Table of Contents

Colin Brock - A Tribute

It is with great sadness that we have to report the death of Professor Colin Brock on 30th December 2016 following a short battle with his illness. Colin was a key figure in helping to establish the Centre for Research in International and Comparative Education (CRICE) at the University of Malaya and this journal, the Journal of International and Comparative Education (JICE). From the outset he was the Chair of the International Advisory Board and his wise counsel will be sorely missed.

In many ways Colin Brock was a larger than life figure both physically, as well as professionally in the field of Comparative and International Education, simply because of his prodigious output of papers, books, monographs and reports and his impact on so many students over 40 years. During his academic career he supervised 72 doctoral theses, 250 Masters Dissertations and examined over 60 Masters and Doctoral students in different universities. He was still writing until a few weeks before his death.

In some ways it is impossible to place Colin Brock in any particular genre of Comparative and International Education apart from the Geography of Education which was his first love. He did his Masters degree by research at the University of Durham between 1962 and 1965 in the field of urban geography and his PhD on the impact of geography on education at the University of Hull between 1986 and 1992. He was not associated with any particular geographical region such as Africa or Southeast Asia, though his short period in the Caribbean led him to develop an interest in Small States, and he was willing to undertake almost any task or subject. As a result he was at home writing about teacher education in Sub-Saharan Arica as he was about Education in the Muslim World of the Middle East and North Africa or Education in Europe. His edited works covered just about every part of the world and on a very wide range of subjects.

Colin was born in London in September 1939, soon after the outbreak of the Second World War. He was educated at Rutlish School in Merton, South West London between 1950 and 1958. He proved his academic ability by gaining both a State Scholarship [1957] and a John Innes Scholarship [1958] both of which enabled him to go to University College at Durham University [1958-61]where he read Geography and Anthropology for his BA degree [1961]. He later took a Masters degree there [1962-65] and after his retirement he was given an Honorary Professorship in Education in 2014.

On leaving university he went into teaching at three highly regarded grammar schools in the south of England - Alleyns in Dulwich, Windsor Grammar School and Henley- on-Thames Grammar School -from 1961 to 1969 during which time he took an MEd part-time in Comparative Education at the University of Reading [1970]. He decided to move on from school teaching and go into teacher training. Between 1969 and 1974 he was first a Lecturer and then a Senior Lecturer in Geography at Bulmershe College of Higher Education, Reading. [This was later absorbed into the Faculty of Education and Community Studies in the University of Reading.]

For two of these years he was seconded as an Education Adviser to the Caribbean Development Division of the then United Kingdom's Overseas Development Agency (ODA), now the Department for International Development (DFID), based in St. Lucia. It was his experience in that post that was to lead to a change of career. Thereafter he was to devote his career to Education in Developing Countries.

His first post was as a Lecturer in Education (Overseas Education) at the University of Leeds [1974-77]. He then moved on to become Head of International Education at the University of Hull [1979-92]. He left Hull to take up an appointment as Chief Education Adviser to the Universities of England Consortium for International Activities (UNECIA), which was based at the University of Sheffield. He held this position until 1995. At the same time, from 1992-94 he was appointed a Farmington Fellow/ Senior Research Associate in the Department of Education, University of Oxford. He decided that this was his real interest and he spent the rest of his academic career at Oxford, first as a Lecturer in Comparative and International Education [1994-2005]; then as a holder of a UNESCO Chair in Education as a Humanitarian Response [2005-12]; finally as a Senior Research

Fellow [2012-14]. His main work at Oxford was to make Education and Development a crucial part of the Comparative Education courses that had been taught there over many years.

During his career Colin Brock undertook assignments with different bilateral and multinational agencies in West Africa and the Caribbean, Sub-Saharan Africa, and Eastern Europe. For example with Nadine Cammish he wrote a study of '*Factors Affecting Female Participation in Education in Seven Developing Countries*' (1997) for the UK Department for International Development. More recently he wrote a study on Education in Small States for the Commonwealth Secretariat. He wrote about '*The Place of Education in a United Europe*' with Witold Tulasiewicz (2000) and '*Challenges of Education in Brazil*' (2004) with Simon Schwartzman. More recently, he has edited different series of books on '*Education Around the World*', '*Education as a Humanitarian Response*', '*Monographs in International Education*' and '*The Routledge Encyclopaedia of Modern Asian Educators*'. He would perhaps like his lasting legacy to be two books on education and geography- '*Space, Place and Scale in the Study of Education*' with Lorraine Symaco (Routledge, 2015) and '*The Geography of Education*' (Bloomsbury, 2016) which was published just a few weeks before his death. He was Chair of the British Comparative Education Society [1984-86] and Editor of 'Compare' the journal of the BCES [now BAICE] the British Association of International and Comparative Education] from 1988-98. His writings are so prolific that the above account hardly does justice to Colin Brock as an author or as an editor.

As a man he had many facets. It was while at school that his love of, and prowess at, cricket was manifested. He left Rutlish School as Captain of the 1st Cricket XI, while at Durham University he played for the University 1st XI for all his three years as an undergraduate. He never lost his love for cricket and as a form of relaxation he always followed the Yorkshire County Cricket team. He had a fund of humorous stories and he always managed to see the funny side of situations that he observed during his many forays overseas. These often came out during *viva voce* examinations. Based on his early experiences at Bulmershe College of Higher Education he used to claim that 'Sociology was the study of people who did not need looking at by people who did!' As a convivial raconteur he was second to none. His many students not only valued his help and guidance but he encouraged many of them to publish their work jointly with him. The testimonies that were given by former students after his death was announced spoke volumes about the affection in which he was held. He was kind, compassionate and a real encourager as well as a man of many interests. He will be a very hard act to follow.

Keith Watson
Emeritus Professor of Comparative and International Education
University of Reading

The Gender Gap In Malaysian Public Universities: Examining The 'Lost Boys'

Jonathan Yong Tienxhi[a]
Penang Institute

Abstract: *This paper examines the growing gender gap between men and women in Malaysian public universities, using the Gender Parity Index (GPI) to measure gender disparities over time. It considers the gender gap in University of Malaya with other prominent overseas universities, and compares the GPI between all twenty public higher education institutions for the years 2009-2013. It also compares the GPI of public universities in Malaysia with local private education institutions, and examines the gender disparities in public universities in terms of subject segregation. Particular attention is paid to the gender segregation in terms of Science, Technology, Engineering and Mathematics (STEM) subjects; gender segregation in STEM subjects in Malaysian public universities is compared to East Asia Pacific averages. Lastly, various causes and explanations for the gender gap are explored.*

Keywords**:** *gender, higher education, disparity, STEM*

Introduction

Men have dominated the global higher education landscape for most of recorded history; in the UK, women were not allowed to enrol into universities until 1920. However, enrolment trends since the 1990s have produced a reverse gender gap globally, with women outnumbering men in almost all Organisation for Economic Co-operation and Development (OECD) countries (Vincent-Lancrin, 2008). This disparity between men and women in terms of access to higher education has been a worldwide phenomenon with women comprising the majority of tertiary students in 93 out of 146 countries examined by the Atlas Gender Equality report (UNESCO, 2012). It is important to note that due to demographic trends, the majority of students live in countries in which men still outnumber women in higher education (54% of youth), particularly in sub-Saharan Africa. Nevertheless, the development of reverse gender gap has caused researchers on education to orient their attention to the unique problems faced by males in the education system, in what was called 'The Boy Turn' (Weaver-Hightower, 2003). The reverse gender gap has received greater scrutiny by researchers and policy makers over the past several years, as the problem of the falling rate of male enrolment is increasingly acknowledged. The Higher Education Policy Institute (HEPI), a think tank based in the UK, has referred to the phenomenon as a 'national scandal' (Weale, 2016), while the Malaysia Education Blueprint 2013-25 specifically mentioned the problem of 'lost boys', warning that these alienated youths are a potential source of social instability (Ministry of Education Malaysia, 2012).

Why is this issue worth paying attention to? Some might argue that whatever disparities faced by men in the sphere of education, this hardly translates into an enduring disadvantage. After all, women continue to be left behind in Malaysia's political and economic spheres. In 2015, Malaysia was ranked 111 out of 146 nations surveyed by the World Economic Forum in terms of the gender gap, the worst placed nation in the Association of South East Asian Nations (ASEAN) region (World Economic Forum, 2015). This paper disagrees with the premise that male disparity in higher education enrolment is not worth paying attention to due to the prevalence of structural disadvantages against

[a] **Correspondence can be directed to:** j.yong-tienxhi@lse.ac.uk

women. Firstly, it implies that the problem of under-enrolment of men in universities can only be resolved if resources and effort are taken away from helping women achieve equity in other spheres of life. In fact, disparity for or against one gender does not automatically result in an adverse impact on the other. As Nick Hillman, HEPI director noted, 'policymaking is not a zero-sum game in which you have to choose between caring for one group or the other' (Weale, 2016). Rather, we ought to understand and eradicate differences in opportunity where we can find them. Secondly, the gap between men and women in higher education hurts those at disadvantage the most, hence increasing overall social inequality. Young men from poor income families are disproportionately affected by the gender gap in universities, and the Universities Colleges and Admissions Service (UCAS) has pointed out 'the widening gap between men and women is acting to stall progress in reducing inequality overall' (UCAS 2015, p.1). As we will observe in this paper, the gender gap in Malaysian public universities is significantly wider compared to Malaysian private universities. As public university tuition is vastly lower than private university, this indicates that the gender gap has a much greater effect on men from lower income groups. Hence, closing the higher education gender gap could have a positive effect on social equality as a whole.

Given the importance of studying the higher education gender gap, this paper hopes to examine the extent in which Malaysian public universities have been part of this global trend, and to understand the specifics of how the reverse gender gap has emerged in particular Malaysian universities and fields of study. In addition to this, this paper will consider various explanations for the emergence of this gender gap, in order to explain the disappearance of these 'lost boys'.

The Gender Parity Index

The tool used in this paper to capture the changing demographics of university enrolment is a measure known as the Global Parity Index (GPI), which can be found by dividing the number of females over the number of males in a certain student population and rounding up to two decimals. A GPI of less than 1 represents a disparity in favour of males, while a GPI above 1 represents a disparity in favour of females. The GPI is commonly used in reports by international organisations, such as in the UNICEF report 'Why are Boys underperforming in Education?' and the 2012 World Atlas of Gender Equality in Education produced by UNESCO's Institute of Statistics. According to UNESCO (2012), a GPI measurement of 0.97-1.03 indicates that gender parity has been achieved.

The Gender Gap and National Wealth

The countries in which women in higher education are still disadvantaged tend to be those with low Gross Domestic Product (GDP) per capita, such as sub-Saharan African nations. Conversely, nations with high GDP per capita tend to have a higher level of GPI. This is according to the World Atlas of Gender Equality in Education 2012, which shows that there is a strong correlation between rising GPI in tertiary education and a country's national wealth (UNESCO 2012, p.80). For example, nations which have high national wealth tend to have higher GPI such Iceland and Norway, with GPI of at least 1.4. Prime Minister Najib Razak has recently stated that Malaysia is on track to be a high income nation by 2020 (Goh, 2015). Even if this timeline is exaggerated, this raises the possibility that as Malaysia increases its national income, there will be corresponding rise in GPI. It should be noted that there are many exceptions to the general trend between GPI and national wealth. Japan has a GPI lower than 1 despite being a high income nation, while the Philippines has a relatively high GPI despite having less GDP per capita than Malaysia. Of course, Malaysia's progress into a high income nation should be welcomed, and it is not predetermined that there will be an increase in the higher education gender gap. However, the global trends suggest a need to anticipate this problem by paying closer attention to male under-enrolment where it is strongest. In the context of Malaysia, this is in our public universities.

The Gender Gap Reversal in Malaysian Public Universities

The gender gap in Malaysian public universities is comparable to the international trends outlined earlier, with the gap beginning to emerge towards the end of 1990s and rising quickly in recent years. According to Malaysia's Gender Gap Index report, the combined gross enrolment ratio was in favour of men in 1980 (53%-56.9%), but parity was achieved by 1990; women have had a higher enrolment ratio since 2000, of 65.3%-64.3% (Ministry of Women, Family and Community Development Malaysia, 2007). This disparity was already notable by the turn of the century, as former premier Mahathir Mohamed once asked 'Where have the *bumiputera* (translated as 'sons of the soil', to refer to the Malay race and other indigenous groups in Sarawak and Sabah) male students gone to? Are they not interested in education? Or are their qualifications (to enter university) too low?' (Khoo 2003, p.197). Despite this, a detailed examination of the gender gap in Malaysian higher education has not been made. Instead, the academic literature on educational inequality in Malaysia has tended to focus on the ethnic divide rather than gender disparity. This was seen in recently published books such as *The Colour of Inequality* and *The Emergence and Widening of the Ethnic Divide in the Malaysian Educational System*. This is partly due to the tremendously important political and social dynamics of ethnicity within the education system, but also due to the perception that gender inequity is no longer a pressing matter with regards to education. In 1999, it was found that 'the gender gap in attaining upper secondary school within an ethnic group is relatively small compared to the ethnic gap' in Malaysia (Pong 1999, p.165). By the 1980s, it was found that increasing levels of education attainment were 'evenly distributed among genders' (Milanovic, 2006). This may have been true around the turn of the century, but does not take into account data which indicate that educational disparity according to gender has begun to increasingly widen in recent years, this time to the detriment of men.

The Gender Gap at the University of Malaya and National University of Singapore

As Malaysia's oldest and most prestigious institution of higher education, the University of Malaya (UM) has been emblematic of the shift from female underrepresentation to forming the majority of undergraduates. Two years after independence, UM enrolled 77 female undergraduates, comprising a mere 10.7% of their total undergraduate student population (Ministry of Women and Family Development, 2013), while the female undergraduate enrolment in 2012 was 61.6%. The drastic change in gender ratio has changed the discourse of educational inequity from enabling educational access to female students to ensuring equitable participation of males in education.

UM was established in 1949 under the Carr-Saunders Commission, and the University of Malaya in Kuala Lumpur was formed in 1962 (refer to University of Malaya, n.d.). During the first six years of UM in Kuala Lumpur, GPI remained more or less stagnant, as male student enrolment increased at an even faster rate than female student enrolment (Ministry of Education Malaysia, 1967). This is in stark contrast to the current gender enrolment ratio at UM. In 2013, the GPI for undergraduates at UM was 1.63, a disparity which is greatly in favour of women. The percentage of women enrolled in undergraduate programmes at UM increased from 24.5% in 1962, to 62% in 2013 (Ministry of Education Malaysia, 2013). These numbers show the extent to which women have succeeded in drastically increasing their participation in the premier higher education institution of the country.

Comparing the gender parity of UM with National University of Singapore (NUS) is revealing, as the two share historical roots and geographical proximity. Since NUS is located in Singapore, a country with a higher national income than Malaysia, this makes the gender disparity in Malaysia even more notable. When comparing undergraduate data between the two universities, we find that the gender disparity in UM is consistently higher compared to NUS between the years 2009-2013. The GPI of UM for this period ranges between 1.58-1.6 (Ministry of Education Malaysia, 2013; Ministry of Higher Education, 2010; 2011; 2012) while the GPI of NUS ranges between 1-1.04 (NUS Registrar's Office, 2016). The GPI of NUS can be considered to be achieving gender parity, as it is very close to the range of 0.97-1.03, which is considered by UNESCO to be the range of gender parity. This

trend shows that despite sharing a common history and relatively close geographical and cultural similarities, the gender parity within UM is unusually high. However, there are twenty other public universities currently operating in Malaysia. Is the gender gap at UM an anomaly within Malaysian higher education or is it a representative of a larger phenomenon?

GPI Comparison of Malaysian Public Universities

There are twenty public universities (IPTAs) currently operating in Malaysia. It should be noted that UNICEF categorises any country with a GPI less than 0.8 or higher than 1.25 to be 'far from goal' of gender parity (World Bank, 2004). As all but four Malaysian IPTAs would fall into that category, we have used a more lenient classification to avoid polarising the data. UNICEF's definition of gender parity at 0.97-1.03 is maintained, but we include categories 'close to parity', 'intermediate disparity', while classifying extreme disparity at GPI less than 0.5 or over 1.5. We also highlight the universities which have disparities that go well beyond 1.5 in order to illustrate the depth of the problem.

Table 1. GPI of Enrolment Ratio for all Malaysian IPTAs in 2013

Fewer women enrolled			Gender Parity	Fewer men enrolled			
Extreme disparity (<0.5)	**Intermediate disparity (0.5-0.89)**	**Close to Parity (0.9-0.96)**	**Parity (0.97-1.03)**	**Close to Parity (1.03-1.1)**	**Intermediate disparity (1.11-1.5)**	**Extreme disparity**	
						(>1.5-1.99)	**(>2.0)**
Universiti Pertahanan Nasional Malaysia (UPNM)	Universiti Teknologi Malaysia (UTM), Universiti Teknikal Malaysia (UTEM)		Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Malaysia Perlis (UniMAP)	Universiti Malaysia Pahang (UMP)	Universiti Islam Antarabangsa Malaysia (UIAM)	Universiti Malaya (UM), Universiti Sains Malaysia (USM), Universiti Utara Malaysia (UUM), Universiti Malaysia Sabah (UMS), UniversitiKebangsaan Malaysia (UKM)	Universiti Putra Malaysia (UPM), Universiti Malaysia Sarawak (UniMAS), Universiti Pendidikan Sultan Idris(UPSI), Universiti Teknologi Mara (UITM), (Universiti Sultan Zainal Abidin (UniSZA), Universiti Malaysia Terengganu (UMT), (Universiti Sains Islam Malaysia (USIM), (Universiti Malaysia Kelantan (UMK)

Source: Ministry of Education Malaysia, 2013

Table 1 above demonstrates that UM's GPI of 1.63 is far from an anomaly, but falls well within Malaysian norms. While 1.63 does represent extreme disparity, most Malaysian IPTAs fall within this classification (13 out of 20 universities). In fact, 8 public universities have a GPI of over 2.0, which indicates that female undergraduates more than double their male counterparts in those universities. Only two universities can be said to have achieved gender parity, while one university has extreme disparity against women. The three universities which show disparity against women are UPNM, UTM, and UTEM. These disparities can be explained by the course of studies and faculties available or emphasised at these universities. As we will see in the section below on subject gender segregation, engineering remains the sole course of study which still harbours a significant disparity against women, with a GPI of 0.58. UTM is among the top 100 universities in the world for engineering and technology according to the QS world rankings, and offers no less than 22 bachelor degrees in the field of engineering; while in UTEM, five out of seven of their faculties are for engineering. The only IPTA with extreme gender disparity against women is the National Defence University of Malaysia (UPMN), with a GPI of 0.41 (30% female). This is undoubtedly due to the subject orientation at the university (National Defence), which reflects that military remains a male dominated field.

This table shows that gender inequality has become a significant phenomenon in certain sectors of the Malaysian higher education landscape. Inequity against women persists in certain subjects and fields, particularly national defence and engineering. But on a broader scale, men in public universities have become increasingly underrepresented. By tracing the GPI of Malaysian public universities over a period of five years, we can see the trend of increasing gender disparity over time.

Table 2. Comparison of Malaysian IPTA's GPI, 2009 to 2013

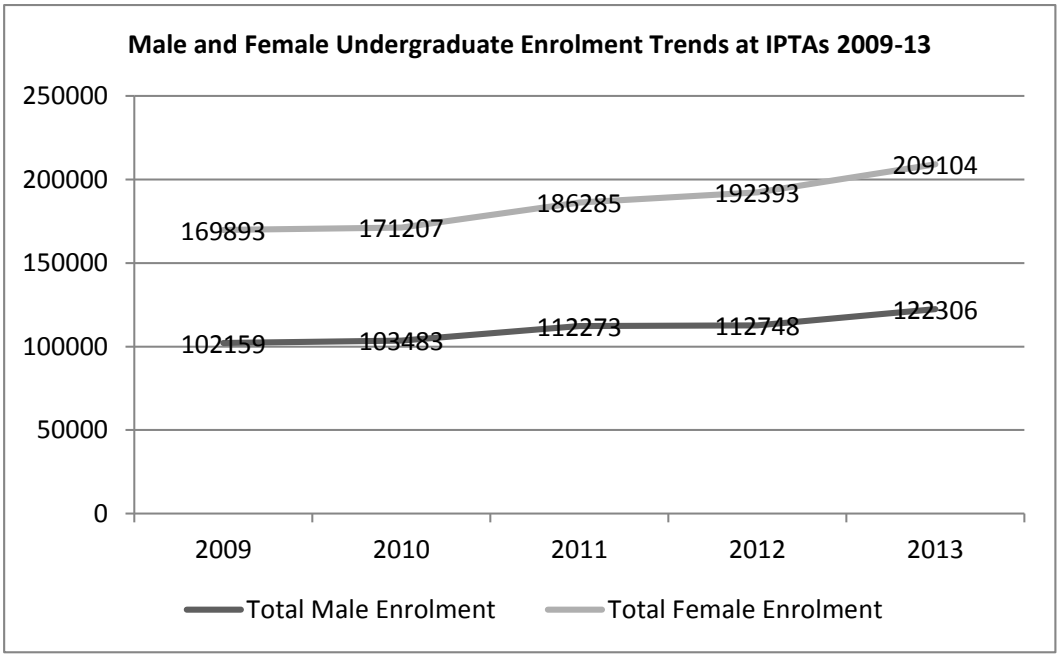
Comparison of Malaysian Public Universities GPI (Undergraduate)					
University/Year	2009	2010	2011	2012	2013
UM	1.58	1.6	1.56	1.6	1.63
USM	1.57	1.58	1.59	1.65	1.67
UKM	2	2.11	1.99	2.13	1.94
UPM	2.2	2.2	2.11	2.17	2.18
UTM	0.85	0.83	0.8	0.77	0.81
UUM	2.3	2.06	2	1.98	1.91
UIAM	1.68	1.57	1.53	1.5	1.48
UniMAS	1.85	2.01	2.15	2.1	2.1
UMS	1.66	1.86	1.91	1.91	1.76
UPSI	2.49	2.59	2.66	2.94	2.89
UITM	1.91	1.93	1.91	2	2.01
UniSZA	2.96	2.79	2.76	2.65	2.68
UMT	2.29	2.3	2.42	2.52	2.68
USIM	2.84	2.76	2.44	2.58	2.57
UTHM	0.93	0.87	0.88	0.98	1.03
UTEM	0.64	0.71	0.77	0.74	0.75
UMP	0.85	0.97	1.07	1.09	1.1
UniMAP	0.8	0.83	0.91	0.92	0.98
UMK	1.85	1.93	2.18	2.34	2.61
UPNM	0.17	0.26	0.33	0.41	0.4
All Universties	1.66	1.65	1.66	1.7	1.71

Sources: Ministry of Higher Education Malaysia (2011; 2012) and Ministry of Education Malaysia (2013)

Table 2 above tracks the GPI ratio for all 20 IPTAs from the year 2009-2013.The data reveals that overall gender disparity has worsened across these years, as the GPI has shifted from 1.66 to 1.71 in the space of five years. While UM shows an increase in disparity across this period (from 1.58-1.63), this is actually below the national average of 1.71. This trend will undoubtedly be amplified if we use data going further back in history, or over a longer period. The gender parity in Malaysian IPTAs is high even by international standards- 55% of undergraduates in the UK were female in 2011, while women consisted of 56.4% of public university students in the U.S in 2010 (Borzelleca, 2012). At the same period, female undergraduate enrolment in Malaysian IPTAs was at 62% and rising.

