the data will be the supervisor and the researcher named above. Data will only be published in aggregation and in summary format. There is no chance and intention to trace data back to individual persons as the data are of very general nature.

**Consent of participation:** No written consent for participation will be obtained. It is assumed that the completion of the questionnaire represents consent of participation. Completion of the questionnaire can be interrupted at any times and there is no coercion whatsoever to participate in the research or to complete the questionnaire once started. Any refusal to participate or withdrawal from the research will not in any way prejudice the participant.

**Feedback:** Upon completion of the questionnaire, you are entitled to receive a summary of the research results. Note that this is optional. Your name and your email address will not be linked to your survey response in anyway.

**Consent Letter & Survey Questionnaires (for TNE lecturers)**

**Introduction and purpose**

This survey will assist me in understanding the satisfaction, quality, motivation, relevance and concerns in pursuing a tertiary education in a transnational arrangement. It is about university study (where students choose to study EITHER in their home country OR abroad, away from the country in which they normally live) and some of the issues that students consider when making their choices for either undergraduate or postgraduate degrees.

It is being carried out for the dissertation of my Doctorate's degree at Durham University. I, Richard BL Soh, am the researcher and my supervisors are Dr Julie Rattray and Dr Jonathan Tummons, from Durham University School of Education.

Ethical consideration has been completed, and approval has been sought and granted in line with Durham University and Durham University School of Education research ethics process.

If you are willing and able to complete this survey, I am personally very grateful for your time and answers.

**What is involved?**

I need about 30 to 45 minutes of your time to complete this survey. Participation is voluntary and should involve no risks beyond those everyday living. If you should find any question invasive or offensive, you are free to leave the question unanswered. Also, should you wish to end the survey at any point after starting it you are free to do so.

**Confidentiality**

The survey will ask for some limited personal information (e.g., age, nationality) to enable me to make comparisons between and within groups. All responses collected will be confidential and all responses will be de-identified, and the results will be used to identify patterns and trends, and will be included in my EdD dissertation. This will be marked at a later date by Durham University staff and external examiners.

The data will only be seen by members of the supervisory and reviewing team from the university. All data will be stored in a secure-password protected storage area complying with our security policy and will only be used for research purposes.

**How will the information be used?**

Findings will be used for supporting and comparing various viewpoints of the research in the completion of the thesis that I am pursuing for my Doctorate in Education on Transnational Education with the University of Durham, United Kingdom.

Should you have queries regarding this study please contact me using the following details: Mr Richard BL Soh, +65 96369159, r.b.l.soh@durham.ac.uk

Given the information detailed above, are you willing to continue?

1. If you consent to participate, please mark "Yes" and signed and date this

YES	
NO	
Signature/Date	

2. Which private education institution/s are you currently teaching?


3. Besides teaching in a private education institution, are you teaching in a public institute of higher learning such as Polytechnic or university?

YES/NO	If yes, which Institution_____
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4. Besides teaching in a PEI, do you hold a full-time role in another organisation?

YES/NO	If yes, in what capacity_____
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5. What is your highest qualification for teaching in a PEI? Please circle.

	Bachelor		Master
	PhD/Doctorate		Other (please specify)

6. What are the subjects that you are currently teaching?


7. What is your engagement status with the local PEI?

Full-time staff/ Sessional staff

8. As a sessional staff with a PEIs, how are you deployed?

<input type="checkbox"/>	Trimester based	<input type="checkbox"/>	Project based
<input type="checkbox"/>	Block teaching	<input type="checkbox"/>	Ad Hoc

9. What is the frequency of your classes? Circle where applicable

<input type="checkbox"/>	Daily	<input type="checkbox"/>	Weekly
<input type="checkbox"/>	Block teaching	<input type="checkbox"/>	Ad Hoc
<input type="checkbox"/>	Project based	<input type="checkbox"/>	

10. What are the main reasons for you to teach in a TNE programme? (Select all that apply)

<input type="checkbox"/>	As a profession
<input type="checkbox"/>	Unable to gain admission to teach in public Institute of higher learning
<input type="checkbox"/>	Able to share my experience and knowledge
<input type="checkbox"/>	Additional income
<input type="checkbox"/>	To utilise my free time
<input type="checkbox"/>	Stepping stone to teaching in a public university
<input type="checkbox"/>	Able to teach part-time while holding a day job
<input type="checkbox"/>	Flexible time-tabling
<input type="checkbox"/>	Night classes available
<input type="checkbox"/>	Wider choice of courses
<input type="checkbox"/>	Other (please specify) _____

11. What in your opinion and experiences teaching in the PEIs, are the challenges of the private education institutes?

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12. How much do you value these aspects of a transnational programme?

Aspects of TNE Programme	Low				High
	1	2	3	4	5
Academic expertise					
Quality of faculties					
Quality of teachings					
Variety of courses					
Opportunity to move to on-campus					
Quality of facilities					
Diversity of students					
Flexible learning structure					
Faster completion with 3 terms/ year					
Access to Home campus faculties					

Are there any other aspects of a transnational programme that you value?

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13. What are your opinions of the students in a transnational programme?

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14. In your opinions, do you find the programmes offered by the various PEIs meet the relevance of the employment markets?