While there remain a few universities which possess disparities against women, there are reasons to be optimistic about this problem based on the trends of the data shown. Only two universities (UPNM and UTEM) possess a GPI in favour of men which UNICEF would consider 'far from goal' of gender parity (less than 0.8) as of 2013. Both universities show a trend of improving gender parity from 2009-13, with UTEM going from 0.64-0.75, while UPNM gender parity increased from 0.17-0.4. The same cannot be said of the universities at the other end of the spectrum, as 8 out of the 13 universities classified as having extreme disparity in favour of women worsened in terms of GPI during this period, such as UPSI (2.49 to 2.89) and UMK (1.85-2.61). This indicates that the underrepresentation of men in Malaysian public universities will continue to be an underlying problem for the foreseeable future, and could plausibly worsen over the coming years.

Figure 1. Male and female enrolment trends at IPTAs 2009-13



Sources: Ministry of Higher Education Malaysia (2011; 2012) and Ministry of Education Malaysia (2013)

The gender gap in Malaysian IPTAs is substantial and worthy of further study. Figure 1 shows the difference between male and female enrolments in the year 2013 amounted to 86,798 students, a figure which is itself equal to 26% of Malaysia's entire undergraduate student population in public universities. Furthermore, the numerical gap between male and female enrolments has been steadily increasing from 2009-2013. In 2009, the gap between male and female students was 67,734 students.

In 2011, this had increased to 74,012 students, before culminating to a gap of 86,798 students in 2013. This shows a worrying trend of expanding gender disparities in public universities. One positive trend which can be discerned is that while the gender gap is widening, male enrolments overall are still increasing, albeit at a much slower pace. If male enrolments begin to stagnate or decline, these trends will be greatly exacerbated.

Comparing the Gender Gap of Public Universities in Malaysia with the Private Sector

This section focuses on the gender gap within Malaysian public universities, but it may be instructive to consider how this gender parity compares to Malaysian private universities (IPTS). As of March 2015, 509 active IPTS campuses are operating in Malaysia. These include universities (61), colleges (405), university colleges (34) as well as branch campuses of foreign universities (9) (Ministry of Higher Education Malaysia, 2012). With regards to total student enrolment in 2013, IPTS institutions in Malaysia have a slight disparity in favour of women, with a GPI of 1.06; much closer to attaining gender parity compared to total student enrolment in IPTA institutions which have an average GPI of 1.57 (Ministry of Higher Education, 2012). Focusing on undergraduate students further widens the difference in GPI, as IPTA universities have a GPI of 1.7 as compared to the IPTS institutions, which attain gender parity at 0.98. The numbers show that the gender gap in Malaysian higher education mainly pertains to public universities.

Of course, an overall GPI which is close to parity may obscure inequities within particular institutions, particularly as there are over 500 IPTS campuses within Malaysia. Among some of the more prominent IPTS universities, there exists a wide spectrum of gender disparities. For example, Limkokwing and Nottingham Universities had intermediate disparity against women, with GPI between 0.5 and 0.89 (Ministry of Higher Education Malaysia, 2012). Meanwhile, Sunway University and HELP University had intermediate disparity in favour of women, with GPI between 1.11 and 1.5 (Ministry of Higher Education Malaysia, 2012). It should be noted that none of the institutions I examined had extreme disparities in favour of men or women, and all had GPI below the average of IPTA universities. This is in stark contrast to the GPI of public universities, where over half had GPI that could be considered extreme disparity. This affirms the notion that the gender gap between men and women is particularly large in Malaysian public universities as compared to the private sector.

It is not immediately clear why IPTS universities have far less of a gender gap compared to IPTA universities in Malaysia. The evidence for the relationship between private institutions of education and gender parity is mixed and often contradictory. In countries in which women form a minority of tertiary student population, private universities can often be more equitable in terms of gender parity, such as the case of Kenya where women consist of 54% of private university students compared to 32% of public university students (Onsongo, 2011). However, in the U.S, it has been argued that private universities discriminate against women in order to maintain gender balance; while public universities are more meritocratic in terms of admissions (Birger, 2015). One plausible explanation for disparity in Malaysia is that the boys and men who are left behind due to the gender gap consist primarily of those from lower income families, and thus has a stronger impact on IPTA universities which are far cheaper in comparison to IPTS universities.

The Gender Gap by Subject Segregation

The gender gap in Malaysian higher education needs to be understood in the context of gender segregation by subject in universities. This refers to the phenomenon in which male and female students tend to enrol in different faculties and courses at university; hence an overall increased female participation rate does not automatically lead an increase in gender parity across different faculties. This segregation has been said to account for between 15% to 25% of the gender income gap among college students (Bobbitt-Zeher, 2007).

The segregation of gender in Malaysian higher education needs to be considered in order to understand the gender gap. In which fields of study, if any, has gender parity been attained? And how does this compare to global norms? These are the questions we consider in the following section:

Figure 3. GPI according to field of study in Malaysian IPTAs 2010-13

Field of Study/ Year		2010	2011	2012	2013
Education	GPI	2.26	2.33	2.66	2.37
Arts & Humanities	GPI	1.7	1.7	1.69	1.65
Social Science, Business & Law	GPI	2.05	2.03	2.07	2.04
Science, Mathematics & Computers	GPI	1.63	1.62	1.66	1.69
Engineering, Manufacturing & Construction	GPI	0.72	0.73	0.73	0.75
Agriculture &Veterinary	GPI	1.44	1.26	1.27	1.3
Health & Welfare	GPI	2.33	2.36	2.52	2.51
Services	GPI	1.46	1.54	1.58	1.53

Source: Ministry of Education Malaysia (2013)

Table 3 shows the enrolment in the eight major fields of study in Malaysia according to gender for the years 2010-2013. We find that women outnumber men in seven out of the eight fields of study, including areas in which women are traditionally underrepresented such as mathematics and science. This is shown by the GPI which is consistently higher than 1.0 with the exception of one field of study. The only field of study in which men continue to outnumber women is in engineering, manufacturing and construction. How does this compare to international norms? Women in Malaysian public universities have higher representation in each field on study in comparison to other countries within the East Asia and Pacific region (UNICEF 2009, p.32). While the regional average for female representation in social sciences, business and law is slightly less than 50%, women comprise 67% of students in the same field of study. In fields of study where women consists of a majority, such as health and welfare (about 64%), the trend is even more pronounced in Malaysian public universities (71%). While women in the same region are underrepresented in the fields of science and mathematics, women in Malaysia make up 62.8% of the student population in those fields. Finally, even in the field of engineering, manufacturing and construction where women in Malaysia are still a minority, they come much closer to gender parity compared to the regional average, which is less than 20% compared to 43.1% in Malaysia (UNICEF, 2009).

These figures are noteworthy because degrees in STEM fields have often been an exception to the global trend towards increasing women enrolment in universities. A recent report from the National Student Clearinghouse looks at degrees in STEM fields and finds that the share of STEM bachelor's degrees going to women in the U.S has actually decreased over the past decade (National Student Clearinghouse, 2015). While overall parity in undergraduate enrolment has increased worldwide, this has not been the case in STEM disciplines where there are more male than female students in 91% of countries examined (UNESCO 2015, p.3). Furthermore, the OECD (2011) found that STEM fields have become increasingly unpopular for women as they progress in their academic fields, with declining rates of women opting to study past a Bachelors' degree to Masters and then PhDs. A closer examination of the degree choices within those fields of study can reflect the extent to which Malaysian public universities differ from these trends.

Table 4. GPI and Percentage of Women in STEM Subjects (Public Universities)

Degree		Men	Women	All	GPI	% of which are women
Engineering	Bachelors	42309	34615	76924	0.82	45
	Masters	6543	6377	12920	0.97	49
	Doctorate	4380	2607	6987	0.6	37
Mathematics	Bachelors	1512	4450	5962	2.94	75
	Masters	264	709	973	2.69	73
	Doctorate	313	369	682	1.18	54
Science	Bachelors	3286	8275	11561	2.52	72
	Masters	3909	7121	11030	1.82	65
	Doctorate	2102	2506	4608	1.19	54
Technology	Bachelors	2581	4098	6679	1.59	61
	Masters	534	540	1074	1.01	50
	Doctorate	333	180	513	0.54	35

Source: Malaysian Higher Education Statistics, 2013

Table 4 above shows that in the traditional STEM fields, women have overtaken men in every degree with the exception of engineering. In the fields of science and mathematics, this true at every level of academic qualification from bachelor degree to doctorate. With regards to engineering, Malaysia has attained an impressive degree of gender parity, with women comprising of 45% of undergraduates. This is indeed surprising considering that global underrepresentation of women in engineering courses. For an instance, female engineering undergraduates in the US comprise a mere 17% of the student population according to the National Student Clearinghouse (2015). In Canada, the University of Toronto recently celebrated the fact that their engineering courses had 30% female enrolment, higher than any other university in Ontario (Engineering Strategic Communications, 2015). Closer to home, 19.5% of engineering undergraduates in the Republic of Korea were female in 2011 (UNESCO 2015, p.4). A more detailed breakdown of the degree choices would be required to examine whether or not further inequities exist within these subject choices.

Malaysia's achievements in attaining gender parity for women in STEM fields are worthy of emulation, and serves as a convincing counterpoint to former Harvard President Lawrence H. Summers' comments that the underrepresentation of women in science fields at universities may be due to innate differences (Hemel, 2005). In a paper entitled '*Why is Computer Science in Malaysia Dominated by Women?*', it is argued that 'The fact that in Malaysia, women's education, and their positions in computer science departments and software employment being equivalent to those of men, undoubtedly contributes to such relative optimism about gender and technology relations in developing countries', showing that women are able to compete equally when they are not faced with cultural and institutional stereotyping (Mellstrom 2009, p.887) The question that arises in the Malaysian context is whether or not men have been at the receiving end of some of these negative stereotypes and institutional barriers, particularly when they comprise a mere 25% of undergraduates in mathematics. In the same paper, one female computer science professor expressed the view that the boys in her department 'don't seem motivated enough and we also have problems with young men dropping out of class.' (Mellstrom 2009, p.897) We will consider these and other explanations for the gender gap below.

Causes of the Gender Gap

The causes of the gender gap in Malaysian public universities undoubtedly involve a complex array of factors. The first possible cause we will consider is that men are underrepresented in public universities because they pursue alternative tertiary pathways, including polytechnics, community colleges and overseas universities. We also consider the other explanations typically ascribed to explain the higher education gender gap, and examine them in the Malaysian context. This would include higher returns to education for women, better performance in secondary schooling, and negative socialisation of men.

The difference between the number of men and women enrolled in undergraduate IPTA programmes in 2013 was 86,798 students. Given that there are marginally more men than women in the Malaysian population (CIA, 2016), this suggests that there could be potentially over 86 thousand more men in Malaysian public universities. Where have these missing men gone to? We have already seen that men are overall marginally better represented in IPTS universities, thus it is clear that the absence of male students in IPTA universities cannot be explained by their proliferation in the private sector of higher education. This section considers the possibility that male youth have entered alternative pathways to higher education, and thus are underrepresented in Malaysian public universities. One possibility is that men have chosen alternative routes for career advancement by enrolling into polytechnics & community colleges. A second possibility is that male students are sufficiently privileged to enter higher quality institutions than IPTAs, and are sent to overseas universities. Both of these possibilities will be examined to identify the extent to which they can explain the gender gap.

Men at Polytechnics and Community Colleges

From 2009-2013, male enrolment in polytechnics was consistently higher than the rate of female enrolment (Ministry of Education Malaysia, 2013). For example, in 2013 there were 48114 male students enrolled in polytechnic colleges compared to 41389 female students. This difference amounts to 6725 students, and a GPI of 0.86. However, this gap itself narrowed from 2009-2013. The disparity in favour of male students is even more pronounced in local community colleges, where the GPI has steadily worsened in terms of disparity in favour of males. In 2013, the GPI for enrolment into community colleges in Malaysia was 0.56, with 13738 male students enrolled compared to 21468 female students (Ministry of Education Malaysia, 2013).

However, due to the relatively small size of student enrolment, the gap between male and female students is slightly smaller than compared to the gap of polytechnic students at 6008 students. The relatively small student enrolment size and increasing GPI in polytechnic colleges means that the gender gap among undergraduates in IPTAs cannot be satisfactorily explained by male enrolment in polytechnic institutions and community colleges. The 'missing' number of male students at IPTAs dwarfs the gender gap in these institutions in terms of size, as the difference in number between male and female students in polytechnics and community colleges in 2013 consists of 12733 students, about 14% of the gender gap in IPTA undergraduate programmes for the same year. Furthermore, this does not address the underlying issue of why boys are choosing to enter polytechnics or community colleges rather than undergraduate programmes, thus lowering their potential future incomes.

Men in Overseas Universities

Given the dominance of men in the political and economic spheres of Malaysia, it may be posited that male youth are given a privileged position by their families and are sent abroad to receive higher education from more recognised institutions in places such as the UK or the US. Is there a preference for families to send their sons abroad, and can this explain the gender gap?

According to the UNESCO Institute for Statistics (2016), there are currently 56, 260 Malaysian students studying abroad. Most of these students are in the UK (15, 583) and Australia (15, 357), the next closest being the US (6, 486). Given these numbers, it is clear that the size of the gender gap in Malaysian public universities is larger than the entire number of Malaysian overseas students put together. This makes it unlikely that the overseas student population can explain the gender gap of Malaysian IPTAs to a significant degree. Furthermore, the overseas student population of Malaysia is far from male dominated. In Australia, the number of male and female students from Malaysia in 2014 was practically equal, with a 49.3% female and 50.7% male student population (Australian Government, 2015). In the UK, there is no data available as to what percentage of Malaysian students are male. However, male students studying in the UK from Asia are actually underrepresented, with only 47.21% of students from Asia studying in the UK being male (HESA, 2016) This would indicate that the Malaysians students studying in the UK are unlikely to be strongly male dominated, and thus overseas students cannot explain the lack of absence of male students in public universities.

Women have Higher Returns for University Education than Men

One explanation to why women outnumber men in public universities is due to the fact that they receive greater economic incentives for entering higher education. This explanation is grounded in Human Capital theory, an influential economic theory advanced by economists from the Chicago School of Economics such as Gary Becker. It posits that human decisions are based on the economic self-interest of individuals operating within a free market. Hence, enrolment in university education is primarily an investment decision, and women's increasing enrolment in public universities must be due to expanding returns within the labour market. Another Chicago School economist, Francisco Paro, found that 'studies empirically show that the college wage premium for women is higher than the college wage premium for men and has been for at least 40 years', adding that the comparatively high financial returns for women could potentially explain the gender gap (Parro 2012, p.158). However, other examinations of Current Population Survey (CPS) have found that while women's wage returns to higher education have indeed increased, men's returns have increased even more rapidly because jobs for those employed straight out of high school have become increasingly low paid (Diprete and Buchmann 2006, p.2).Overall, it has been found that the human capital theory 'does not provide a particularly convincing explanation' for the gender gap in countries such as the United States and Japan (Vincent-Lancrin 2008, p.282). Does this approach make better sense in the Malaysian context?

Due to the wage gap between men and women in Malaysia, Malaysian women earn 8.4% less than their male counterparts on average (Lee, 2015). However, it is important to note that this alone does not refute the idea that women can get higher returns for university education; what is important is not the wage gap between men and women but the gap between the earnings of tertiary graduates and non-tertiary graduates. According to the 2012 Salaries & Wages Survey Report, women with a tertiary degree on average earned more than double the salary of women with just a high school certificate; a premium of 1545 Malaysian Ringgit (RM) on average. However, men with a tertiary degree earned an even larger premium: male tertiary graduates earned an average of RM 3542 as compared to men with a high school certificate who earned an average of RM 1554. This amounts to a premium of RM 1988 on average. Hence, it is clear that men have equal, if not more economic incentives for pursuing higher education and this cannot explain the gender gap in Malaysian public universities.

Girls Perform Better in Secondary School Education

Girls can outperform boys in secondary school education in two ways: they score better in standardised tests, and they drop out at a lesser rate. There is a positive association of performance in standardised tests, overall marks, and good study habits with university enrolment (Frenette and

Zeman, 2007). Obviously, a lower dropout rate among girls would increase their chances of making the transition to higher education. These are the two measures of secondary school performance examined here.

The better performance of female students compared to male students has been the most common explanation for the gender gap, both in Malaysia and abroad. "More female applicants had better academic results and performance, which explains the increase in the gender gap," said UKM Professor Othman A. Karim (Kapoor and Au, 2011). The then deputy Vice Chancellor of Universiti Putra Malaysia, Professor Mohd Fauzi Ramlan also insisted that "the female students were just more qualified than the males" (Kapoor and Au, 2011), pointing out that UPM were forced to allocate more residential colleges for women even while vacancies for men still existed. Is there empirical proof that Malaysian women achieve better academic results than Malaysian men?

In 2010, one UNICEF report entitled 'Why are Boys under-performing in Education? Gender Analysis of Four Asia-Pacific Countries' examined national school examination results and educational data from Malaysian Educational Statistics, and found that girls outperformed boys academically in four key subjects (English, Mathematics, Science and *Bahasa Malaysia* in the years 2005-2007. (Hepworth 2013, p.14) Furthermore, the performance gap between boys and girls in Malaysian government schools began in primary school, and only widened as they progressed to lower secondary and then upper secondary. Another form of standardised tests which we can consider is the Programme for International Student Assessment (PISA) which is a global study carried out by the OECD. Malaysia first participated in the study in 2009. In the 2012 PISA study, 34 OECD countries and 31 partner countries participated the testing of mathematics, reading and science. Overall, there was a small gender gap in favour of boys in science, a large gender gap in favour of boys in mathematics and a large gender gap in favour of girls in reading (OECD 2014, p.66). Malaysia was one of the five countries out of the 65 tested countries in which girls outperformed boys in mathematics, to a statistically significant degree (OECD 2014, p.73). Malaysian girls also outperformed boys in science and reading. The underachievement of Malaysian males in terms of examination results is in accordance to global trends. In the UK, the gender gap between boys and girls in their General Certificate of Secondary Education (GCSE) examinations was the highest in over a decade in 2014, as girls outperformed boys by 8.8 percentage points (Arnett, 2014).

Girls also perform better than boys at staying in school. The drop-out rate for Malaysian school children is very low at primary school levels (0.8% in 2014) but rises significantly in secondary school (10% in 2014) (United Nations Malaysia 2015, p.10). The dropout rate among students transitioning into lower secondary is low for both genders, although female students have a marginally lower dropout rate. However, dropout rates rapidly increase as students enter secondary schooling. Goolamally and Ahmad (2010) found that 9.96% of boys and 8.02% of girls dropped out while transitioning into secondary school in the 2005 cohort. They also noted that the rate at which girls dropped out of school from 2006 to 2009 actually decreased, while the rate at which boys dropped out had the opposite trend. This provides evidence for the proposition that girls not only perform better than boys academically while in secondary school, but also drop out at a lower rate. This will undoubtedly have an impact on overall gender parity in universities.

Nevertheless, the gap in secondary school performance in itself does not provide a satisfactory explanation for the enrolment gap in Malaysian universities. It merely shifts the question to why are women systematically performing better than their male counterparts in terms of their examination results, or staying in school at a greater rate. Insofar as we reject naturalistic explanations for gender differences, these factors are a symptom of a deeper, underlying problem. There is research which indicates the size of the gender gap among students is not stagnant, but changes over time, in particular decreasing with regards to career aspirations and degree attainment (Chamberlain, 1988). This suggests that the gender gap is not caused by inherent or genetic dispositions, but caused by wider social phenomena.

Socialisation

Socialisation is a broad term used to refer to the lifelong processes in which individuals acquire norms, customs, values and ideologies from their environment, which in turn influences how they interact with society. It suggests that a person's upbringing can heavily impact his or her biological traits, to the extent that different genders may systematically behave differently. This can be caused by interactions during childhood, parental role models, peers or schooling (Sax and Harper 2007, p.4). In the context of the gender gap in Malaysian higher education, it is possible that boys have become socialised to accept unhealthy gender stereotypes, which inhibits their ability to fully partake in academic life and enrol into universities. This socialisation can occur across different aspects of society, such as in parenting, peers and schools.

We can find limited evidence for such socialisation in research done through focus groups surveys of Malaysian undergraduate students. When asked for reasons why boys performed worse than girls in the Malaysian context, participants' felt somewhat strong or strongly in agreement with statements such as 'Boys have to hide their fears', 'Girls are ambitious', 'Girls have a clear vision of the future compared to boys', 'Girls are more disciplined', and 'Girls are hardworking' (Goolamally and Ahmad 2010, p.17) These answers indicate that girl's benefit from positive stereotypes which encourage them to go to university, while conversely boys are given negative stereotypes; implying that masculine attributes include being undisciplined, lazy, lacking in ambition and without vision. This makes it difficult for boys to fully participate in the kinds of activity which will ultimately be essential for flourishing in higher education; for instance, reading is often perceived by boys as a feminine activity (UNICEF 2004, p.63).

Even nominally positive traits associated with boys can be damaging. One of the statements which participants agreed with in the focus group was 'Parents trust a boy's capability to secure a job', which can influence a parent's decision to withdraw their son from school as they are more capable of finding work with competitive wages. This concurs with labour force statistics which find that 33% of women aged 15-24 participate in the labour force, as compared to 48% of men at the same age group (Ministry of Women and Family Development, 2013).

Conclusion

The paper has found that 13 out of 20 of Malaysian public universities fall under UNESCO's classification of 'far from gender parity', with a GPI higher than 1.5. This includes the University of Malaya, which has significantly higher GPI compared to foreign counterparts in developed nations. We also find that this phenomenon is not replicated in Malaysia's private sector of higher education, where the GPI is much more balanced. The gender gap in terms of public university enrolment extends to every field of study with the exception of engineering, manufacturing and construction; we find in the latter field that Malaysia has succeeded in achieving much closer gender parity compared to other countries in the Asia pacific region and also more developed nations like the US and the UK. Gender parity is much more equal in Malaysian private universities, and among Malaysian overseas educated students. However, there remains a significant gap in Malaysian public universities, as the number of men enrolling into community colleges and polytechnics are insufficient to explain this gap. We find that there is a trend of male underperformance in secondary schooling level which undoubtedly contributes to the gender gap in higher education, as boys attain lower academic achievement and drop out at higher rates overall. This does not suffice as an explanation by itself, without considering how boys and girls are socialised differently from a young age.

Much more research needs to be done in order to produce informed recommendations on how to reduce or mitigate the gender gap at Malaysian public universities. Part of the purpose behind this paper is to open a dialogue among policy makers and academics to focus more attention on the issue of male enrolment in public universities, which has been scarcely discussed despite being acknowledged in the Malaysian Education Blueprint. Based on the evidence reviewed in this paper, we recommend that schools in Malaysia begin to consciously review their role in gender

socialisation, in terms of 'curriculum materials, teachers' expectations, educational tracking, and peer relations [which] encourage girls and boys to learn gender-related skills and self-concept' (Anderson 2000, p.38). Schools could implement awareness campaigns and work to increase parental involvement in their son's lives; research indicates that parents are usually less involved in their sons' academic lives while daughters hold school discussions with their parents at a higher rate (Carter and Wjtkiewicz, 2000). The gender gap in higher education is one that disproportionately affects males from backgrounds of lower income, as acknowledged in reports from HEPI (Hillman and Robinson, 2016). This is why the gender gap is close to parity in private universities and overseas education. Hence, social policies which target lower income families and communities should have the effect of reducing the gender gap in Malaysian public universities too. This way, we can take steps to address this disparity, while taking care not to roll back the impressive progress that has been made with regard to increasing female participation in all fields of study.

References

Anderson, M. L. (2000). *Thinking about Women: Sociological perspectives on sex and gender* (5th edition). Allyn and Bacon: Boston, MA.

Arnett, G. (2014). *GCSE Results: Biggest Gap in 11 Years between Boys and Girls A*-C Pass Rate, the Guardian*. Available at http://www.theguardian.com/news/datablog/2014/aug/21/gcse-results-2014-biggest-gap-11-boys-and-girls-a-c-pass-rate. [Accessed 15 July 2016].

Australian Government, Department of Education and Training. (2015). *International Student Numbers 2014.* Available at https://internationaleducation.gov.au/research/Research-Snapshots/Documents/International%20Student%20Numbers%202014.pdf. [Accessed 15 September 2016].

Birger, J. (2015). *Why getting into elite colleges is harder for women. Washington Post*, July 30. Available at https://www.washingtonpost.com/posteverything/wp/2015/07/30/achieving-perfect-gender-balance-on-campus-isnt-that-important-ending-private-colleges-affirmative-action-for-men-is/. [Accessed 10 June 2016].

Bobbitt-Zeher, D. (2007). The gender income gap and the role of education. *Sociology of Education, 80*(1), pp. 1-22.

Borzelleca, D. (2012). *The Male-Female Ratio in College. Forbes*. Available at http://www.forbes.com/sites/ccap/2012/02/16/the-male-female-ratio-in college/#466c44441525. [Accessed 10 June 2016].

Carter, R. S. and Wojtkiewicz, R. A. (2000). Parental involvement with adolescents' education: Do daughters or sons get more help? *Adolescence (Spring), 35*(137), pp. 29-44.

Chamberlain, M. K. (1988). *Women in Academe: Progress and prospects*. New York: Russell Sage Foundation.

CIA. (2016). *The World Factbook.* Available at https://www.cia.gov/library/publications/the-world-factbook/fields/2018.html#download. [Accessed 10 June 2016].

Diprete, T. A. and Buchmann, C. (2006). Gender-specific trends in the value of education and the emerging gender gap in college completion. *Demography*, *43*(1), pp.1-24.

Engineering Stategic Communications. (2015). *U of T Engineering Celebrates Record Number of Female First-Year Students*. Available at http://news.engineering.utoronto.ca/record-female-first-years/. [Accessed 10 June 2016].

Frenette, M. and Zeman, K. (2007). *Why Are Most University Students Women? Evidence Based on Academic Performance, Study Habits and Parental Influences, Analytical Studies Branch Research Paper Series, Statistics Canada, Analytical Studies Branch*. Available at http://EconPapers.repec.org/RePEc:stc:stcp3e:2007303e. [Accessed 20 June 2016].

Goh, L. (2015). *PM: Malaysia on track to becoming high-income nation by 2020. The Star*, September 29. Available at http://www.thestar.com.my/news/nation/2015/09/29/najib-high-income-2020/. [Accessed 20 July 2016].

Goolamally, N. and Ahmad, J. (2010). *Boys Do Poorly in Schools: The Malaysian Story. Unpublished Manuscript.* Available at https://www.researchgate.net/publication/262689050_BOYS_DO_POORLY_IN_SCHOOLS_THE_MALAYSIAN_STORY. [Accessed 15 July 2016].

Hemel, D. J. (2005). *Summers' Comments on Women and Science Draw Ire. The Harvard Crimson.* Available at: https://www.thecrimson.com/article/2005/1/14/summers-comments-on-women-and-science/. [Accessed June 20 2016].

Hepworth, F. (2013). *Why are Boys Underperforming in Education? Gender Analysis of Four Asia Pacific Countries. United Nations Girls Education Initiative: New York*. Available at http://www.unicef.org/eapro/report_why_are_boys_underperforming_FINAL.pdf. [Accessed 20 July 2016].

Higher Education Statistics Agency (HESA). (2016). *Students in Higher Education 2014/2015.* Available at https://www.hesa.ac.uk/data-and-analysis/publications/students-2014-15. [Accessed 15 August 2016].

Hillman, N. and Robinson, N. (2016.*) Boys to Men: The Underachievement of Young Men in Higher Education – And How to Start Tackling It. Higher Education Policy Institute*. Available at http://www.hepi.ac.uk/wp-content/uploads/2016/05/Boys-to-Men.pdf. [Accessed July 20th 2016].

Kapoor, C. and Au, E. (2011). *Female Undergrads Outnumber Males: Malaysia, Asia One News,* September 8. Available at http://news.asiaone.com/News/AsiaOne%2BNews/Malaysia/Story/A1Story20110908-298320.html. [Accessed 15 September 2016].

Khoo, B. T. (2003). *Beyond Mahathir: Malaysian politics and its discontents*. London: Zed Books.

Lee, P. (2015). *Gender-Wage Bias Still Raging, The Star*. Available at www.thestar.com.my/news/nation/2015/01/05/genderwage-bias-still-raging-men-earn-more-doing-the-same-job-on-many-fronts-report-/. [Accessed 10 June 2016].

Mellström, U. (2009). The intersection of gender, race and cultural boundaries, or why is computer science in Malaysia dominated by women? *Social Studies of Science, 39*(6), pp. 885-907.

Milanovic, B. (2006). Inequality and determinants of earnings in Malaysia, 1984-1997. *Asian Economic Journal*, *20*(2), pp. 191-216.

Ministry of Education Malaysia. (1967). *Educational Statistics of Malaysia 1938-1967. Dewan Bahasa dan Pustaka*. Available at http://www.fmm.org.my/upload/educational%20statistics%20of%20malaysia%201938-1967.pdf. [Accessed July 10 2016].

Ministry of Education Malaysia. (2012). *Preliminary Report Malaysia Education Blueprint 2013-2025*. Available at www.moe.gov.my/userfiles/file/PPP/Preliminary-Blueprint-Eng.pdf. [Accessed 10 June 2016].

Ministry of Education Malaysia. (2013). *Education Statistic: Higher Education Sector. Perpustakaan Negara Malaysia*. Available at https://www.mohe.gov.my/en/download/public/statistik/2013/83-perangkaan-pendidikan-negara-spt-2013/file. [Accessed June 15 2016].

Ministry of Higher Education Malaysia (2010). *Statistics of Higher Education Malaysia 2009.* Putrajaya: Ministry of Higher Education.

Ministry of Higher Education Malaysia. (2011). *Statistics of Higher Education Malaysia 2010.* Putrajaya*:* Ministry of Higher Education.

Ministry of Higher Education Malaysia. (2012). *Buku Informasi IPTS 2012 Bertaraf Universiti, Kolej Universiti Dan Kampus Cawangan.* Putrajaya: Ministry of Education Malaysia.

Ministry of Higher Education Malaysia. (2012). *National Education Statistic: Higher Education Sector*. *Ministry of Higher Education of Malaysia*. Available at https://www.mohe.gov.my/en/download/public/statistik/2012/84-perangkaan-pendidikan-negara-spt-2012/file. [Accessed June 15 2016].

Ministry of Women, Family and Community Development. (2007). *Measuring and Monitoring Gender Equality: Malaysia's Gender Gap Index*. Available at http://www.undp.org/content/dam/malaysia/docs/WomenE/MGGI_report.pdf. [Accessed 10 June 2016].

Ministry of Women and Family Development. (2013). *The Progress of Malaysian Women Since Independence*. Available at http://www.undp.org/content/dam/malaysia/docs/WomenE/ProgressOfMalaysianWomen.pdf. [Accessed 10 June 2016].

National Student Clearinghouse. (2015). *Snapshot Report: Degree Attainment*. Available at https://nscresearchcenter.org/wp-content/uploads/SnapshotReport15-DegreeAttainment.pdf. [Accessed 10 June 2016].

NUS Registrar's Office. (2016). *Student and Graduate Statistics National University of Singapore*. Available at http://www.nus.edu.sg/registrar/statistics.html. [Accessed July 10 2016].

OECD. (2011). *Report on the Gender Initiative*: *Gender equality in education, employment and entrepreneurship*. Paris: OECD.

OECD. (2014). *PISA 2012 Results: What Students Know and Can Do. Student Performance in Mathematics, Reading and Science. Paris: OECD Publishing*. Available at https://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-I.pdf. [Accessed 15 June 2016].

Onsongo, J. K. (2011). *Promoting Gender Equity in Selected Public Universities in Kenya*. Addis Ababa, Ethiopia: Organisation for Social Science Research in Eastern and Southern Africa (OSSREA).

Parro, F. (2012). International evidence on the gender gap in education over the past six decades: A puzzle and an answer to it. *Journal of Human Capital*, *6*(2), pp. 150-185.

Pong, S. L. (1999). Gender inequality in educational attainment in Peninsular Malaysia. In C. Heward and S. Bunwaree (Eds.), *Gender, Education and Development: Beyond Access to Empowerment*. London: Zed Books.

Sax, L. and Harper, C. (2007). Origins of the gender gap: Pre-college and college influences on differences between men and women. *Research in Higher Education*, *48*(6), pp. 669-694.

UCAS. (2015). *End of Cycle Report 2015, UCAS Analysis and Research.* Available at https://www.ucas.com/sites/default/files/eoc-report-2015-v2.pdf. [Accessed 15 June 2015].

UNESCO. (2012). *World Atlas of Gender Equality in Education*. Available at http://www.uis.unesco.org/Education/Documents/unesco-world-atlas-gender-education-2012.pdf. [Accessed 10 June 2016].

UNESCO. (2015). *A Complex Formula: Girls and Women in Science, Technology, Engineering and Mathematics in Asia.* Available at http://unesdoc.unesco.org/images/0024/002457/245717E.pdf. [Accessed 15 June 2016].

UNESCO Institute for Statistics. (2016). *Global Flow of Tertiary- Level Students 2014*. Available at http://uis.unesco.org/en/uis-student-flow. [Accessed July 20th 2016].

UNICEF. (2004). *The State of the World's Children 2004*. Available at http://www.unicef.org/sowc04/files/Chapter5.pdf. [Accessed 15 August 2016].

UNICEF. (2009). *Gender Equality in Education: East Asia and Pacific*. Available at https://www.unicef.org/eapro/Gender_Snapshot_web.pdf. [Accessed 10 June 2016].

United Nations Malaysia. (2015). *Malaysia Millennium Development Goals Report 2015*. Available at http://un.org.my/upload/undp_mdg_report_2015.pdf. [Accessed 15 September 2016].

University of Malaya (n.d.). *Our History*. Available at https://www.um.edu.my/about-um/our-history. [Accessed 2 March 2017].

Vincent-Lancrin, S. (2008). *The Reversal of Gender Inequalities in Higher Education: An On-going Trend.* Available at https://www.oecd.org/edu/ceri/41939699.pdf . [Accessed 15 June 2016].

Weale, S. (2016). *UK's University Gender Gap is a National Scandal, Says Think Tank, The Guardian.* Available at: https://www.theguardian.com/education/2016/may/12/university-gender-gap-scandal-thinktank-men. [Accessed 15 August 2016].

Weaver-Hightower, M. (2003). The boy turn in research on gender and education. *Review of Educational Research, 73*(4), pp. 471-498.

World Bank. (2004). *Global Monitoring Report 2004: Policies and Actions for Achieving the Millennium Development Goals and Related Outcomes The World Bank pp.42*. Available at http://siteresources.worldbank.org/INTGLOBALMONITORING/Resources/GMR_2004.pdf. [Accessed July 15 2016].

World Economic Forum. (2015). *The Global Gender Gap Report 2015.* Cologne/Geneva: World Economic Forum.

Corporate Universities and Corporation-University Partnerships in Thailand: Complementing Education in Learning, Leadership and Change

Oliver S. Crocco[a]
Maria Cseh
George Washington University
Dollaya Hemmapattawe
Siam Cement Group

Abstract: *With an estimated workforce of 285 million and the establishment of the Association of Southeast Asian Nations (ASEAN) Economic Community in 2015, ASEAN faces vast challenges in human resource development (HRD) and higher education. These challenges in Thailand have resulted in the rise of corporate universities and corporation-university partnerships. Corporate partnerships in education adapt quickly to industry needs and are increasingly popular and complementary to traditional higher education. This research looks at one corporate university and one corporation-university partnership to investigate how, if at all, corporate universities and partnerships address HRD issues such as adult learning, leadership development, organisational change, corporate social responsibility (CSR), as well as ethical and global issues. This research finds initial evidence that corporate educational strategies address a variety of HRD issues and have the potential to revolutionise and complement higher education in Thailand in a way that drives the nation toward a more sustainable future.*

Keywords: *Thailand, higher education, corporate education, human resource development*

Introduction

With an estimated workforce of 285 million and the establishment of the Association of Southeast Asian Nations (ASEAN) Economic Community in December 2015, ASEAN faces vast challenges in human resource development (HRD) (McLean and Chiraprapha, 2015). These challenges stem from the creation of a single market and production base as well as the free flow of skilled labour in the region as part of ASEAN economic integration (Fry, 2008). In response to these challenges, there has been a rise of corporate universities and corporation-university partnerships around the world (Abel and Li, 2012; Alagaraja and Li, 2015). Corporate involvement in education allows for quick adaptation to industry needs and is becoming increasingly widespread and complementary to traditional higher education (Allen, 2010). This makes corporate education primed to address HRD issues such as adult learning, organisational change, and leadership development. Thailand, a geographic and economic hub of mainland Southeast Asia, has shown to be a growing area for corporate universities and corporate-university partnerships (Suthiphand and Kornkarun, 2015).

In 1992, the 7th National Economic and Social Development Plan (1992-1996) of Thailand was set in motion, which led to investments in the study of HRD, including the first master's programme in HRD at the National Institute of Development Administration (NIDA) in 1992. McLean and Chiraprapha (2015) developed a taxonomy to assess a country's level of HRD education and found that Thailand

[a] **Correspondence can be directed to:** olivercrocco@gwu.edu

is "established" according to the taxonomy with seven universities offering a variety of programmes in HRD. While HRD-specific education in Thailand is clearly on the rise, less is known about how higher education addresses issues of learning, leadership, and change, which are essential areas in HRD.

Education that addresses issues related to learning, leadership, and change has evolved and expanded from the conventional classroom to virtual learning communities, from on-the-job training to high-technological simulation machines, and from intensive orientation programmes to pre-employment curricula (Rodriguez and Armellini, 2013). There has also been a shift away from prescriptive instruction to constructivism (Toraman and Demir, 2016). Additionally, there is a growing conviction that traditional orientations to training and workforce learning post-recruitment do not effectively develop employees' skills because of the unpredictable nature of labour markets and business expansion, especially in an emergent region such as Southeast Asia (Parry and Hayden, 2015). Parry and Hayden (2015) go on to argue for the need to identify and systematise technical skills and soft skills necessary for workers in Southeast Asia so that they are able 'to innovate and adapt to dynamic work environments' (p.76). In Thailand, some large corporate organisations such as CP ALL and Siam Cement Group (SCG) are finding ways to supply highly skilled manpower while minimising spending on training (Busaya and McLean, 2012). One solution is to establish collaborative education programmes with institutions of higher education (SCG Chemicals, 2012). These co-creative education programmes between higher education and the private sector are generating innovative and important practices in learning, leadership, and change education. Since traditional universities tend to be slower in adapting new educational demands and attitudes, understanding the role of corporate university partnerships and programmes is of increasing importance (Blass, 2005; Alagaraja and Li, 2015). There is evidence that traditional universities are not as limber in creating new programmes and adapting to new curricula, which is due in part to hierarchical and bureaucratic institutional structures (Schierenbeck, 2012). Corporations tend to be more tuned to the needs of the market with adaptable strategy and decision-making processes (Dealtry and Howard, 2008). At this time, however, little is known about corporate universities and corporation-university partnerships in Thailand, what corporations are operating them, and what programmes they are offering. Considering the growing need for HRD education to engage the challenges facing Thailand in ASEAN Economic Community, it is important to explore how corporate universities and corporation-university partnerships are contributing to HRD education.

This study explores the presence of corporate universities and corporation-university partnerships in Thailand and identifies how, if at all, these programmes address issues related to HRD education including, but not limited to, adult learning, leadership development, organisational change, corporate social responsibility (CSR), and ethical and global issues related to them, particularly in the context of ASEAN. Bringing together research on HRD, higher education, and corporate universities, this research explores how one corporate university program and one corporation-university partnership certificate programme address issues related to HRD such as adult learning, leadership development, organisational change, CSR, and ethical and global issues particularly in the context ASEAN. The researchers identified the background and curricula of one corporation-university partnership certificate programme–the Chemical Engineering Practice School (ChEPS) certificate programme, which was initiated and organised by the collaboration of Siam Cement Group (SCG), King Mongkut's University of Technology Thonburi (KMUTT), and the Suksaphat Foundation–and one corporate university master's programme in Thailand–Master of Business Administration Programme in International Business (iMBA) as part of the International Programme at the Panyapiwat Institute of Management (PIM) in Bangkok, Thailand. These programmes were selected because they represent two of the largest and most dynamic companies in Thailand, they are two of the oldest continuously running corporate educational programmes in Thailand, and they act as illustrative examples of corporate educational programmes that incorporate HRD issues in Thailand.

Methodology

Two approaches were utilised to achieve the purpose of this study. Firstly, a concise literature and document review was conducted on the rise of corporate universities and corporation-university partnerships in Thailand. Secondly, the researchers used a multiple case study research design based on public document analysis to explore the background, curricula, and contributions of HRD of the two programmes analysed in this study. According to Merriam and Tisdell (2016), leading scholars in case study research methodology, a case study is 'an in-depth description and analysis of a bounded system' (p.37). Public documents can be 'a major source of data in qualitative research… [and] can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem' (Merriam and Tisdell 2016, p.189). Using documents for case study research is advantageous in that they may be the best source of data to answer the research question and are unaffected by the presence of the researcher (Merriam and Tisdell, 2016). That said, Merriam and Tisdell (2016) note that document analysis is also subject to limitations such as representing ideals and goals and not necessarily reality, which are explored more in the limitations section.

This study utilises peer-reviewed journal articles and scholarly books found in the George Washington University research database including various search engines. Official websites and organisation documents were also collected and used in the analysis. Sources included publications in both Thai and English languages. Search terms included corporate university/universities, corporation-university partnerships, stakeholder university, higher education, HRD, Thailand, ASEAN, change, leadership, learning, CSR, ethical issues, global issues, and their combinations.

The Corporate University, Higher Education, and HRD

A corporate university is defined most recently in scholarly literature by Margherita and Secundo (2009) as cited by Alagaraja and Li (2015, p.22) as:

> A new learning archetype which promotes and develops innovative learning and capability building processes among globally distributed and integrated networks of employees, customers, suppliers, partners, as well as academics, professionals, independent learners, and other institutions.

The trend of the corporate university has emerged primarily as the result of two factors: the fading distinction between education and training, and the gap between the goals of corporations and the offerings of universities (Blass, 2005; Alagaraja and Li, 2015). Corporate universities are generally also defined as an institution of higher learning developed by a company 'to fill a gap where the demand for company-specific training and development has not been met by the supply of education stemming from the public provision' (Blass 2005, p.62). At the heart of the corporate university is the idea that 'companies face increasing pressure today to develop outstanding human capital' (Margherita and Secundo 2011, p.176). Corporate universities began in the late1950s with internal universities in companies like General Motors and McDonald's (Margherita and Secundo, 2011), expanded into the 1980s with organisations like Disney and Motorola, and have continued to grow in popularity around the world (Blass, 2005). It is estimated that there are now around 4000 corporate universities around the world (Margherita and Secundo, 2011).