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15. In view of MOE focus on SkillsFutures Initiatives, expansion of the local universities' places and relevance of degrees, what are your views on the relevance of continuing having transnational programmes in Singapore?

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16. In your opinion, what is the ideal numbers of PEIs and programmes?

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17. What are the areas for improvement in the transnational education programmes?

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18. How likely are you to recommend others to teach in a transnational programme?

<b>Highly Likely</b>		<b>Likely</b>		<b>Highly Unlikely</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

19. Do you have any other comments, questions, or concerns?

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Please provide your contact details in case I have any follow-up questions. (I will not share this with others, it is just a survey and it is optional)

Finally, please refer and encourage your friends who are studying or completed a degree under the transnational programme such as yours to contact me for their opinions.

Thank you for your time and participation

<b>Name</b>	
<b>Email</b>	
<b>Mobile</b>	
<b>Gender</b>	Male/ Female/ Prefer not to reveal
<b>Age Group</b>	Below 30 / 31 – 40 / 41- 50 / 51 – 60 / Above
<b>Number of years</b>	

Participation to this research is voluntary. This survey is completely anonymous and confidential.



If you have any questions about the specifics of the study, please contact Richard Soh by email: [rblsoh@gmail.com](mailto:rblsoh@gmail.com)/ [r.b.l.soh@durham.ac.uk](mailto:r.b.l.soh@durham.ac.uk) or phone: (65) 96369159. You are also welcome to contact the Project Supervisor, Associate Professor Dr Julie Rattray at email: [Julie.rattray@durham.ac.uk](mailto:Julie.rattray@durham.ac.uk) or phone: (44) 191 33482349.

**Note:**

**Confidentiality:** The completion of the questionnaire is completely anonymous and confidential. No individual will be identified in any publication of the results. The only people who will have access to the data will be the supervisor and the researcher named above. Data will only be published in aggregation and in summary format. There is no chance and intention to trace data back to individual persons as the data are of very general nature.

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**Feedback:** Upon completion of the questionnaire, you are entitled to receive a summary of the research results. Note that this is optional. Your name and your email address will not be linked to your survey response in anyway.

**Interview/Survey questions for institutions' staffs**

Dear

**Participant Information Sheet**

**Title: Interview/ Survey on Transnational Education in Singapore**

This interview/survey is part of my research project on ***Transnational Higher Education in Singapore - Relevance and Sustainability: "Can transnational higher education programmes in partnership with Private Education Institutions continue to be relevant and sustainable in Singapore with the government's drive with SkillsFuture Initiative?"*** This research is being conducted for the dissertation of the requirements for the degree of Doctor of Education at the School of Education, Durham University, UK.

As your university is a key stakeholder of the transnational education ecosystem in Singapore, your participation and contribution are of critical importance for the findings of this research. Thus, would appreciate an interview with you or a completion of the survey by you on your institution's TNE experience in Singapore, future plans and how the Singapore's operation fits into the University's latest Strategic Plan. However, your participation in this research is voluntary and you can conclude the interview/survey at any point.

All responses you give or other data collected will be kept confidential. The records of this research will be kept secure and private. All files containing any information you give are password protected. In any research report that may be published, no information will be included that will make it possible to identify you individually. All data collected in this research will be used solely for the submission of the dissertation to the School of Education, Durham University.

This will take about 45 to 60 minutes to complete. If you have any questions, requests or concerns regarding this research, please contact me via email at Richard B L SOH at r.b.l.soh@durham.ac.uk or by telephone at +65-96369159.

This study has been reviewed and approved by the School of Education Ethics Sub-Committee at Durham University (date of approval: 22<sup>nd</sup> May 2018, reference 2991).

**A. Background questions**

Your university had a long history of TNE in Singapore, dating back to the collaboration with PEI in Singapore in the 1980s/1990s/2000s.

1. How long have your university been present in Singapore through a TNE arrangement? \_\_\_\_\_ years since \_\_\_\_\_
2. Does your institution have any transnational education (TNE) partnership arrangements apart from Singapore? YES/NO (Delete where applicable)
3. If yes, who are the other partners and countries - \_\_\_\_\_
4. As your university presence in Singapore is a Branch Office/ International Branch Campus but operated through a PEI, what are the advantages and limitation in this arrangement?
5. How many students are enrolled in your university TNE programmes in Singapore? (Please provide an approximate number of FTE)

Undergraduate	Postgraduate	Research	Others

6. What is the ratio of local and international students? \_\_\_\_\_
7. What is the ratio of full-time and part-time students? \_\_\_\_\_
8. What is the median age of the students? \_\_\_\_\_

**B. Policy context questions**

1. ***How and what are the student experiences in TNE in the following areas?***
  - a. *Programme diversity/availability*
  - b. *Campus experiences and infrastructure*
  - c. *Faculties support/access/interactions*
  - d. *Affordability*
  - e. *Study abroad opportunity*
2. ***What are the TNE contributions to the communities?***
3. ***What are the financial impacts for the various stakeholders?***
4. ***How does the quality of programme compare to on-campus in Australia?***
5. ***How will TNE arrangement in Singapore be of relevance to the different stakeholders?***
6. ***What are university's future plans in Singapore and TNE in the regions?***