In research on Motorola University China, Shaw (2005) found that corporate universities of global companies could thrive across national boundaries, which will likely be important for ASEAN and the ASEAN Economic Community (AEC). In a study of 60 traditional universities and 40 corporate universities in the US and the UK, Walton (2005) found that corporate universities made more references to terms such as training, competitive advantage, and strategic competences, while traditional universities more often referenced scholarship, research culture, and benefiting society. Thus, corporate universities are not necessarily designed to compete with traditional higher education institutions but rather to address the needs of corporations, with special focus on change

management, leadership, and lifelong learning (Blass, 2005). This also distinguishes corporate education initiatives from those focused on human development and poverty alleviation such as vocational and educational training (VET) discussed in Palestine by Hilal and McGrath (2016).

Over time, the idea of the corporate university has evolved from using learning as a way of supporting a company's objectives to being more interconnected with stakeholders at all levels. This has led to what Margherita and Secundo (2011) describe as the stakeholder university archetype, which is characterised by the three features of 'broad human capital development objectives... extended involvement of a wide range of stakeholders… [and] networked learning, knowledge creation, and innovation processes' (p.181). This type of integration and connection with stakeholders in education has been seen in countries like Vietnam where there is a call for university and non-university stakeholders to work together in advancing medical education (Luu et al., 2009). In many ways, the context of corporate universities and corporation-university partnerships in Thailand reflects the new paradigm of the stakeholder university according to Margherita and Secundo (2011). The idea of the corporate university embedded in a nation's higher education fits well with the overarching lens of HRD.

As McLean and McLean (2001) demonstrate, national context largely influences the definition and practices of HRD in a particular nation. These include, but are not limited to influences of economics, government policy, and culture (McLean and McLean, 2001). In an attempt to write a global definition of HRD, McLean and McLean (2001, p.322) write,

> Human resource development is any process or activity that, either initially or over the long term, has the potential to develop adults' work-based knowledge, expertise, productivity and satisfaction, whether for personal or group/team gain, or for the benefit of an organisation, community, nation, or ultimately, the whole of humanity.

Additionally, Ardichvili (2012; 2013) claims that academic curricula in HRD should focus on sustainability and ethical issues, in both theory and practice. In Thailand in particular, a definition for HRD emerged in 1998 by Chartchai NaChiangmai, the founder of the first HRD program at NIDA, who wrote:

> HRD is an interactive process of enhancing and facilitating the development of capabilities and potentials of individuals, organisations and communities through organisation development and community development to attain effectively, efficiently and harmoniously personal and organisation goals, as well as communal goals. (McLean and McLean 2001, p.318).

Thus, the idea of the corporate university as defined by Margherita and Secundo (2009) fits well with the goals of HRD in promoting leadership development, adult learning, and organisational change. To understand this phenomenon more fully, it is important to understand how this integration of higher education and corporate learning co-evolved in Thailand.

Corporate Universities and Corporation-University Partnerships in Thailand

The last 30 years have shown exponential growth in higher education enrolment in Thailand. During this time, Thailand reached massification, when enrolment of the relevant age group in higher education institutions was between 15% and 50% according to Trow's (2006) framework. Recently, Thailand eclipsed 50% enrolment in higher education institutions in 2010 (The World Bank, 2016). In the 2014 UNESCO report, "Higher Education in Asia: Expanding Out, Expanding Up," Chapman and Chien (2014, p.48) argue that Thailand is investing more in graduate education with the overarching goal 'to fuel economic development' and become a competitive educational hub in the region. To support economic development considering the AEC, both corporate and educational sectors are attempting to be more competitive and innovative. In one study of SCG, Parisa and Vichita (2016)

found that concern for employees and investing in their learning was one of the driving values of the company. This has led to a rise in corporate universities as a result of economic integration in Southeast Asia as part of the AEC and increased demand for higher education in Thailand.

Examples of corporate universities in Thailand include, but are not limited to, Panyapiwat Institute of Management, founded by CP ALL, Thailand's largest publicly-traded company; Nation University, which is operated by Nation Multimedia Group which owns the daily English newspaper *The Nation*; Vidyasirimedhi Institute of Science and Technology (VISTEC), founded by Thailand's state-owned oil and gas company, PTT-Group; and, the Thai-Nichi Institute of Technology in Bangkok, founded the Technology Promotion Association to serve Japanese companies in the region.

Another corporate solution to increased educational needs is that of corporation-university partnerships. A prominent example of these partnerships is the Chemical Engineering Practice School (ChEPS) certificate programme, which was initiated and organised in collaboration with Siam Cement Group (SCG), King Mongkut's University of Technology Thonburi (KMUTT), and the Suksaphat Foundation. This type of partnership represents a new type of employee development in Thailand. While other partnerships are emerging with PTT Public Company Limited (PTT) and the Charoen Pokphand Group (CP) with well-known institutions of higher education in Thailand to create their own curricula, only data on the ChEPS certificate programme was available at the time of this writing. Some of these corporate universities and corporation-university partnerships are open to the public for enrolment while others are limited to existing employees. In this research, five corporate universities/corporation-university partnerships were identified and explored (see Table 1).

This increased focus on corporate involvement in higher education does not detract from the importance of public, traditional higher education but rather complements it. For example, corporate involvement is able to bring in specific content important to the workforce while traditional universities have the structure in places for theoretically and empirically informed education. Additionally, corporate universities may have different priorities in terms of knowledge production. In a mixed methods study of 12 Dutch corporate universities, results showed that while knowledge production was viewed as important by these corporate universities, concrete steps to further knowledge production was absent (Jansink et al., 2005). Ultimately, corporation-university partnerships and corporate universities can leverage educational resources. In the next two sections, a discussion of the two cases selected is presented.

Siam Cement Group and King Mongkut's University of Technology Thonburi's Chemical Engineering Practice School Certificate Programme

Background

Founded in 1913, Siam Cement Group (SCG) has expanded to include SCG Cement-Building Materials, SCG Paper, and SCG Chemicals, making it one of the largest business conglomerates in Southeast Asia. SCG was founded under a Royal Decree by King Vajiravudh (Rama VI) and is linked to Thailand's royal family through the Crown Property Bureau (CPB), which owns 30% of SCG's shares. This connection to the Thai royal family likely positively influenced the company's enduring success. SCG Chemicals, a subsidiary of SCG, manufactures and supplies chemical products throughout the region and has continually valued high levels of employee competence and ethical behaviour (SCG Chemicals, 2016).

To accomplish their vision, the Constructionism-Chemical Engineering Practice School (C-ChEPS) was established in collaboration with King Mongkut's University of Technology Thonburi (KMUTT) and the Suksaphat Foundation. Since then, the practice school has been renamed as the Chemical Engineering Practice School (ChEPS), which has expanded its corporate investors and also offers a two-year master's degree. Using the corporation-university partnership model, SCG Chemicals invested in and launched an 8-month certificate programme to provide essential training courses aligned with their organisational goals, embedded in an organisational learning culture, fully utilising knowledge and technology, and systematically monitoring what they describe as human

Table 1. Characteristics of Programmes in Selected Corporate Universities and Corporation-University Partnerships in Thailand

Institution	Operated by	Year Established	Degree Levels Offered	Departments	Length of Programme	Website
King Mongkut's University of Technology Thonburi (KMUTT)'s Chemical Engineering Practice School (ChEPS)	Siam Cement Group (SCG)	2000	- 1 Master's - 1 Certificate	- Chemical Engineering	8 Months – 2 Years	http://www.cheps-kmutt.com
Nation University	Nation Multimedia Group	2006	- 7 Bachelor's - 3 Master's - 1 PhD	- Communication Arts - Health Sciences Social - Sciences and Humanities - Information Technology - Business Administration	2-4 Years	www.nation.ac.th
Panyapiwat Institute of Management (PIM)	CP ALL Public Company Limited	2007	- 15 Bachelor's - 3 Master's - 1 PhD	- Business Administration - Engineering and Technology - Food Business Management - Liberal Arts - Communication Arts - Management Science - Innovative Agriculture Management - Education - Agro-Industry - International College	2-4 Years	www.pim.ac.th
Thai-Nichi Institute of Technology (TNI)	Technology Promotion Association (Thailand-Japan)	2007	- 16 Bachelor's - 5 Master's	- Engineering - Information Technology - Business Administration	2-4 Years	www.tni.ac.th
Vidyasirimedhi Institute of Science and Technology (VISTEC)	PTT Public Company Limited (PTT Group)	2016	- 2 Master's - 2 PhD	- Chemical Engineering - Materials Science	2-4 Years	www.vistec.ac.th

capital investment (SCG Chemicals, 2012). In this program, SCG facilitators work alongside KMUTT professors in conjunction with community members and mentors to provide a comprehensive and holistic certificate in chemical engineering. SCG is responsible to co-design the curriculum and provide manpower, time, and budget for the learning process while KMUTT is responsible for co-designing the curriculum as well as provide academic expertise in theoretical models and empirical evidence to ignite innovative ideas in the learners (SCG Chemicals, 2012).

To embed an organisational culture of lifelong learning and innovation, the first SCG Practice School was established in 2000 under the vision of Mr. Paron Isarasena Na Ayudhaya, former president of SCG (SCG Chemicals, 2012). As mentioned above, while ChEPS now runs a two-year master's programme, this paper focuses on the original C-ChEPS programme–hence referred to as the ChEPS certificate programme–designed for and offered exclusively to SCG employees with ten years of experience at SCG Chemicals. The purpose of this corporation-university certificate programme is to "increase employees' productivity and developing change agents, who will create an innovative culture in SCG Chemicals" (SCG Chemical, 2012).

ChEPS Certificate Programme Curricula

As presented in Table 2, the ChEPS certificate programme curricula consists of five modules: (a) Background Knowledge, (b) Project-based Learning, (c) Learning Tools, (d) Mindfulness, and (e) Learning Support (see Table 2).

Table 2. Characteristics of Certificate in Chemical Engineering from the Chemical Engineering Practice School (C-ChEPS) with Siam Cement Group

Month	Module	Courses/Activities
1	Learning Tools Mindfulness	Micro Worlds and LEGO Dialogue and Meditation Village that learn My life project
2	Background Knowledge	Pre-course (Math and Units) Phase I: Chemistry
3	Background Knowledge	Phase II: Mass and energy balance Phase III: Heat transfer
4	Background Knowledge	Phase IV: Fluid mechanics Phase V: Separation process
5	Project-based Learning	Project-Based Learning: Team project
6	Learning Support	Evaluation and Idea Generation
7	Project-based Learning	Project-Based Learning: Individual project
8	Project-based Learning	Project-Based Learning: Individual project

Source: SCG Chemicals, 2012

The Background Knowledge module concentrates on technical knowledge, which includes Chemical Engineering, Mathematics, English, Computer Skills and Mechanics. Because the learners come from different educational backgrounds, this formal classroom-based training allows them to update their foundational knowledge**.** The KMUTT professors have the responsibility to develop tutorials based on theoretical models and empirical evidence that match SCG's goals and learner capabilities. This module is divided into four phases from basic to advanced levels. After this module, the learners understand the basics of Chemistry, Mass and Energy Balance, Fluid Mechanics, and

Heat Transfer. In addition, the learners have a chance to visit and conduct their own experiments in the KMUTT laboratory (SCG Chemicals, 2012).

At the end of Background Knowledge module, the learners are assigned to propose projects related to their job areas. This Project-Based Learning Module provides opportunities to autonomously create, lead, and organise projects. This module is the heart of ChEPS certificate programme because it helps its participants learn how to apply the theories that they acquire from the Background Knowledge Module to real-life situations. Each learner creates one individual project and one group project. The facilitators constantly support the learners by offering practical tools, guidance on essential resources, and reflections on the progress of each learner. At the end of this second module, the learners publish their project reports and present the outcomes to their executives (SCG Chemicals, 2012).

The Learning Tools modules are incorporated throughout ChEPS certificate programme. For instance, there is a Mind Map tool that helps the learners summarise, organise, and memorise information relevant to their studies effectively. The MicroWorlds tool improves creativity, logical thinking, problem solving, and critical thinking in the learners through active participation. External experts in these fields are invited to teach the learners how to apply these tools effectively in their programme as well as in their lives (SCG Chemicals, 2012).

The Mindfulness module embeds ethical awareness in the learners. As Thailand is a largely Buddhist country, Thai leaders value mindfulness and meditation, even when it comes to chemical engineering. While rooted in Buddhism, this practice is more focused on mindfulness and not religious practice and is thus ecumenical and welcoming to those with no religious affiliation. In this module, monks from nearby temples are invited to be special facilitators. The learners spend their time learning about Buddhist principles and practices of mindfulness and meditation. This module mimics a seven-day meditation retreat at a Buddhist temple and shows learners how to meditate and practice control of their breathing. This process is believed to help the learners know themselves, reflect on ethical judgments, and build respect for one another and the world (SCG Chemicals, 2012). It also correlates with other research on the role of meditation and its relation to self-directed learning, readiness and organisational innovative ability and organisational performance (Ho, 2011). This module also relates to SCG's value of sustainability and the belief that 'competence and moral integrity are inseparable' (Siam Cement Group, 2013). In addition to meditation, the learners are trained in the SCG Code of Ethics from the SCG leaders using story-telling methods. The ChEPS certificate programme also emphasises CSR. All learners have short stays in villages to support rural communities in projects such as helping develop public facilities in those communities. These hands-on activities improve social awareness in the learners and promote the value of CSR (SCG Chemicals, 2012).

Lastly, to ensure that the learners can learn systematically, the Learning Support module is utilised throughout the certificate programme (SCG Chemicals, 2012). Facilitators and professors along with mentors, sponsors, and human resources (HR) professionals play different roles in this module. Facilitators, which consist of employees at SCG with postgraduate degrees in the Chemical Engineering field, are appointed to support, consult, and evaluate high vocational learners during the programme. Professors from KMUTT advise and respond to knowledge creation by providing academic support along with theoretical and empirical expertise. Mentors, who are comprised of Division Managers at SCG, and sponsors, who are direct managers at SCG, have duties to support and stimulate learners to achieve the programme's goals. Coordinators from the human resources department at SCG also provide learning facilities in the programme and organise activities. To evaluate the outcomes of the programme, SCG applies four criteria as individual indicators: (a) Chemical Engineering Knowledge, (b) Project-based Learning Outcomes, (c) English and Computer Knowledge, (d) Activities Participation and Learning Tools Usage (SCG Chemicals, 2012). The next section explores how the ChEPS certificate programme highlights issues related to HRD.

HRD Issues in ChEPS

In many ways, the ChEPS certificate programme covers a wide variety of HRD issues including adult learning, organisational change, leadership, CSR, and ethical issues. The authors of this paper were not able to find aspects of the programme that directly relate to global issues or ASEAN issues. Using adult learning (Knowles, 1980), and collaborative inquiry theory (Bray et al., 2000) as a lens for analysis, the authors of this paper found that this corporation-university partnership certificate programme strongly values continued learning and collaborative problem solving.

The ChEPS certificate programme was designed by keeping a balance between formal and informal learning, which aims to develop not only Chemical Engineering skills but also soft skills in the learners (SCG Chemicals, 2012). The curriculum contains hands-on activities that relate to leadership development, organisational change, CSR, and ethical development. The curriculum is rooted in principles of constructionism, which comes from Jean Piaget's constructivism (Ackerman, 2004). The main idea of constructionism is that 'knowledge is created through cognitive interactions within social contexts' (Callahan 2007, p.79). The ChEPS certificate programme is principally focused on project-based learning and largely incorporates the principles of constructionism.

The collaborative inquiry practices (Bray et al., 2000) are applied in the group assignment in the Project-Based Learning module. Collaborative inquiry focuses on individuals learning together from their shared experiences in a systematic experiential learning cycle (Bray et al., 2000). The four phases of collaborative inquiry include forming a collaborative inquiry group, creating conditions for the group, acting on the inquiry question, and making meaning by constructing group knowledge (Bray et al., 2000).

Other HRD issues covered in depth in the ChEPS programme are CSR, business ethics, and sustainability. According to Siam Cement Group (2013), learners in the programme are consistently encouraged to focus on the principles of CSR through involvement in local communities, service learning, and mindfulness. The aforementioned mindfulness module contributes to the ideas of Yamnill, et al. (2008) who look at the contributions of Buddhism in HRD.

Panyapiwat Institute of Management's Master of Business Administration (MBA) Programme in International Business

Background

Established in 1988 by the Charoen Pokphand Group, CP ALL Public Company Limited has become the second largest company in Thailand with 35,000 employees operating over 8000 7-Eleven stores (CP ALL Public Company Limited, 2015). CP ALL is a publicly traded company run by CEO and Chairman Dhanin Chearavanont, a Thai-Chinese billionaire, along with his brothers and their families. To support its growth strategy and commitment to training, CP ALL established the Panyapiwat Institute of Management (PIM) in 2007. The primary foci of PIM are in regional and international management, retail, and technology in the public and private sectors, and to produce graduates of 'academic and moral excellence with professional ethics, sound public awareness, and a strong sense of social and environmental responsibility' (CP ALL Public Company Limited, 2015). The PIM International College was established in 2013 to respond to demands for global leadership with the motto, "AEC stance, China Connection, Global Wisdom" (Panyapiwat Institute of Management, 2013). The Master of Business Administration Programme in International Business (iMBA) at PIM is a 18-24-month graduate programme in business management with English as the language of instruction and assessment with both thesis and non-thesis options.

iMBA Curriculum

The iMBA curricula represents the global perspective of CP All Public Company Limited and consists of six courses: (a) Pre-Course, (b) Foundation Course, (c) Core Course, (d) China-ASEAN Module, (e) Elective Course, and (f) Immersion Programme (see Table 3).

The three pre-course seminars (Global Leadership Workshop, Management, and Effective Business Communication) expose students to global perspectives and general knowledge and skills with topics on team building, problem solving, global leadership, group dynamics, public speaking, and report writing (Panyapiwat Institute of Management, 2014).

The foundation and elective courses, not unlike typical MBA programmes in Thailand, include research methods, economics, finance, marketing, and organisational behaviour. A unique contribution to this programme is its global emphasis in its core courses, which include Oriental Wisdom in Management and International Business Strategy, the latter of which includes an emphasis on ASEAN and the AEC. The China emphasis also sets it apart from other MBA programmes in Thailand. With 12 credits specifically allocated for China and ASEAN management issues.

PIM's iMBA contends that their connection to the corporate sector puts the programme in a unique place of offering instruction and work-based learning that no other university can offer. This programme prides itself in providing instructors who are 'experts in their fields' and classrooms that offer 'practical know how based on real-work situations' (Panyapiwat Institute of Management, 2016). In addition, the Immersion Programme provides learners a chance to intern in a foreign country for a month with a partner university for project development and networking. As a bonus, the PIM iMBA distinguishes itself from traditional higher education in offering high probability of employment at some capacity within CP ALL. In this sense, the iMBA programme serves as a feeder university for CP ALL's corporate workforce.

Table 3. Characteristics of Master of Business Administration Programme in International Business (iMBA) from Panyapiwat Institute of Management (PIM), CP ALL Public Company Limited

Module	Courses
Pre-Course (Non-Credit)	Global Leadership Workshop Management Effective Business Communication
Foundation Course (12 Credits)	Economic Analysis for Business Decisions Research Methodology Data Analysis Financial Report & Management Marketing & Consumer Behaviour Operations Management & Global Logistics Leadership & Organisational Behaviour
Core Course (6 Credits)	Oriental Wisdom in Management Global Business Environment International Business Strategy
China-ASEAN Module (12 credits)	China and AEC in Global Economy Networking and Managing People in China AEC Investment & Finance in China AEC Branding and Marketing in China AEC Selected Topics in China Business Selected Topics in ASEAN Business
Elective Course (6 Credits)	Managing Multinational Companies Cross Cultural Communication International Entrepreneurship Market Entry Strategy Legal Aspects in International Business Selected Topics in International Business Independent Study
Immersion Programme (Optional)	Internship

Sources: Panyapiwat Institute of Management (2013; 2014)

HRD Issues in PIM's iMBA

Overall, the iMBA programme at PIM moderately addresses issues of HRD. There are only three mentions of learning in the curriculum in addition to the ideal graduate characteristic of one 'with an enquiring mind and passion for lifelong learning' (Panyapiwat Institute of Management, 2016). Global competence issues are the strength of this programme in terms of HRD and they are addressed in everything from cross-cultural communication, international business strategy, management in ASEAN and China, and international entrepreneurship. It is likely that the Chinese focus of PIM, including the fact that it has a Mandarin option MBA and PhD programme likely comes from the ethnic Chinese roots of CP All's founder.

While impressive on paper, there is no mention that these items are taught in a way that is particularly constructivist but there is a PIM strategy mentioned as 'integrating classroom and workplace learning' as well as 'work-based learning' for working students (Panyapiwat Institute of Management, 2016). Although the authors of this paper could not find any coursework that relates specifically to issues of ethics and CSR, the research team noticed that PIM has integrated these issues in their philosophy, mission, and vision, which includes mention of 'moral standard and trustworthiness' and 'partnership and contribution to the community' (Panyapiwat Institute of Management, 2016). Still, how HRD issues emerge in the program as a whole is unclear.

Discussions and Limitations

By looking at one corporate university programme (the Master of Business Administration Programme in International Business (iMBA) as part of the International Programme Panyapiwat Institute of Management in Bangkok) and one corporation-university certificate programme partnership (the Chemical Engineering Practice School (ChEPS) certificate programme, which was initiated and organised by the collaboration of Siam Cement Group (SCG) and King Mongkut's University of Technology Thonburi (KMUTT)), there is evidence that corporate universities and corporation-university partnerships do play a role in education in learning, leadership, and change in Thailand.

The background and curricula of these programmes show that they are a relatively recent phenomenon in Thailand (developed in the last nine years) and are adapting to the current global environment of Southeast Asia. The flexibility of these programmes in their offerings seems to imply that their corporate involvement supports adaptable learning and growth of students. Also, both programmes entail the likelihood of further employment within those corporations upon completion.

In analysing how these two programmes address issues of HRD such as adult learning, leadership development, organisational change, CSR, and ethical and global issues related to them, particularly in the context of ASEAN, it seems that both programmes address many HRD-related issues but that the ChEPS certificate programme affords more opportunities for constructionist, project-based learning. Therefore, it is likely that a programme like the ChEPS certificate programme will be more valuable in creating change-agents and adaptable leaders who are invested in their own lifelong learning. This study is limited in scope to two programmes, one corporate university programme and one corporation-university partnership certificate programme; still, this research demonstrates that HRD issues are of major concern to these programmes. The ChEPS certificate programme particularly seems on the cutting edge of integrating HRD issues in meaningful ways.

The findings of this research further reveal that these corporate educational programmes are not simply focused on organisational outcomes related to company strategies but are more broadly focused on HRD and national competitiveness within and beyond ASEAN. Hence Thai government has worked closely with the top research universities in Thailand such as KMUTT. A finding of this research is that these corporate educational initiatives may also be part of the National HRD of Thailand, which McLean (2014) shows more broadly relates to how a nation seeks to coordinate HRD from the top down. This contributes to the conversation surrounding the theory put forth by McLean and McLean (2001) that the definition and practices of HRD are shaped by context. Considering the

role of the Thai royal family in SCG, the ethnic Chinese roots and current connections of CP All, the unique cultural, geographical, and economic context of Thailand has shaped its expression of HRD.

There is a growing paradigm shift in learning, leadership, and change education from that of limitless growth to one of sustainability and CSR (Ardichvili, 2012). This research begins to shed light on how these corporate educational collaborations provide learning opportunities for Thai professionals to develop strategies toward sustainability (Pruetipibultham, 2010). In a recent book chapter on the Sufficiency Economy Philosophy, a concept made popular in Thailand by King Bhumibol Adulyadej (Rama IX), the attitudes of moderation, reasonableness, and prudence are elevated as vital aspects to leading a nation towards sufficiency (Bergsteiner and Priyanut, 2016). This appears to be addressed in the ChEPS program but more careful examination would provide in-depth understanding how these corporate educational programmes reflect this concept along with the unique values of Thai people such as respect, honour, synergy, and learning (Somsak and Yolles, 2010).

Limitations in this study revolve primarily around the limits of document analysis as a data collection method. Since this study utilises information obtained largely from online documents and published reports, it is impossible to distinguish from the espoused values in these documents and the actual practices of the programme relying on online data collection runs the risk of missing data that may not have a strong online presence (Merriam and Tisdell, 2016). According to Yin (2014), document analysis also risks reporting bias where the organisation's ideals more than comprehensive realities are reflected in the documents. Additionally, in the case of this study, data could only be gathered about the five existing corporate universities and corporation-university partnerships, which may have left out other corporate educational programmes that do not have an online presence.

Implications

While this research begins to shed light on the ways these types of corporate-oriented programmes elucidate HRD issues, there are implications for further research. For example, deepening this case study to include in-depth interviews with professors, corporate university founders, and partners would help further understand how the corporate programme is administered, the quality of the modules, and the perspectives of stakeholders. Another implication for further research would revolve around a longitudinal study of these programmes and the way their alumni practice HRD. Similar to those suggested by Pang (1982), tracer studies could follow alumni of these programs through participant observation and interviews to examine their success in the labour market and how they integrate HRD issues in their lives and work. Additionally, this study implies that further research into understanding some of the barriers and facilitators in these types of partnerships in Southeast Asia would be helpful in the design and implementation of future programmes. Also, the investigation of how Buddhist philosophy influences HRD initiatives in Thai higher education and collaboration with corporations, especially with relation to sustainability and business ethics.

This research supports private sector organisations interested in learning, leadership, and change education that do not currently have their own pre-employment academic programmes or certificate programmes to collaborate with existing institutes of higher education. Future research could look at how these corporate programmes may promote customisability of the programmes to the unique Thai context. For example, in a study of culturally endorsed leadership styles of Thai employees, Vimolwan (2010) found that consultative leadership styles were preferred, which led employees to perceive a role in decision-making processes and in turn increased job satisfaction. Therefore, future studies could look at corporate educational programmes that utilise consultative leadership styles to support learning and leadership development.

Conclusion

An evolving blend of corporate educational models is on the rise in the Thai context, and these programs are addressing a variety of HRD issues. From the broad educational needs of the largest

conglomerates to the specific training goals of a division like SCG Chemicals, these corporate universities and corporation-university partnerships are addressing crucial needs for adult learning, leadership development, and organizational change. In times of political or societal change, corporate partnerships in education can alleviate financial burdens and make significant contributions to the higher education landscape. Further exploration of the role of corporate educational programs in Thailand will help researchers and practitioners understand how these institutions and partnerships are preparing future change agents and shaping Thailand's unique expression of HRD considering its cultural, geographical, and economic context towards a more sustainable future. Furthermore, it is reasonable to infer that these corporate educational programs will continue to play a vital role in Thai society as a whole in bringing about the vision of the late King Bhumibol of a sufficiency economy.

References

Abel, A. and Li, J. (2012). Exploring the corporate university phenomenon: Development and implementation of a comprehensive survey. *Human Resource Development Quarterly, 23* (1), pp. 103-128.

Ackerman, E. (2004). Constructing knowledge and transforming the world. In M. Tokoro and L. Steels (Eds.), *A Learning Zone of One's Own: Sharing Representations and Flow in Collaborative Learning Environments*. Washington, DC: IOS Press, pp. 15-37.

Alagaraja, M. and Li, J. (2015). Utilizing institutional perspectives to investigate the emergence, rise, and (relative) decline of corporate universities. *Human Resource Development International, 18*(1), pp. 4-23.

Allen, M. (2002). *The Corporate University Handbook: Designing, managing, and growing a successful program*. New York: AMACOM.

Allen, M. (2010). Corporate universities 2010: Globalization and greater sophistication. *Journal of International Management Studies, 5*(1), pp. 48-53.

Ardichvili, A. (2012). Sustainability or limitless expansion: Paradigm shift in HRD practice and teaching. *European Journal of Training and Development, 36*(9), pp. 873-887.

Ardichvili, A. (2013). The role of HRD in CSR, sustainability, and ethics: A relational model. *Human Resource Development Review, 12*(4), pp. 456-473.

Association of Southeast Asian Nations. (2015). *ASEAN Economic Community Blueprint 2025*. Available at http://www.asean.org/storage/2016/03/AECBP_2025r_FINAL.pdf [Accessed 19 December 2016].

Bergsteiner, H. and Priyanut D. (2016). The sufficiency economy philosophy process. In G. C. Avery and H. Bergsteiner (Eds.), *Sufficiency Thinking: Thailand's Gift to an Unsustainable World.* Sydney: Allen & Unwin, pp. 32-52.

Blass, E. (2005). The rise of the corporate university. *Journal of European Industrial Training, 29*(1), pp. 58-74.

Bray, J., Lee, J., Smith, L. and Yorks, L. (2000). *Collaborative Inquiry in Practice: Action, reflection and making meaning.* Thousand Oaks, CA: Sage Publications.

Busaya, V. and McLean, G. N. (2012). Leadership development in selected leading Thai companies. *Journal of Leadership Studies, 6*(1), pp. 6-22.

Callahan, J. L. (2007). Gazing into the crystal ball: Critical HRD as a future of research in the field. *Human Resource Development International, 10*(1), pp. 77-82.

Chapman, D. and Chien, C. (2014). Expanding out and up: What are the system-level dynamics? Case study of Malaysia and Thailand. In D. Chapman and C. Chien (Eds.), *Higher Education in Asia: Expanding Out, Expanding Up*. Montreal: UNESCO Institute for Statistics.

CP All Public Company Limited. (2015). *CP All Annual Report 2014.* Available at http://www.cpall.co.th/annualreport2014/pdf/CPAll_2014.pdf [Accessed 19 December 2016].

Dealtry, R. and Howard, K. (2008). Moving towards optimising demand-led learning. *Journal of Workplace Learning, 20*(3), pp. 214-224.

Fry, G. (2008). *The Association of Southeast Asian Nations.* New York: Infobase Publishing.

Hellriegel, D. and Slocum, J. (2011). *Organizational Behavior* (13th edition). Mason, OH: South-Western Cengage Learning.

Hilal, R. and McGrath, S. (2016). The role of vocational education and training in Palestine in addressing inequality and promoting human development. *Journal of International and Comparative Education, 5*(2), pp. 87-102.

Ho, L. (2011). Meditation, learning, organizational innovation and performance. *Industrial Management & Data Systems, 111*(1), pp. 113-131.

Jansink, F., Kwakman, K. and Streumer, J. (2005). The knowledge-productive corporate university. *Journal of European Industrial Training, 29*(1), pp. 40-57.

Knowles, M. S. (1980). *The Modern Practice of Adult Education: From pedagogy to andragogy* (2nd edition). New York: Cambridge Books.

Luu, N. H., Nguyen, L. V., Wilt, G. J., Broerse, J., Ruitenberg, E. J. and Wright, E. P. (2009). Motivation of university and non-university stakeholders to change medical education in Vietnam. *BMC Medical Education, 9*(49), pp. 1-14.

Margherita, A. and Secundo, G. (2009). The emergence of the stakeholder university. In A. Romano (Ed.), *Open Business Innovation Leadership: The Emergence of the Stakeholder University*. London: Palgrave Macmillan, pp. 170-207.

Margherita, A. and Secundo, G. (2011). The stakeholder university as learning model of the extended enterprise. *Journal of Management Development, 30*(2), pp. 175-186.

McLean, G. N. (2014). National HRD. In. N. E. Chalofsky, T. S. Rocco and M. L. Morris (Eds.), *Handbook of Human Resource Development.* Hoboken, NJ: John Wiley & Sons, pp. 643-660.

McLean, G. N. and Chiraprapha T. A. (2015). HRD education in developing countries. *Advances in Developing Human Resources, 17*(2), pp. 213-238.

McLean, G. N. and McLean, L. (2001). If we can't define HRD in one country, how can we define it in an international context? *Human Resource Development International, 4*(3), pp. 313-326.

Merriam, S. B., Caffarella, R. S. and Baumgartner, L. M. (2006). *Learning in Adulthood: A comprehensive guide* (3rd edition). San Francisco, CA: Jossey-Bass.

Merriam, S. B. and Tisdell, E. J. (2016). *Qualitative Research: A guide to design and implementation* (5th edition). San Francisco, CA: Jossey-Bass.

Oranuch, P. (2010). The sufficiency economy philosophy and strategic HRD: A sustainable development for Thailand. *Human Resource Development International, 13*(1), pp. 99-110.

Pang, E. F. (1982). *Education, Manpower, and Development in Singapore*. Singapore: NUS Press.

Panyapiwat Institute of Management. (2013). *Master of Business Administration Program in International Business*. Available at http://interprogram.pim.ac.th/pages/imba [Accessed 19 December 2016].

Panyapiwat Institute of Management. (2014). *iMBA Course Description*. Available at http://interprogram.pim.ac.th/uploads/content/2014/12/o_198n3lsk41lva1on11m591f92fnda.pdf [Accessed 19 December 2016].

Panyapiwat Institute of Management. (2016). *About Us*. Available at http://interprogram.pim.ac.th/en/pages/about-us [Accessed 21 December 2016].

Parisa, R. and Vichita, V. R. (2016). Siam cement group as a sustainable enterprise. In G. C. Avery and H. Bergsteiner (Eds.), *Sufficiency Thinking: Thailand's Gift to an Unsustainable World.* Sydney: Allen & Unwin, pp. 198-215.

Parry, J. and Hayden, M. (2015). Skills development: A review with reference to Southeast Asia. *Journal of International and Comparative Education, 4*(2), pp. 67-78.

Pruetipibultham, O. (2010). The sufficiency economy philosophy and strategic HRD: A sustainable development for Thailand. *Human Resource Development International*, *13*(1), pp. 99-110.

Rodriguez, B. C. P. and Armellini, A. (2013). Interaction and effectiveness of corporate e-learning programmes. *Human Resource Development International, 16*(4), pp. 480-489.

SCG Chemicals. (2012). *Constructionism-Chemical Engineering Practice School (C-ChEPS): Summary report 2012*. Bangkok: SCG Chemicals.

SCG Chemicals. (2016). *Company at a Glance: Overview*. Available at https://www.scgchemicals.com/en/company/company-at-a-glance/overview [Accessed 23 December 2016].

Schierenbeck, C. (2012). *Fixing Higher Education: A business manager's take on how to boost productivity in higher education.* Wiesbaden: Springer Fachmedien Wiesbaden.

Shaw, S. (2005). The corporate university: Global or local phenomenon? *Journal of European Industrial Training, 29*(1), pp. 21-39.

Siam Cement Group. (2013). *SCG Sustainability Report 2013*. Available at http://www.scg.co.th/en/05sustainability_development/03_sustainability_report.html [Accessed 19 December 2016].

Siriporn, Y., McLean, G. N. and Pagorn S. (2008). The role of a religious institution in HRD: The case of Wat (temple) Panyanataram, Thailand. *Human Resource Development International*, *11*(3), pp. 223-235.

Somsak, J. and Yolles, M. (2010). Assessing values and value change in Thai organizations. *Journal of Organisational Transformation & Social Change, 7*(3), pp. 321-347.

Suthiphand, C. and Kornkarun, C. (2015). *Thailand's Economic Integration with Neighboring Countries and Possible Connectivity with South Asia*. ADBI Working Paper 520. Tokyo: Asian Development Bank Institute. Available at http://www.adbi.org/working- paper/2015/04/03/6589.thailand.economic.integration/ [Accessed 29 January 2017].

The World Bank. (2016). *Thailand*. Available at http://data.worldbank.org/country/thailand [Accessed 19 December 2016].

Trow, M. (2006). Reflections on the transition from elite to mass to universal access: Forms and phases of higher education in modern societies since WWII. In J. F. Forest and P G. Altbach (Eds.), *International Handbook of Higher Education*. Dordrecht: Springer, pp. 243- 280.

Toraman, C. and Demir, E. (2016). The effect of constructivism on attitudes towards lessons: A meta–analysis study. *Eurasian Journal of Educational Research*, *62*(62), pp. 115-142.

Vimolwan, Y. (2010). A study of Thai employees' preferred leadership style. *Asia Pacific Business Review, 16*(1-2), pp. 161-181.

Visser, W. (2007). *The A to Z of Corporate Social Responsibility: A complete reference guide to concepts, codes and organisations.* Chichester, England: John Wiley & Sons.

Walton, J. (2005). Would the real corporate university please stand up? *Journal of European Industrial Training*, *29*(1), pp. 7-20.

Yamnill, S., McLean, G. N. and Singsuriya, P. (2008). The role of a religious institution in HRD: The case of Wat (temple) Panyanantaram, Thailand. *Human Resource Development International*, *11*(3), pp. 223-235.

Yin, R. (2014). *Case Study Research: Design and methods* (5th edition). Los Angeles, CA: Sage.

Education in Timor-Leste: Envisioning the Future

Robin Burns[a]
Independent Education Consultant

Abstract: *Timor-Leste is a small state that finally achieved independence in 2002. It has had to re-build an entire education system from a small base largely destroyed in the independence struggle. This paper presents the issues identified in pre-independence meetings, and considers these within the framework of transition and transformation problems for a small island with a diverse population and a long history of colonisation, using Namibia as an apt example. Fifteen years later, teacher preparation both pre- and in-service is identified as a major issue in achieving educational and social goals, with language training a key factor. Enrolments have improved and gender equity is close to parity, but urban-rural differences remain. Late enrolments, drop-outs especially in the early years, and repetition are major hurdles in achieving an educated, knowledgeable and qualified population.*

Keywords: *educational priorities, role of teachers, newly independent small state, Timor-Leste*

Introduction

Education is held in high esteem as an instrument of social change and transformation. But education alone cannot bring about a new society and new relationships between citizens; that requires interactions throughout the society and its institutions. Nevertheless, education is considered a key factor in society, whether it is charged with fuelling "the knowledge economy" and the transformation from production to service industries in advanced capitalist societies, raising employment and income levels especially in developing countries, or healing a society that has been torn by conflict.

It is argued here that it is the kind of education and the way it is conceptualised as a means of social renewal that is critical, especially in a post-conflict situation. The case presented here is Timor-Leste, one of the newest nations on the world stage. It has emerged from nearly five centuries of colonisation: 450 years under Portuguese rule, and 24 years of harsh occupation by Indonesia. The Portuguese provided limited, elite education. Under Indonesia, mass basic education was attempted, with teachers imported in large numbers from Indonesia. In the three years between the Indonesian retreat in 1999 and full independence in May 2002, not only did a huge number of foreign teachers leave the country, but schools themselves were destroyed in the struggle. The newly independent government thus faced the task of re-building, from a very low base indeed. And it was not just educational institutions that were destroyed, so there is ongoing competition for resources for infrastructure, personnel and materials throughout society. In education, the need is as basic as providing water and sanitation for schools.

The weak base on which to build education, and the period when very little education took place, provides an opportunity to build a system appropriate for the present realities and future hopes and expectations. Thus education figured highly at anticipatory planning meetings of Timorese abroad as the end of Indonesian domination approached. This paper surveys educational directions proposed prior to independence, using educational development in a small state as the conceptual framework, and outlines present achievements and ongoing problems. Teacher preparation and support emerges as the key issue.

[a] **Correspondence can be directed to:** rburns@netspace.net.au

Background

The Democratic Republic of Timor-Leste (formerly East Timor), is a small island in the Timor Sea. Its nearest neighbours are Indonesia and Australia. It shares the island with Indonesian West Timor, and includes two tiny off-shore islands, and an enclave in West Timor. It is tropical, rugged and mountainous, and around 76 percent of people are subsistence farmers (Albergaria-Almeida and Martinho, 2015). The Timor Sea has rich gas and oil fields, the boundary being subject to dispute with Australia. The Petroleum Fund "is being used to promote human progress through the development of the non-oil economy" (Albergaria-Almeida and Martinho 2015, p.2365). The most recent population estimate is 1,212,000, of whom 48 percent are under 15. The birthrate is one of the highest in the world at 7.5 children per woman (Albergaria-Almeida and Martinho, 2015). The majority of people follow the Roman Catholic faith, and in addition to its strictures regarding birth control there is a concern to re-populate following the heavy loss of life during both struggles for independence. The population consists of a number of smaller groups with distinct dialects. During the Indonesian occupation, *Bahasa Indonesia* was the language of instruction in schools and in the wider public arena. Portuguese has been selected as the national language, side-by-side with Tetum, a Timorese *lingua franca*.

Similar Issues Faced in Namibia

Brock and Crossley (2013) demonstrate the vital role that comparative and international studies in education can play in the present globalised and telecommunications world. They promote critical examination of the impacts of international blueprints found in the World Declaration on Education for All and a Framework for Action, the Millennium Development Goals and their follow-up Agenda for Sustainable Development. Based on research and theorising on issues for small states, especially small island states, insights are obtained regarding the crucial role of the local milieu "in any analyses of education and social development" (Brock and Crossley 2013, p.388). And in the navigation of the possibilities and pitfalls of policy and practice transfer, important lessons can also be learned from comparative and international studies.

One small state that shared some colonial similarities is Namibia. In the planning stage for Timor-Leste, how Namibia approached educational development was arguably helpful for raising issues for critical attention. Like East Timor, it had two colonial rulers (Germany and South Africa), both of whom used education specifically for the domination and servitude of the indigenous population. It underwent a long and violent struggle for independence, and has an ethnically and linguistically diverse population of just over two million. One difference is its large landmass, with the population thinly scattered, largely due to aridity. Three years after independence, in order to activate the constitutional right to education, the government produced a *Development Brief for Education, Culture and Training* (MEC, 1993) outlining ways to link education and social development with the realities of the 1990s and beyond.

The 1993 document notes that education is both an investment in human capital which, through its extension and improvement promotes development, and a basic human right. The former is a well-recognised rationale for education, though a potentially problematic one in that it can merely reinforce conformity to a repressive regime. The latter gains its significance when linked to the goal of creating an equitable society. In order to achieve this, it is believed that effective participation in adult life and in the national community requires that all are able to understand and communicate with each other. As with adequate nutrition and sound health, basic education is proposed as fundamental to individual and social wellbeing (MEC, 1993).

The Namibian policy states that education for all does not simply mean more schools and classes and high participation rates. Quantitative increase can simply lead to greater penetration of ideologies and further sorting of people into `success' and `failure' categories based on the old

social order. This only perpetrates the *status quo*. What is needed is qualitative change. This needs to take contextual matters into account, including politics, values and interests.

A 2011 survey by UNICEF indicates that progress has been made towards universal primary education (now 98%) and that gender parity in enrolment and retention has been achieved. However, survival rates have not improved and declined in some districts and for some years, while repetition rates have increased. The San people in particular are disadvantaged especially in provision of first language instruction, which is general for the first three primary years, after which the national language, English, is introduced, with first language instruction continuing but not always available. In a country that is inequitable (UNICEF, 2011), classrooms, equipment, and especially teacher preparedness remain issues of concern (Katjavivi, 2016; UNESCO, 2010/11).

Thus, issues of educational quality, the role of the context in which change is desired, language, resources and teacher education continue as key concerns for Namibia. Beginning afresh in Timor-Leste, these point to issues to consider.

Education and Social Transformation

As a key aspect of social transformation, "new ways" are required "to think about education and training and how we organise it" (MEC 1993, p.4). However, one of the challenging aspects of education is that there is greater time lag between new ideas and policies, and new outcomes in education than in many other sectors, nor does change necessarily lead to the desired outcomes (Arnove and Dewees, 1991).

The dangers created by time lag are shown in the slow process of increasing equality through education, leading to pressures both internal and external that may be generated to divert education to more short-term ends, especially the creation of a small number of highly educated people. Such pressure may divert educational resources, or may alternately be used for more constructive solutions both to the need for highly educated people and the means to acquire them. The choice is essentially a political one, although it may be pushed in purely economic, human resource terms.

There are many forces that form a society, its institutions and the individuals within it. Recognition of key factors, and the articulation of clear, realistic goals as well as the underlying vision, are essential ingredients in the development of new educational policy to serve the aspirations of the people and the country's development objectives. Education can and indeed must be a vital element in this process of development; it cannot be isolated from the wider social reality and the vision towards which it is moving. A new regime may perpetuate old structures and processes, only the identity of those in power having changed, and any regime will impose its own vision and preferred means to achieve it (e.g. Carnoy and Samoff, 1990).

To create a vision for a democratic society, and the concrete steps towards its realisation, requires widespread community involvement. Democratic and development ideals require clear articulation in order to devise the appropriate policies for their implementation. In this process, education has a dual role. It plays a role in creating a new structure and relationships between people and government, different social groups, and people and the productive processes. As a cultural implement, it also plays a central role in spreading new ideologies, values and behaviours.

The transition to a new society is a difficult and exciting challenge. The following outlines educational issues for the effective realisation of the vision for a future Timor-Leste.

Some Words about Scale

In educational planning, policy and aid circles, the category *small state* has acquired some significance in recent years. A major element in this is the use of the notion of *vulnerability* as a characteristic of such states. Vulnerability in turn is seen as an exacerbated form of dependence (Atchoarena,

1993; Bacchus and Brock, 1987; Bray, 1992; Brock and Crossley, 2013). Small states, defined as those with a population under 1.5 million, may face a particularly difficult balancing act between internal and external factors. In educational terms, "the central policy debate revolves around what it is both desirable and possible to undertake nationally, and what is appropriate and sensible to buy or use overseas" (Bray and Packer 1993, p.49). Commentators stress the importance of regional as well as wider links for such states, though there is a danger of new dependencies arising, and educational borrowing and transfer have been controversial issues throughout the post-colonial, globalised world. A small developing state will look for outside assistance, and regional links, posing both potential problems and possibilities, and in addition face internal fragmentation which poses different challenges to the emerging nation. Language will play a role in the choices made, especially regarding external alliances and regional membership; in turn, the choice of official and national languages may be partly determined by these external considerations. Combined with the role allocated to education, both will be central for promoting national identity.

A further aspect of small scale that has implications for education and is related to the generally less segmented economy and more ready links between sectors, is the crucial role for education in human resource development. Some commentators consider that small scale is an advantage in attempts to link education, human resources and development (Bray and Packer 1993, p.53). But while it is vital in any discussion of education and development to work towards economic growth and higher levels of employment, there are structural and political factors also to take into account. Thus, reasons for economic stagnation and high levels of unemployment need to be understood before appropriate planning can take place. And as the education policies of countries such as Namibia indicate, wider socio-political goals have often been the basis for change in the country's status and government. Such goals cannot be abandoned if the new government is to maintain its legitimacy. Therefore, decisions have to be made about balancing political and economic goals for education, e.g. between extending basic education to all and improving its quality, and accelerating specialist education for a technical and commercial elite.

And such decisions take place within a framework of educational globalisation led by the World Bank which has not only made structural adjustment policies a requirement for funding, but is exerting pressure on countries to improve the quality of education, to focus on basic education and to adopt measures aimed at increasing cost sharing in education. Since 1988 it has decided that structural adjustment in education has two forms: diversifying the sources of finance and containing unit costs (Nieuwenhuis 1996, pp.128-129). One may well ask where equity and democracy fit into such prescriptions.

Hindson (1995; see also Ball, 1998) aptly reminds us that there is a danger in assuming that educational planning models in use in western societies can simply be applied to produce comparable outcomes in other nations. This is applicable regardless of the size of the nation, and both at the level of developing educational plans and strategies, and also in the ways in which aid agencies and others evaluate the outcomes of such plans.

> ...orthodox Western-oriented planning models did not take into account the now generally-accepted complexity of the interaction between education and development...The logical rational planning process has thus often been subverted by the impact of local tensions based in local cultural contexts and the results educational direction has not been authorised by the Western rational model. (Hindson 1995, p.327)

Embarking on Education for Change

The foregoing presents an overview of issues in the education-development nexus, and the contextualising of these within the realities of the late 1990s. The task for education in an independent

Timor-Leste involves facing socio-economic and political realities, coupled with the enunciation of a philosophy and vision of both a desirable Timor-Leste, and a possible one. Only through testing such visions with the people, as widely as possible, and through involving them in the drawing up of detailed objectives, plans and strategies, will a policy and a praxis emerge that will bring together the whole community to move into the new future. The present provides significant restraints on that vision and the processes for its realisation, though change is an inherent capacity in all societies. The question is how to do it consciously, co-operatively and effectively. To quote from the late Paulo Freire,

> The fundamental role of those committed to cultural action for conscientization is not properly speaking to fabricate the liberating idea, but to invite the people to grasp with their minds the truth of their reality. (Freire 1972, p. 76)

While this may seem almost utopian in a situation where the entire fabric of society was ruptured, the people of Timor-Leste have lived under foreign domination for so many generations, there is an opportunity at last for them to decide the shape and content of future institutions. Outside rule can unite people in the liberation struggle, but also create divisions that, once the ruler has gone, surface and disrupt. Shaping the new nation, and shaping education need to work hand in hand, with involvement of the people a key for both.

A Suggested Agenda

In the pre-independence situation, three central issues emerged:

1. Who shall be educated, and to what levels?
2. What type(s) of education?
3. The educators

A fourth, resources, finance and administration, is critical but beyond the scope of this discussion as these are issues that affect all public sectors. Expanding the first three issues, further considerations are:

Who Shall be Educated, and to What Levels?

Equity: Interpreting Education for All

By 1994 the literacy rate for those 10 years old and beyond was 47.3%, a rise of 13% in 8 years. Approximately 150,000 students were recorded in all the levels of formal education (Mameo, 1995), but this gives no idea of the actual retention rates, success rates at different levels, nor distribution at each level by gender, ethnicity or location. Whichever way one interprets the figures, illiteracy is a key issue in Timor-Leste. And given the nature of the terrain, the long period of disruption caused by the occupation, and poverty, one can assume that not all of the relevant age cohorts even begin school. Equity begins with the question of *access*: how that is distributed by gender and location, among other factors, is a further question. Before any policy is enunciated, a realistic assessment of school provision, school enrolments and progression through the school system is essential. Reasons for non-attendance are also vital: in other situations where schooling has made little impact on the employment prospects of sectors of the population, especially in Africa, there has been a falling away not only of enrolments but of attendance (e.g. Namibia: UNICEF, 2011).

Basic Education

Basic education has become an orthodox item in educational planning in developing countries, actively promoted by the World Bank, and is often interpreted as an economic rather than a human rights issue. Namibia adopted a 10 year basic education plan which it aims to offer to all children; other countries have established 7 years as the basic framework, roughly corresponding to primary education. Questions here include:

i. how many years basic education?
ii. should all children undergo the same content?
iii. how to ensure equity in quality of basic education?
iv. should it be free? if not, how should costs be shared?
v. will an upper limit be placed on age of entry?
vi. how to encourage hard-to-reach groups to attend, e.g. girls, ethnic minorities, remote area children?

Post-Basic Education

A major question here in addition to issues around provision, is entry qualifications. If basic education is defined as primary schooling, what proportion of primary completers are expected to continue? Will there be alternatives to an academic stream, and how will children be selected for each? More complex questions about qualifications, certification and the possibility of re-entry at a later stage through the development of flexible paths to different levels must also be faced, and given the small population of Timor-Leste, serious questions asked about the range of provision, especially at the tertiary level, that can reasonably be expected within the country.

Youth

Youth are a special challenge, and unemployment amongst secondary school leavers seems very high. The period of war has led to the disruption of schooling and school-employment pathways, if they ever existed clearly for the majority of Timorese youth. In addition to the usual problem of school drop outs and push outs, a pool of both literate and illiterate youth needs to be harnessed to the new national project. The Seychelles embraced a bold programme in the 1980s, building special youth villages for two years of work and development oriented schooling (Haffenden, 1991). In Botswana, and in an earlier phase in Tanzania, youth brigades have been formed to provide both (further) education for young people and to use the skills of school leavers in village communities, giving future social leaders experience of work in the rural areas and service in agricultural sectors (Flederman, 1991). In Nicaragua under the Sandinista government youth played a vital role in the successful national literacy campaign, a key post-liberation programme (Arnove and Dewees, 1991). Involving youth, empowering them especially where they have been silenced and subverted by illiteracy, and combining education with realistic job-creation is a central challenge for most nations, and a crucial one in Timor-Leste.

Adults

There are many educational challenges in a country where illiteracy rates increase with age, and where the majority of the indigenous population live in the rural areas. Literacy and post-literacy are linked factors in involving people in their community's and their nation's development. FRETILIN, a leftist political party in Timor-Leste recognised this in its Freirian-based literacy campaigns in the mid-1970s (Hill, 1978). Through Freire, particularly in Guinea-Bissau, literacy is proposed as a key item to liberate the bulk of the population from the `culture of silence' to which illiteracy, and the reasons for that illiteracy, condemns them (Freire, 1978). While Freire's approach, which involves politicisation, activation and the development of critical skills for action and reflection, is idealistic, and requires extensive recruitment, training, organisation and maintenance, it also provides a basis for considering essential questions about the purpose and content of literacy work. A further issue to be addressed is the resources for post-literacy or literacy-maintenance, as well as how those newly awakened to the possibilities that education can bring, can use their skills in their communities. Freire's approach emphasises cultural circles rather than literacy groups as a way of emphasising

the broad basis of such work. Despite the down-playing of the role of the teacher, this requires well organised and trained literacy workers and as was found in Guinea-Bissau, local organisational support, e.g. through the main political party, which may be problematically combined with equity issues in a divided Timor-Leste.

A related issue is one of *adult education and training* for those, presumably literate, who nevertheless require literacy maintenance, skills upgrading and further education to address changing economic circumstances. It is suggested that this is best provided at the workplace, though questions of responsibility, organisation and cost arise.

What Type(s) of Education?

Curriculum Issues in Basic Education

Central to consideration of education is the language of instruction. Language policy is a political issue, and it was decided that there would be two national languages: Tetum, and Portuguese. At the level of education there is nevertheless a question of initial language of instruction, and the timing of the introduction of additional languages. Gaining basic literacy in one's mother tongue is a sound beginning; given Timor-Leste's position in the Asian-Pacific region, the early introduction of English is also desirable. Malaysia is one example of a multi-lingual state which had an ambitious plan whereby students began their education in one of three nominated medium of instruction (MOI), i.e., Chinese, Malay or Tamil; at six months English was introduced for those for whom *Bahasa Malaysia* is the mother tongue, and *Bahasa Malaysia* was introduced for all others. After Year 1, English is added as a compulsory subject in national primary schools, where Malay is the MOI. Namibia introduces English in Year 4. Few teachers remain in Timor-Leste from either the Portuguese or Indonesian periods, when Portuguese and Bahasa respectively were the only languages of instruction. Therefore teacher preparation will be a vital task for successful educational development. The preparation and availability of education materials for teachers, and for students, is an additional huge and costly task. Namibia, for example, is still behind with both teacher and material development despite extensive efforts (UNICEF, 2011).

The content of *general education* is another area for decision-making. In most newly-independent countries there is an urgent need for localisation of the curriculum: learning *our* history and geography, *our* environment, is a critical tool for involvement in *our* development, but it is also a starting point for moving out. There was a long debate in education in the 1980s about `relevant' education, especially for the immediate environment. Valuing local history, culture, knowledge and skills is an important part of the task of national development, and in meeting others and valuing their history and culture, too, in fact it is a key element in the development of unity and a multicultural society. However, parents often cite as a reason for sending children to school the need to know about the wider world, and the general conclusion of the relevance debate was that it had at best limited impact on development, nor was it an appropriate vehicle for the rectification of social and economic ills (Sinclair and Lillis, 1980). Curriculum is not a panacea, and widespread consultation regarding its content, as well as equivalent attention to the methods of imparting knowledge, are crucial for enabling education to play an active role in development, social, cultural and individual.

There has also been an extensive debate about the role that work should play in education at all levels. While it is now criticised as being one way to condition children to their pre-ordained place in the world, defining unemployment as a skills rather than a structural problem (Kraak, 1991), for many radical educators education cannot be meaningfully divorced from work if it is to avoid being purely elitist and theoretical. Study-service schemes proliferated from the late 1960s in an attempt to deal with this (Burns, 1978). They were designed to orient the participants to work, and for them in turn to influence formal schooling in the direction of more relevance to basic needs in society (Haffenden, 1991). Despite such innovations, how to relate schooling and work remains

both a conceptual and a practical issue within education. Preparation, supervision, de-briefing and funding are central issues.

Vocational Education

Like relevance education, this has been a controversial issue in many developing countries. (e.g. Watson, 1994). A small country cannot afford a proliferation of training institutions and programmes, and the evidence suggests that parents and students alike are reluctant to commit themselves to what is often seen as an inferior option (Baker, 1989). How to provide appropriate training for the labour market depends on the development of that market, and the recognition of the time lag between delineation of a need for particular skills and its provision through education and training. On-the-job training, with appropriate development of a system of assessment and recognised qualifications, is an attractive option to institution-building. Again, training, supervision and evaluation of the trainees is an issue.

Non-Formal Education

Non-formal education is linked to vocational education on the one hand, and post-literacy on the other. Surveying existing provision, needs and likely providers, and the training and co-ordination of the latter, are required to extend learning opportunities to those previously deprived, and to those requiring further education for a changing workplace. As Youngman (2003) points out, literacy programmes sometimes reproduce existing inequalities. Non-formal education can be a key part of ongoing political education, and of personal development, including language learning. Local level study circles provide a useful approach, with considerable local input not only to the teaching-learning process, but to resourcing it e.g. through sharing facilities with schools, and recognising and using local skills and knowledge.

Teacher Education

Most accounts of education in newly independent countries, and increasingly throughout the world, focus first and foremost on the teachers as the key players in the process of educational delivery and change. On the one hand they constitute an interest group who may be very committed to existing policies and practices, and hence a key force for resistance to new ideas and practices, and on the other, the key to change. Beeby (1966) recognised four stages in the growth of a primary school system, based on the types of goals and organisation of the school as well as the level of teacher education. The second and third stages are formal and restrictive, with meaning and understanding not stressed until the final stage is reached, when teachers are well-educated and trained. The question therefore arises, how to transform the expectations inculcated during earlier phases? This in turn raises the wider issues of transformation of an education system as a whole. If it is not begun at the very early stages of education, then time and effort are surely wasted in the need to unlearn at a later stage. And given high drop-out rates in particular, the outcome of such a divided system is the creation of a hierarchy of learners not only with different amounts of formal education, but different experiences depending on the level they reach.

Projects to change and upgrade the teaching service are often only partially successful. The pre-service level is one clear case for action, but this will take time both to alter entrance standards and qualifications, and for change to reach the classroom. Attracting appropriate students, and retaining them both in the course and in employment in education, may depend on the perception of education as a community value and as a respected form of employment with adequate remuneration and status as teaching is one occupation which is readily useable in other fields and can result in a high teacher turnover. Innovative approaches to recruitment can include recognition of other relevant

experience in lieu of formal qualifications, community nomination to insure acceptance of the teacher in the community, especially if a strong community basis for the school is to be established and involvement of the community in the curriculum. Such approaches however require adequate on-the-job training and support. Innovative approaches to education or even adequate curriculum delivery will not come from poorly qualified, inexperienced teachers.

At the in-service level, locally delivered programmes are effective especially with support from the head teacher. Shorter courses tend to have little lasting effect, and the recognition of participation is important in teacher involvement. Nowhere is teaching an easy job; in a system disrupted, undergoing change, and with pupils and parents questioning the value of education given the high level of youth unemployment, teachers need to confidence in their ability to adapt to work with new methods and curricula (Bishop, 1986; Duggan, 1996; Duncan and Löfstedt, 1981; Maclure, 1994; and MEC, 1993).

In turn, the teacher educators cannot be ignored in any programme of in-service. It may seem a luxury in view of the many urgent needs in the education system to focus at this level, however, they are key players in the whole game, since they provide the human resources and models for others and for the system at every level.

Fifteen Years on

The task of educational maintenance, let alone reform, is a challenging one, and few countries can have faced the huge task that confronted newly-independent Timor-Leste. The question of resources looms very large, not just the money to pay for school buildings, equipment and teachers' salaries, but for upgrading and retraining, as well as the provision of language materials, and of books and magazines for the newly literate. In 1999 I suggested, following Freire, (1974) that decision-making and planning would not only "require(s) the development of an especially critical, flexible spirit" but the acceptance that "education becomes a highly important task" (pp.7-8).

The importance of education has been clearly accepted within the government's policy and planning statements. The emphasis in these statements is on education for the training of human resources for development (DRET, 2009). These documents state the importance of reforming education in order to improve its quality. Such improvement is vitally required for the achievement of any substantive educational change, since teachers are a key factor and their low educational base is a major barrier to their active, informed participation in educational reform. Similarly, Namibia has re-affirmed the need for "continuous improvement in quality teaching and learning outcomes" while highlighting the role of education in ongoing national development (Ministry of Education, 2011, p.iv).

Dealing in turn with the major areas outlined above:

Who Shall be Educated and to What Level?

Recent surveys show that while the highest repetition and dropout rate is at Grade 1, it continues throughout primary school and has risen not decreased in the period surveyed (UNESCO, 2015). Indonesia accepted universal primary education as a priority but critics note that its aim was the "Indonesianization" of the population (Albergaria-Almeida and Martinho, 2015, p.2368). The present government has accepted universal primary education as a goal and made nine years of basic education compulsory, using a six-three structure. It is also free. However, the government is not the only educational provider and information about the private institutions is not readily available. The 2014 National Education Profile Update (Education Policy and Data Center, n.d.) shows that 18% of children aged 6-11 and 23% of 12-17 year olds were out of school. Interpreting these figures is further complicated by the fact that a considerable proportion of children start after

age 6, there are high repetition rates especially from the first to the second year, and high dropout rates though these decrease by the upper secondary level. A significant percentage of enrolments of 12-17 year olds could still be at the basic level. Enrolments also vary between urban and rural areas. Enrolments alone do not indicate student achievement, e.g. the achievement of literacy in either national language is slow.

For national sustainable development goals to be achieved, rising educational standards and achievements are necessary. There is greater retention in the upper three secondary levels but only 25% of students progress to these schools, which are all in urban areas. Gender parity has been largely achieved though there are district variations, as in other demographic characteristics (UNESCO, 2015).

Prior to independence, tertiary students were sent to Indonesia, or made their way to Australia or other developed countries. There is now a national university in Dili, the capital, and a range of other post-school training centres, the latter all operated by private providers. Information on fees is not available but can be assumed to limit participation even further than the academic problems to reach that level.

What Type of Education?

The decision to make Portuguese as well as Tetum a national language follows its suppression during the Indonesian occupancy. A major challenge is the provision of teachers fluent in Portuguese, vital not just for language instruction but the entire curriculum. There are serious problems in the provision of a trained teaching workforce, right down to high absenteeism among teachers especially in the basic years. No matter how good the curriculum is, it is dependent on teachers for its implementation. Portugal is a major donor for education, and assists with provision of Portuguese teaching materials and teacher training. Resources for every aspect of education is a general problem for educational development in a newly emerging nation. But outside aid may come at the price of externally determined priorities and content (Brock, 2014; Crossley, 2001; Cummings, 1997; King and Palmer, 2014; and Torres, 1999). There is no space here to discuss curriculum content other than language.

The post-basic level has been divided into two streams, with a core of eight subjects (Tetum, Portuguese, English, Indonesian, Citizenship and Social Development, Multimedia Technologies, Religion and Moral Education, and Physical Education and Sport, the latter dropped in the final year). The two streams are Science and Technology, and Social Sciences and Humanities. Both are heavily academic in orientation. This re-structuring is being assisted by the Portuguese University of Aveiro, and includes provision of student and teacher materials, and teacher in-service (Almemida et al., 2014).

Vocational education is diverse, and non-formal education largely consists of adult literacy and short-term programmes by non-governmental organisations (NGOs).

Teacher Education

This is the crux for delivery and transformation of education at every level and is the most problematic aspect of education in Timor-Leste today. Following independence, volunteer teachers were recruited, many with only primary education and no teaching qualifications. There is still a significant need for Portuguese language training, many teachers reverting to Tetum or local dialects (Lucas et al., 2015). This lack affects their ability to deliver the curriculum, and to undertake training in subject fields. Additionally, they are dealing with large class sizes, and a variety of pupil ages in any one grade, infrastructure that is uneven at best, and a lack of organisational skills at every level of the education and administrative system. A useful recent project is the evaluation of secondary educational changes (Almemida et al., 2014). Evaluation of implementation of educational programmes at every level is often neglected; its use is needed for future planning and resourcing in Timor-Leste.

In-service education for teachers is playing an important role, though it can contribute to teacher absenteeism. The University of Aveiro uses an innovative approach, starting with in-servicing the teacher educators, and empowering teachers who have gone through their programme to themselves become in-service leaders. Support for language training through periods in Portugal is also provided (Lucas et al., 2015).

Discussion and Conclusion

More than 25 years after independence Namibia is still facing a number of the problems now confronting education in Timor-Leste, in particular lack of teacher quality especially in remote areas, poor school infrastructure, and varying retention rates depending on level and location. It now spends 8% of its budget on education and is committed to educational improvement at all levels. The most salient lesson from this is the long, slow process of educational change and the need for ongoing commitment to that. Independent Timor-Leste is addressing many of the educational issues raised in pre-independence discussion, enshrining them in its policy and plans. Teachers are critical for achieving development throughout society and with the huge teacher loss in 1999 (Almemida et al., 2014), the system had to be re-constructed from a very low base. The collaboration with Portugal is productive in this process.

Competition with other institutions both for money and personnel is endemic but by no means unique to Timor-Leste. Nor are other key issues: overcoming the effects of rural isolation, ethnic diversity and income disparities in educational provision, enskilling of teachers for the challenges now and in the future, and improving educational content and outcomes. Timor-Leste may not yet be at the stage envisaged by Brock and Crossley (2013) where it can enjoy the advantages of small scale. Nevertheless, the vision for education is clear:

> In 2030 the people of Timor-Leste will be educated, knowledgeable and qualified to live long and productive lives, respectful of place, family and positive traditional values. All individuals will have the same opportunities for access to quality education that will allow them to participate in the economic, social and political development process, ensuring social equity and national unity (Ministry of Education, 2011b).

Enabling the population, especially the rising generation, to realise this vision is an ongoing challenge. It is one which the nation has embraced and with goodwill can move towards.

Notes

Warm thanks are offered to Professor Michael Crossley and the late Professor Colin Brock for stimulating discussions over many years of issues raised here.

References

Albergaria-Almeida, P., Martinho, M. and Cabrita, I. (2014*). Evaluating the Impact of Restructuring Secondary Education in East Timor. Procedia – Social and Behavioral Sciences 141: 665-669*. Available at www.sciencedirect.com. [Accessed 6 February 2017].

Albergaria-Almeida, P. and Martinho, M. (2015). *The Empowerment of Education in East Timor through In-Service Teacher Training. Procedia – Social and Behavioral Sciences 191, 2364-2368*. Available at www.sciencedirect.com. [Accessed 6 February2017].

Arnove, R.F. and Dewees, A. (1991). Education and revolutionary transformation in Nicaragua, 1979-1990. *Comparative Education Review*, *35*(1), pp. 92-109.

Atchoarena, D. (1993). *Educational Strategies for Small Island States*. Paris: Unesco International Institute for Education Planning.

Bacchus, K. and Brock, C. (1987). *The Challenges of Scale*. London: Commonwealth Secretariat.
Baker, V.J. (1989). Education for its own sake: The relevance dimension in rural areas. *Comparative Education Review, 33*(4), pp. 507-518.
Ball, S.J. (1998). Big policies/small world: An introduction to international perspectives in education policy. *Comparative Education, 34*(2), pp. 119-130.
Beeby, C.A. (1966). *The Quality of Education in Developing Countries*. Cambridge Mass.: Harvard University Press.
Bishop, G. (1986*). Innovation in Education*. London: Macmillan.
Bray, M. (1992). *Education Planning in Small Countries*. Paris: UNESCO.
Bray, M. and Packer, S. (1993). *Education in Small States: Concepts, challenges and strategies*. Oxford: Pergamon Press.
Brock, C. (2014). Global curricular legacies and challenges for the twenty-first century. *Journal of International and Comparative Education, 3*(1), pp. 126-138.
Brock, C. and Crossley, M. (2013). Revisiting scale, comparative research and education in small states. *Comparative Education, 49*(3), pp. 388-403.
Burns, R. (1978). *Education and development: Study-service programmes in the Philippines*. Paper presented at the Asian Studies Association of Australia National Conference, Sydney.
Carnoy, M. and Samoff, J. (1990). *Education and Social Transition in the Third World*. Princeton N.J.: Princeton University Press.
Crossley, M. (2001) Cross-cultural issues, small states and research: Capacity building in Belize. *International Journal of Educational Development, 21*(3), pp. 217-229.
Cummings, W.K. (1997). The limits of modern education. In E. R. Beauchamp (Ed.), *Comparative Education Reader*. New York/London: RoutledgeFalmer, pp. 277-297.
DRET (Democratic Republic of East Timor). (2009). *The Millennium Development Goals, Timor-Leste*: *Timor-Leste national report.* Dili: Democratic Republic of East Timor.
Duggan, S. J. (1996). Education, teacher training and prospects for economic recovery in Cambodia. *Comparative Education, 32*(3), pp. 361-376.
Duncan, W. and Löfstedt, J.I. (1981) .*The Swedish Free Church School Building Project and Teacher Training Project*. Stockholm, Institute of International Education: Stockholm University.
Educational Policy and Data Center (n.d.). Timor-Leste. *National Education Profile 2014 Update*. Available at www.epdc.org/sirtes/default/files/documents/EPDC%20NEP_Timor%20Leste.pdf. [Accessed 5 February 2017].
Flederman, P. (1991). Tirelo Setshaba: Botswana's national study service scheme. In K. Evans and I.G. Haffenden (Eds.), *Education for Young Adults. International Perspectives*. London/New York: Routledge, pp. 108-117.
Freire, P. (1972). *Cultural Action for Freedom*. Harmondsworth: Penguin.
Freire, P. (1974). *Education: The practice of freedom*. London: Writers and Readers Publishing Cooperative.
Freire, P. (1978). *Pedagogy in Progress*. *The Letters to Guinea-Bissau*. New York: The Seabury Press (Translation: C. St. J. Hunter).
Haffenden, I.G. (1991). The Seychelles national youth service 1981-86: Curriculum innovation, implementation and purification. In K. Evans and I.G. Haffenden (Eds.), *Education for Young Adults. International perspectives*. London/New York: Routledge, pp. 128-137.
Hill, H. (1978). *Fretilin: The origins, ideologies and strategies of a national movement for East Timor.* Melbourne: Department of Politics, Monash University MA dissertation (unpublished).
Hindson, C. E. (1995). Education planning in Vanuata – an alternative analysis. *Comparative Education, 31*(3), pp. 327-337.
Katjavivi, P.H. (2016). *Educational Transformation in Namibia*. Address at the London Forum of the Commonwealth Council on Education.
King, K. and Palmer, R. (2014). Development assistance for education post-2015. *Journal of International and Comparative Education*, *3*(1), pp. 139-152.

Kraak, A. (1991). Making the hidden curriculum the formal curriculum: Vocational training in South Africa. *Comparative Education Review, 35*(3), pp. 406-429.

Lucas, M., Cabrita, I. and Ferreira, A. (2015). *Pathways to Change: Improving the Quality of Education in Timor-Leste. Procedia – Social and Behavioral Sciences 186, 732-738*. Available at www.sciencedirect.com. [Accessed 6 February 2017].

Maclure, R. (1994). Misplaced assumptions of decentralization and participation in rural communities: Primary school reform in Burkina Faso. *Comparative Education, 30*(3), pp. 239-254.

Mameo, D. (1995). Analysis of the development process in East Timor: Background, achievements, problems and alternatives. In de Sousa, Saldanha, J. M. (Ed.), *The East Timor Project – Volume 1.* Darwin: Northern Territory University Centre for Southeast Asian Studies, pp. 49-62.

MEC (Ministry of Education and Culture, Namibia). (1993). *Toward Education for All*. *A development brief for education, culture and training.* Windhoek: Gamsberg Macmillan.

Ministry of Education. (2011). *Strategic Plan 2012-2017*. Windhoek: Ministry of Education.

Ministry of Education. (2011b). *National Education Strategic Plan 2011-2030. Dili: Ministry Of Education*. Available at www.moe.gov.tl/pdf/NESP2011-2030.pdf. [Accessed 10 February 2017].

Nieuwenhuis, F. J. (1996). *The Development of Education Systems in Postcolonial Africa*: *A study of a selected number of African countries*. Pretoria: HSRC.

Sinclair, M. E. and Lillis, K. (1980). *School and Community in the Third World*. London: Croom Helm.

Torres, R.-M. (1999). Improving the quality of basic education? The strategies of the World Bank. In E.R. Beauchamp (Ed.), *Comparative Education Reader*. New York/London: RoutledgeFalmer, pp. 299-328.

UNESCO. (2010/2011). *World Data on Education, 7th ed*. Available at www.ibe.unesco.org/en/document/world-data--education-seventh-editition-2010-2011. [Accessed 10 February 2017].

UNESCO. (2015*). Education for All 2015 National Review Report: Timor-Leste*. Available at unesdoc.unescao.org/images/002290/229880E.pdf. [Accessed 16 February 2017].

UNICEF. (2011). *Improving Quality and Equity In Education In Namibia: A Trend And Gap Analysis.* Available at UNICEF_2011_Ninnes_Trends_and_Gaps_final_combined.pdf. [Accessed 16 February 2017].

Watson, K. (1994). Technical and vocational education in developing countries: Western paradigms and comparative methodology. *Comparative Education, 30*(2), pp. 85-97.

Youngman, F. (2003). The state, adult literacy policy and inequality in Botswana. In E. R. Beauchamp (Ed.), Comparative Education Reader. New York/London: RoutledgeFalmer, pp. 139-161.

Embrace, Embed and Enliven: Advancing Social Responsibilities at the University of Northampton, England

Emel Thomas[a]
Wray Irwin
University of Northampton

Abstract: *As the United Kingdom's (UK) first Ashoka U Changemaker Campus, the University of Northampton (UoN) has embarked on a strategy that embraces social enterprises. Social enterprise, innovation and entrepreneurship are key competences that have been used by the university to address social inequalities. This paper will account for the social engagement challenges that are influential in the UK's higher educational environment. International perspectives will be highlighted to demonstrate that significant advantages can be obtained by borrowing and adapting policies and practice strategies. Our primary aims are: to showcase the fundamental activities of social responsibility as demonstrated by UoN and provide examples of stakeholder demands during periods of significant change. We argue that it is essential for higher education institutions (HEI) to develop a more nuanced and innovative examination of community based initiatives and networks in order to sustain engagement and access.*

Keywords: *Ashoka, changemaker, community based initiatives, engagement, social enterprise, social innovation, social responsibility*

Introduction

Finance from public funds to English universities is administered through the Higher Education Funding Council for England (HEFCE). Of these funds, close to 4% is dedicated to an innovation fund that seeks to demonstrate commercial application (Williams, 2015). Therefore UK universities engage in a range of activities beyond education and research. Some create legitimate connections within the public and private sectors. This can result in a conflict between the private sectors' mission for a profit and the public's need for evidence of social good. In recent decades, there have been major changes in higher education (HE). One such change is the development of opportunities for social mobility. Indeed obtaining a HE qualification is seen as a pre-requisite for economic growth and competitiveness. HE has become an industry that 'enhances national competitiveness… a lucrative service that can be sold in a global market place… [eclipsing] the social and cultural objectives' (Naidoo 2003, p.250). The commodification of HE has created some tensions between the economic role of a university and its social responsibility to the communities it serves.

After the 2009 financial crisis, HEI in England grappled with creating and sustaining 'impact' for their diverse communities. Universities sought to ensure a positive strategic ethos whilst developing intellectual capacity for all stakeholders and mediating global league tables and university rankings. The University of Northampton (UoN) is no exception to these demands and responded by carving out an active space for the role of social enterprises, entrepreneurship and innovation. This paper attempts to explore the development of this strategy over one strategic planning cycle, from 2011 to 2015, in the context of social responsibility. It presents an overview of the innovative activities

[a] **Correspondence can be directed to:** emel.thomas@northampton.ac.uk

undertaken by the UoN in recent years to further its social impact and identify the barriers to success. This paper is based on a stakeholder consultation programme undertaken in 2013 which focused on what a Changemaker Campus, as a proxy for a socially innovative university, meant to staff, students and communities. This paper presents a model for a socially responsible HEI in the English context.

Demands for Inclusion within Higher Education

HE in England is a state governed system with the HEFCE granted responsibility for funding and regulation from 1992. Government grants given for teaching allocations in HE were withdrawn in 2012 and resulted in universities needing to cover income previously received from HEFCE. As a result most universities charge UK and EU undergraduate students tuition fees (up to £9000 British Pounds a year). There are 108 universities in England of which some have evolved as a result of legislation that allowed smaller colleges to obtain university status. Since the financial crisis of 2009, the UK's policy of austerity led to a redefining of the role of local government and state agencies in addressing social inequalities. The role of HEI has been reassessed to incorporate explicitly positive social, environmental and cultural impacts alongside their economic contribution (Altbach et al., 2009). Of interest is how university resources can be used to support state provision, deeper local commitments and demonstrate positive community action. In response many HEI developed strategies whereby the community could actively get involved in student experiences, taught curriculum, and research projects. The purpose for change in HE is often debated, especially when considering the divergence between education perceived as a tool for social/economic transformation and education for wider social justice/responsibility ideals. Cristensen and Eyring (2011) argues that moving from an 800-year-old model of universities as economic agents driven by education, research and knowledge creation would enable them to become more innovative and sustainable in the crowded global HE market place. By focusing their energies and resources on generating social impact and justice, as ways of enhancing learning in the community, universities would become disruptive innovators within society producing economic and social benefits.

During the early 2000s in England, the Labour government overtly sought to support HEI that engaged with communities and widened participation. In 2003 the Education Secretary proposed extra funding for universities that attracted students from disadvantaged backgrounds. However in the years following the financial crisis, the need for austerity meant a greater emphasis on financial allocations that promoted capacity building. Specifically this could be evidence by using 'impact' measures as an indication of value added and engagement (Brennan, 2008; Grimshaw and Rubery, 2012). Social engagement and demands for greater social inclusion in HE therefore stretched beyond the traditional priority of increasing the numbers of underrepresented students within HEI to objectives that involved universities developing interventions. It was deemed important that these interventions addressed the root causes of inequality and the lack of engagement in HE in a systemic way. This approach has created new ways of widening participation in HE; something that not only satisfies the economic role of HEIs but also leads to the tackling of global social inequalities. In this model the centrality of widening participation in HE rather than it being treated as a by-product of HE, a means to an end rather than an end in itself, creates the disruption through which different ways of viewing a university's social impact are emerging.

Engagement Responsibilities

There exist two broad challenges for HEI when addressing social engagement demands in local communities. First, engagement must be seen to provide encounters that are cost effective and workable for the target group(s). For universities this is an essential element when seeking to establish and maintain widening participation opportunities. Second, ensuring a quality of service for communities, students, and the university is critical. Particularly if seeking to achieve durable

and principled service activities. These two challenges create a tension; as quality-based activities may not always be the most cost effective ones, and the cheapest form of intervention may not result in the greatest impact. Without regular reflection and renewal of engagement activities, the aim of addressing contemporary social justice and responsibility agendas can quickly disappear (Curtis, 2010). In crisis situations, such as the financial crash, there are often benevolent services established that fulfil social needs (often neglected due to government cut backs on public services) which do not address the systemic issues that cause the social problem in the first place (Newing, 2011). In attempting to respond to economic pressures, social engagement demands require a local compassionate response by more powerful agents such as universities and their community based initiatives, rather than quick fixes that respond to political expediency rather than long term change (Chatterton, 2000). For example, following the closure of government funded youth clubs within the East Midlands region of England, small teams of individuals established local groups to support young people by offering services to meet their needs through a Youth café model (Sorrel Youth Cafe, 2016). Such initiatives when supported in an empathetic way by an HEI can create new pathways into university for disadvantaged young people, whilst providing a conduit through which an HEI can focus its resources for the benefit of that community. It is in this situation the creative ideals of community engagement undertaken by an HEI can be most effective when harnessed through a social enterprise business model.

In recent decades social enterprises in the UK have grown in number (BIS, 2013). Social enterprise business models provide an operating framework through which social entrepreneurs, communities and other stakeholders create innovative solutions to actual problems. When considering international conceptions of social enterprises Kerlin (2010, p.164) states they are:

> …the use of nongovernmental, market-based approaches to address social issues, social enterprise often provides a ''business'' source of revenue for many types of socially oriented organizations and activities. In many cases, this revenue contributes to the self-sufficiency and long term sustainability of organizations involved in charitable activities… Indeed, as the concept has grown in popularity, the actors and institutions involved in the promotion and development of social enterprise appear to reflect its immediate regional socioeconomic environment in terms of social enterprise emphasis, structure, and resources.

Consequently, social enterprises are increasingly being explored as an avenue for HEIs to exert social responsibility within wider society. In considering international definitions of social enterprise it is important to recognise that the context is crucial when attempting to understand the localities in which these organisations are established and operate in (Kerlin, 2006). Alongside contextual issues, commercial understandings of social enterprise differ in part to societal, legal and regulatory frameworks and political conceptions. According to Austin et. al (2006, p.2) there is a need to look beyond social-purpose versus commercial ventures and create something '…new rather than simply the replication of existing enterprises or practices'. Hence the most efficient and effective route of addressing social issues is within the process of continuously making socially responsible decisions. On the other hand the UK government, in part, suggests that social and environmental aims are not the sole identification of a social enterprise, proposing five income and profit indicators that can ratify the status of a social enterprise (BIS, 2013). In recent years the UK's expertise in the social enterprise field has been embraced as a form of soft power; promoted through British Council initiatives across the world, shaping the debate and application of social enterprise within HE along an Anglo-centric model of engagement. In some instances creativity and diversity within the field could be limited when opportunities are not fully embraced. Therefore, the contextual differences through which social enterprises emerge within different countries are important considerations in order to develop new models that address social problems (Peattie and Morley, 2008).

International Perspectives: Borrowing Policy and Practice

Emulating successful policy and practice from elsewhere has long been viewed as a way in which institutions can learn and develop. However transferring ideas and practices across national boundaries is often highly complex. According to Phillips and Schweisfurth (2006) the foreign example needs to be fully understood and reflected on in context prior to adoption. As such policy transfer associated with HE has a well-established history linked to performance strategies. For example performance-based accountability models from the USA have been adopted by countries in transition across Asia and Eastern Europe (McLendon et al., 2006). Smaller countries such as those within the Commonwealth Caribbean or Netherlands Antilles are particularly vulnerable to the transfer of external policies and practices. Although criticisms of policy and practice borrowing regularly focus on dependency on former colonial powers, however in recent times two primary benefits are evident. The first is that particular relationships with partners can help to cluster similar interests and strengths. This can result in a strong network of contacts that can be called upon at a moment's notice (frequently using a range of technologies). The second is mutual benefits from financial resources and status. For example through affiliations with English institutions 'prosperity' and 'success' are associations that can reassure stakeholders (Thomas and Clegg, 2016). Indeed for the development of social enterprises, partnerships and recognition are key drivers in the global environment.

The Merits of Social Enterprise for Higher Education Institutions

It is estimated that 24 % of small and medium sized enterprises in the UK are social enterprises (BIS, 2013). Although HEIs may collaborate with others on matters associated with entrepreneurship it is somewhat unclear as to how many social enterprises are set up and remain operating in the wider HE sector. Emerging, however, are rich narratives showcasing the benefits for HEIs in creating and supporting social enterprises and entrepreneurs (Drayton, 2006). There are four primary benefits for HEI that exert social responsibilities through creating and/or sustaining social enterprises (Denny et al., 2011; Irwin and Maxwell, 2015).

1. **The creation of relationships with diverse communities**. For example working with local schools, beyond teacher training programmes, to establish social enterprises and events can create links with parents, teachers, teaching assistants, children and local authorities.
2. **Co-ventures that contribute to knowledge creation processes**. HEI can utilise social enterprise operations as sites in which to conduct research. Indeed the variety in function of social enterprises is likely to encompass a range of academic disciplines for research examination.
3. **The ability to develop a HEI that is strategically engaged in socially responsible activities**. Universities can operate more in line with organisational market ideals. For example the marketisation of HE in the UK has presented the arguments that universities need to address student demands beyond consumerism standards. However, with the inclusion of social enterprises in the activities of HEI, strategic development can be inclusive of more commendable charitable objectives.
4. **HEIs can contribute to networks of likeminded entrepreneurs creating positive change regionally, nationally and internationally**. The standout merit of this for both HEI and social enterprises is being involved in a large association of innovative partners. For example Ashoka was established first in India in 1980, Brazil in 1996, and the USA in 2000 making it now the largest network of social entrepreneurs.

Ashoka is one of many networks that operate nationally (Guardian Social Enterprise network), within Europe (EMES International research network) and globally (Schwab Foundation, Global Social Enterprise network). Exponents of the 'Everyone a Changemaker' ideal Ashoka seek to:

> …exponentially accelerate lasting social change so it sweeps through systems, tipping the attitudes and behaviour of individuals and institutions. It convenes and connects high-potential changemakers, their ideas and their resources, through the power of collaborative competitions and partner networks (Ashoka, 2016, para 1).

Ashoka's unique approach is in its focus on recognising the power of the social entrepreneur and innovator who changes the world through social innovation and has developed a 'search and selection' processes that 'remains the most rigorous system… for identifying pattern-setting innovators at a relatively early stage of their careers' (Bornstein 2007, p. 12). It is this process that provides credence to the 'lone warrior' narrative of social enterprise, but fails to acknowledge that many social enterprises and innovations require teams, communities, champions, and luck. Networks like this could perpetuate the idea that the only successful social entrepreneurs are the ones that succeed with their venture. It fails to acknowledge that many social innovations are the result of the collapse of others and fails to recognise their contribution. Out of these concerns and a newly desired approach, in 2008, Ashoka U emerged as a sub-venture within the Ashoka network. Ashoka U took the idea of the driven change-making social entrepreneur and applied that to universities, arguing for an institutional change approach that could influence students and enable collaboration with colleges and universities. It was anticipated that such collaborations would break down social barriers and lead to university campus-wide movement of social innovation. Ashoka U universities therefore are often identified as unique ecosystems in society where social change can be generated through engagement with social innovation and creating Changemakers of the future that will change the world for the better.

There are 35 Ashoka U Changemaker campuses around the world that foster skills such as empathy, teamwork, leadership and change making across their institutions and curriculum activities. Although involvement in a large international network runs the risk of not fully discerning local innovative drivers, enterprising associations such as Ashoka U are able to showcase powerful narratives of the impact HEIs have when adopting socially responsible strategies (Drayton, 2006; Sen, 2007). No work has been undertaken to review the impact of Ashoka U and its network in effecting the desired systemic change. It is too early and has to date been restricted to a North American narrative of social enterprise and innovation with a language that is rooted in a liberal arts educational system. However its application of the Ashoka search and select process provides validation of those universities that have embedded social innovation and built supportive environments for change making. How real such claims are, and whether an institution can be judged the same way as an individual in this context is still to be tested.

The UoN is one the youngest universities within the UK. Located in the East Midlands of England, the UoN is currently split across two sites in the county town of Northampton. The university has plans to amalgamate into a new Waterside Campus along the River Nene in 2018. The educational history of Northampton dates back to the thirteenth century. However it is only in recent decades that a HEI in Northampton has formally acquired university status. The UoN is therefore vocal in its desire to support creativity and create strategic partnerships. For the UoN the four primary merits of involvement with social enterprises are not considered to be exclusive. The overarching priorities of improving inclusion and engagement required different approaches much dependent upon the locality. It is within this context that the UoN embarked on embracing social enterprise, entrepreneurship, and innovation as a strategic core competence and sought to become the UK's first Ashoka U Changemaker Campus.

Social Responsibility: Embracing Enterprise and Innovation

Granted University status in 2005, the UoN comprised six academic schools; Health, Education, Social Science, Business, Arts, and Science and Technology. As a post-1992 HEI, the UoN's responsibilities to local communities was a central tenent of its application for university status, which was heavily

supported by those communities. The student body of 13,000 students reflects its context with 61% of students who are the first in their family to attend university; 60% mature students; 25% Black and Minority Ethnic; 10% declaring a disability; and 12% of international students representing the student body. The course portfolio at the University offers a range of professional programmes connected to education and health professions alongside standard business programmes, performance arts and high end technology based programmes. Viewed as a practical rather than academic university, graduates of UoN have consistently reported high levels of employability (currently at 96% employed) (HESA, 2017).

With the Mission of Transforming Lives and Inspiring Change, the University's strategic plan of 2010, Raising the Bar, (UoN 2010, pp.3-4) spelt out that:

> Social Enterprise is [a] uniting theme across the six Schools that builds on strengths in community interaction, regional engagement, widening participation, third sector partnership, student volunteering and employability… National recognition of Social Enterprise as a holistic theme will confer an important point of external differentiation on the University.

The 2010 plan identified that social enterprise was a cross-cutting theme that built on the existing strength of the University offering a differentiator for the institution. Whilst it is acknowledged that the policy, political, and economic context of the UK played an important role informing the strategy, this section will explore the antecedence of this strategy. Also showcased are the different interpretations social enterprise adopted and resultant activities undertaken to achieve this ambition by being awarded the first Ashoka U Changemaker Campus designation in the UK.

The Early Years: Pre-Raising the Bar and 2010-2012

Subject areas at the UoN worked closely with community groups and organisations through research, placement, and knowledge transfer activities. Co-operative models of working and trading were promoted in the 1990s, particularly in the Arts. In the Business School there was a cadre of academics who recognised that social enterprise was a developing field. Across the School of Health, colleagues grappled with the concept following the White Paper of 2006, later the Health and Social Care Act, which looked to a growing social enterprise sector to deliver health outcomes (Department of Health, 2006). Whilst there was real grass-roots engagement, interest and activities were peripheral to the mainstream activities of the University and involved a band of enthusiasts. The adoption of 'Raising the Bar' legitimised the interest in social enterprise and gave permission for activities to be developed in the name of achieving the strategic plan (UoN, 2010).

Although the intent was constructed, there were many issues to resolve from the outset. This included definitional problems around the concept of social enterprise. What was meant by National 'recognition', and how the university would engage students in a concept that as discussed previously in this paper, is contested and multi-definitional and for the University, resulted in an array of discussions. As there was (and remains) no legal definition of social enterprise, the UK government's definition was adopted:

> A social enterprise is a business...with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or community, rather than being driven by the need to maximise profit for shareholders and owners (Cabinet Office 2006, p.10).

The focus was consequently on activities that enhanced student experience, addressed social inclusion, social impact, social innovation and change; and were entrepreneurial, innovative and utilised enterprise skills. These parameters provided the template for staff and student engagement and provided a clear narrative through which to engage external stakeholders.

Throughout its infancy there were three key drivers. First, an enhanced student offer where all students could experience a social enterprise or be supported to start one. Second, a social

enterprise integrated into curriculum in the form of placements, assignments, and assessments. Finally, access to business support to start and grow social enterprises.

At the UoN specific initiatives were introduced. Six prominent examples include:

(a) *Social Enterprise Development Fund,* where training, advice, mentoring and start up grants of between £3,000 and £20,000 for students and staff were made available;
(b) *Inspire Northamptonshire,* a voluntary sector partnership building capacity in the sector, offered leadership training and collaborative service delivery guidance;
(c) *New Venture Development,* WE RE PC (a recycling business that folded in 2012) and Coco Careers (a graduate recruitment agency operating as a social enterprise);
(d) *Inspire2Enterprise,* provided a 'one stop-shop' business support service for social enterprises. Online, telephone and face-to-face assistance became available in this platform to new and existing social enterprises that supported over 7000 organisations between its launch and 2015;
(e) *Direct investments in high growth social enterprises,* such as Goodwill Solutions; a social enterprise logistics firm supporting ex-offenders into work;
(f) *The externalisation of university functions into social enterprises,* with the Estates and Catering departments being assigned as social enterprises with more autonomy around budgeting and service delivery.

The period 2010-2012 can indeed be identified as a period of ambiguity and unfocussed activity brought about by lack of agreement on concepts and terminology, which in turn stimulated a number of discourses within the UoN. The prevailing narrative concentrated on the Cabinet Office's (2006) definition and 'Business' support, that in some regard inhibited staff and students outside of the Business School from getting involved. As one student in the School of Education pointed out:

> *I want to be a teacher not start a business (Anonymous – Student Narrative, 2011).*

This perception that social enterprise was exclusive rather than inclusive created additional difficulties for external stakeholders. The UoN's objectives and approach were heavily questioned and was seen as disruptive and unaccountable without any clear social benefit. The over emphasis of a 'business' definition narrowed the engagement opportunities and raised questions about whether initiatives were being developed in a strategic way or represented *ad hoc* land grabs and cost reduction priorities for public relations purposes. Hence there emerged an interest in what was becoming a focus on 'Social Innovation' (Denny, 2011).

The Mid-Years: 2012-14

Social innovation emerged through the UoN partnership with the Young Foundation, establishing the first Social Entrepreneur in Residence (SEiR) in a UK HEI. Like social enterprise the field of social innovation is contested and emergent. The *Open Book of Social Innovation* defined social innovation as:

> …new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations. In other words, they are innovations that are both good for society and enhance society's capacity to act (Murray et al. 2010, p.3).

This meant that the focus shifted away from creating new social enterprises to the generation of ideas in order to address inequalities and the process of developing and disseminating these across whatever sector or business model was appropriate. Understanding social problems, evidencing needs, learning from failure, measuring social impact as the way of unlocking investment and

contracts, prototyping and design thinking all became part of the new narrative at the UoN. 'Just have a go' became the way students were encouraged to 'get involved'. Emergent initiatives at this time included:

(a) *The Big Ideas Bonanza* that supported 160 community and social ventures with investment up to £30,000 during this period;
(b) *We Do Ideas Northampton* Harnessing App technology created new spaces where students could share and develop their ideas into viable, income generating social ventures. The approach brought in academics and students from a wider range of disciplines than had previously been seen;
(c) *Social Innovation Curriculum,* where academics began to broaden their curriculum to incorporate a social innovation approach. The Bachelor of Arts (BA) Business and Enterprise redesigned its modules to accommodate approaches to venture development and the BA Acting degree introduced a Social Enterprise in an acting module where social innovation underpinned the learning;
(d) *Social Enterprise Ambassadors*, where 200 individuals were recruited to build a community of innovators practicing and engaging students in thinking about social problems and how they would solve them;
(e) *Global opportunities* such as the Dialogue Cafe and Balloon Ventures broadened the appeal of the UoN agenda and offered new kinds of enhancements to the student experience that connected students with global communities and innovators.

UoN's original approach of the early years continued to develop with its focus on social enterprise models, even though there was a growing awareness of the process of social innovation as a mechanism for creating new social enterprises. These two strands developed in parallel; informing and influencing each other but cultivating very different roles in the development of the UoN strategy. The benefits of this approach allowed for a richer dialogue to develop with external stakeholders and opened up new opportunities for closer working. However there remained no clear objective for social change other than the mission to be the 'Number 1 for Social Enterprise'.

Social innovation was predominantly internally driven focussing on curriculum enhancement, student engagement and extra-curricular activities whereby addressing social problems through subject-specific knowledge rather than business creation was seen as the priority. As these mid-years progressed, the lack of an agreed definition that had dominated the social enterprise world for so long began to influence participants of social innovation. Indeed the emergent definitions, theoretical framings and conceptual theories correlated with those in the University whereby social innovation began to mean different things to different individuals. The impact of much activity on communities, students, and ways of working was also being questioned. There emerged the perception that the public relations objective of being first could be overshadowing real social impact.

Changemaker Campus

The UoN came to the attention of Ashoka U in 2012. After undertaking the 'search and selection' process the UoN was awarded Changemaker Campus status in February 2013. The designation recognised how both strands, internal and external, were enhancing each other, providing choice, challenge, and an integrated approach to growing the fields of social enterprise and social innovation. What initially appeared as a tension in the University between the two approaches was taken as a strength and more than that as best practice within the Changemaker Campus network. However the process identified the lack of embedded strategic intent beyond the objective of being 'Number 1 for social enterprise'. The need to embed social innovation as a competency that impacted on all stakeholders was needed and that this would require systemic changes to networks and relationships both internal and external.

Whilst the strategic objective could be said to be achieved, the real work would need to be undertaken to create the systemic change required to have sustainable social impact. Beyond the status of Ashoka U being awarded, little thought had been given to what would happen next or what being a member of the Ashoka network would mean in practice, especially if the university was to lose such attention in the future.

Towards a Changemaker University: Embedding Debates

Prior to the UoN designation, all Changemaker campuses had been located in North America. This gave rise to debates on how the language of Changemaker could be translated into a UK context. Indeed wider examples of policy and practice transfer would suggest that a different HE context could lead to Changemaker being defined differently and so to notions of social innovation (Kerlin, 2010). The Ashoka U definition of a Changemaker Campus suggested that all designated campuses should achieve embedded social innovation as a core value. However, what did embeddedness mean in the English context and how was the UoN able to demonstrate this commitment? Fundamentally, what did Changemaker, as a proxy for social innovation, mean in Northampton? In order to understand these issues a staff consultation was undertaken over a period of six months utilising survey, focus groups, and workshops, which was extended into the student body and external stakeholders. The questions asked focussed on what the term *embedded* social innovation meant in relation to Northampton, and how the Changemaker ethos added value to the UoN's pre-existing values and mission.

The Consultation and Data Collection

To explore the social innovation as an embedded concept an online survey was cascaded through the UoN in-house communication mechanisms, all staff emails and the in-house magazine. Five staff meetings were conducted where Changemaker was explored in depth. Seven community workshops were undertaken as informal focus groups where 57 community and voluntary sector organisations attended. Collectively over 500 responses were received across staff and community organisations from September 2013 to February 2014. The analysis of the responses was initiated using a primary level evaluation. Discussion points were validated by a selection of those involved in the consultation as well as the UoN Executive and Trustee Boards. The validation process both confirmed the findings and raised questions for further exploration outside of the scope of this paper. However the findings draw on the importance of local duties in a dynamic HE environment. Elements of the findings are drawn upon in the following discussion sections as a means of promoting flexible systems for navigating the concepts of social enterprise and social innovation.

Embeddedness

Granovetter (1985, p.504) argues that 'most behaviour is closely embedded in networks of interpersonal relations…' and that he '…believe[s] this to be so for all behaviour'. Furthermore he asserts that by analysing such embedded behaviour as 'rational' within the context of the institution 'what looks to the analyst like non-rational behaviour may be quite sensible when situational constraints, especially those of embeddedness, are fully appreciated' (Granovetter 1985, p.506). For the UoN grappling with the networks of relations value could only be achieved through innovative research. Indeed this could enable the revelation of behaviours that occur beyond what is scripted strategically. Purposive action could also be embedded in an on-going system of relations. What also was needed is deep consideration of opposing ideals associated with embeddedness. According to Karl Polanyi (Machado 2011, p.1) the idea of [dis] embeddedness occurs when '…the economy is immersed in social relations, i.e., it cannot be a separate, autonomous sphere vis-a-vis society

as a whole'. However a dis-embedded economy's main function was not to provide the means by which society could live and thrive but to generate profit for and of itself with no relationship to the real economy in which people live. Applying such notions to social innovation within an HEI raised questions about the role and function of social responsibility and innovation within the UoN as an organisation. To be embedded social innovation would need to be recognised as a rational behaviour set that added value to the interrelationships, discourse, and institutional development of the UoN both at macro and micro level, rather than a narrative for marketing and promotional purposes. To analyse the data, Daszko and Sheinberg's (2005) types of change framework was adopted to plot responses in terms of their correlation to transformational change pre-requisites.

Findings and Dialogues

One principal concern from the consultation findings was that respondents acknowledged and demonstrated commitment to the UoN mission, but felt they had little influence over the decisions the University took in achieving this mission. Some respondents highlighted that decisions appeared to be made through a process they termed bureaucratic that they did not participate in. It was felt that such processes would ultimately hinder the opportunities Changemaker offered staff to 'do things differently' as the bureaucracy would control what emerged. Changemaker and its ethos of 'Everyone a Changemaker' was seen to imply that every member of staff was empowered and responsible for effecting change in order to improve outcomes. However, the perception that the UoN governance was 'exclusive' and bureaucratic rather than people-led and student-centred was counter intuitive to such an ethos (Curtis, 2010). Viewed as such, Changemaker was for some seen as:

> *…just another initiative or badge that would have little impact on the day to day experiences of staff or students' (Anonymous – Workshop Participant, 2014).*

For others, the potential for Changemaker in providing a new way of *embodying* the UoN mission was seen as a positive opportunity. 'Everyone a Changemaker' was therefore viewed as the lens through which the UoN could make its values real, rather than an additional layer of values. It also provided clear objectives and set actors that were involved more in the systems at the university. This was taken to be viewed as a way to *enliven* the relationships between all stakeholders and partners. One example highlighted was the potential for the relationship between academics, students, professional services and wider community to become one of co-creation and co-production: these in turn generating new models of staff engagement, curriculum development, and/or greater adaptability and flexibility.

Changemaker was also perceived as a way of regulating institutional relationships: bridging the gaps between internal and external communities in the context of Northampton, affecting change rather than outright disaffection with the status quo. Whilst at that time some relationships at the UoN were seen as governed and regulated through strategies, policy, and procedure, Changemaker was seen as an alternative approach which could develop trust, leadership, responsibility, transformation and the courage to fail. Although tensions were identified between four communities of interest: environment (including external stakeholders and communities), staff experience, student experience, and leadership, it was acknowledged that these were inter-related constituencies and expressed as interdependent with changes needed across all four if Changemaker was to be seen as embedded. Each constituency saw Changemaker as something that related to other people not them. For example, academic staff stated:

> *Changemaker… it's about the student experience and communities isn't it? It's not about what we do? (Anonymous – Staff Narrative, 2014).*

Whilst professional services saw it as:

…nothing to do with us it's about how academics deliver to students (Anonymous – Student Narrative, 2014).

The sense of Changemaker belonging to others and not self-actualised reinforced the view that it was a 'bolt on', not part of business as usual or embedded into ways of university working. This was further amplified by the view that the prevailing mind-set was bureaucratic rather than creative or innovative. Respondents commented that it was this very bureaucratic mind-set that was inhibiting creativity and innovation and would ultimately stop Changemaker making a difference. Where examples of creativity and innovation were identified, they were expressed as being 'in spite' of the University, rather than 'facilitated by the University' and not seen as being universally celebrated. Whilst neither one of these mind-set 'frequencies' should be seen as more desirable than the other, Changemaker was seen as being less a part of a bureaucratic ecosystem and potentially a transformational development.

In utilising Daszko and Sheinberg's (2005) framework, it is possible to lay bare the shifting ideals of *embrace, embed* and *enliven* notions of social responsibility linked to the implications of being a Changemaker Campus at the UoN.

Table1. Embrace, Embed and Enliven Analysis for the University of Northampton

	Embrace Where the University is?	***Embed*** Current application of University values.	***Enliven*** What a Changemaker campus could be?
Motivation for change	Better, faster, cheaper.	Fix the problem.	Survival, environment, world changes, society, break through needed.
Degree of change	Incremental improvements.	Transition from here to the future.	Revolutionary, necessary.
Thinking	Improve	Change management, strategic planning.	Radical shift in mind-set/ thinking/actions.
Actions	Manage and control processes.	Design the plan, deliver the plan.	Root and branch overhaul of mind-set, culture, communications, strategy, structure, actions, systems and processes, use of data, action focussed, research driven and evaluated.
Destination	Improvements are limited to addressing things that go wrong.	Projects completed.	Continually transforming: no end state.
Changes required	Focus on individual performance, PDRs, improvement in skills, knowledge, and performance.	Control, project management.	Leadership committed to new thinking, learning and actions, external coaching to help see the challenge, courage.
Outcomes	Limited improvements	Changes limited to project plans	Sustainable change, adaptability, fluidity, state of constant change, team approach.

Source: Daszko and Sheinberg (2005, p.3)

The biggest implications were that whilst the Ashoka designation process identified a level of e*mbeddedness* of social innovation into the UoN that in part falls short of a Polanyi or Granovetter definition (Granovetter, 1985; Machado, 2011), neither the institution nor the social processes as identified in the Cajaiba-Santana (2014, p.48) framework had changed and that was partly because prior to the designation neither of the narratives adopted by the UoN had led to a sense of agency across the staff body. Changemaker, and in its name social enterprise and social innovation, appeared for some to be happening somewhere else and not relevant to the majority of staff. Up until February 2014, the end of the consultation period, a systemic change perspective of social innovation had been missing from the discourse of social innovation at the UoN with the emphasis being on venture development and co-development perspectives.

An Enlivened Future for the University of Northampton

The outcome of the consultation implies that for a Changemaker Campus to demonstrate reputable social innovation the three stages; *embrace, embed and enliven* should be identifiable. Furthermore, an evaluation of the wider structural and institutional context of social innovation needs to be undertaken to demonstrate how agency, social practices and new norms and behaviours emerge and affect social change. The Changemaker designation provided the UoN with the ability to claim the 'Number 1 for social enterprise' title. Yet the institution needed to move beyond the status to create a system that would enliven relationships across all stakeholders if significant inclusion and engagement benefits were to be achieved. Social impact and social responsibility would need to remain key drivers for future development.

Conclusion

Globally HE is complex and an increasingly competitive market place. In the UK, the government has encouraged HEIs to establish evidence of social responsibility, which could be validated in the operations of social entrepreneurship. It is also apparent that there are engagement demands for widening participation from not only the government but communities themselves. Compassionate concern for societal issues can result in a flurry of social enterprising activities much of which offer swift responses to challenges caused by short term political decisions with no long term social impact. Borrowing policy and practice has long been viewed in literature as challenging without contextual consideration, investment and partnership. However, the UoN has adopted a deliberate strategy of social impact through innovations as the way of reconciling the social responsibilities in England. Whilst the UoN has captured this under their Changemaker Campus initiative, all universities should seek to embed socially responsible activities. What is clear is that the demands of the future require new thinking and ways of working if HEIs in England are to optimise their social role. This will require them to embrace these new demands, embed an ethos that will affect the change and enliven their institutions to be transformational agents within their communities.

References

Altbach, P.G., Reisberg, L. and Rumbley, L. E. (2009). *Trends in Global Higher Education: Tracking an Academic Revolution. Report prepared for the UNESO World Conference on Higher Education. Paris: UNESCO*. Available at http://unesdoc.unesco.org/images/0018/001831/183168e.pdf. [Accessed 14 February 2016].

Ashoka (2016). *Ashoka Innovators for the Public: Changemakers*. Available at https://www.ashoka.org/changemakers [Accessed 28 February 2016].

Austin, J., Stevenson, H. and Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different or both? *Entrepreneurship Theory and Practice, 30*(1), pp. 1-22.

Bornstein, D. (2007). *How to Change the World: Social entrepreneurs and the power of new ideas*. New York: Oxford University Press.

Brennan, L. (2008). Higher education and social change. *Higher Education*, *56*(3), pp. 381-393.

Cabinet Office (2006). *Social Enterprise Action Plan: Scaling New Heights*. *Office of Third Sector. London: HMSO*. Available at http://webarchive.nationalarchives.gov.uk/20070108124358/http://cabinetoffice.gov.uk/third_sector/documents/social_enterprise/se_action_plan_%202006.pdf. [Accessed 23 February 2016].

Cajaiba-Santana, G. (2014). Social innovation: Moving the field forward. A conceptual framework. *Technology Forecasting and Social Change*, *82*(1), pp. 42-51.

Chatterton, P. (2000). The cultural role of universities in the community: Revisiting the university–community debate. *Environment and Planning A, 32*(1), pp. 165-181.

Christensen, C. M. and Eyring, H. J. (2011). *The Innovative University: Changing the DNA of higher education from the inside out*. San Francisco: Jossey-Bass.

Curtis, T. (2010). The challenges and risks of innovation in social entrepreneurship. In R. Gunn and C. Durkin (Eds.), *Social Entrepreneurship: A Skills Approach*. Bristol: Policy Press, pp. 83-98.

Daszko, M. and Sheinberg, S. (2005). *Survival is Optional: Only Leaders with New Knowledge Can Lead the Transformation*. Available at http://www.mdaszko.com/theoryoftransformation_final_to_short_article_apr05.pdf. [Accessed 4 February 2016].

Denny, S. (2011). *A Socially Enterprising University – A New Model for Higher Education? The Guardian*, June 13. Available at http://www.theguardian.com/social-enterprise-network/2011/jun/13/social-enterprise-higher-education-northampton-university. [Accessed 9 February 2016].

Denny, S., Hazenberg, R., Irwin, W. and Seddon, F. A. (2011). Social enterprise: Evaluation of an enterprise skills programme. *Social Enterprise Journal, 7*(2), pp. 150-172.

Department for Business Innovation and Skills (BIS). (2013). *Social Enterprise; Market Trends. BMG Report Small Business Survey 2012. London: HMSO*. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/205291/Social_Enterprises_Market_Trends_-_report_v1.pdf. [Accessed 25 February 2016].

Department of Health. (2006). *Our Health, Our Care, Our Say: A New Direction for Community Services. London: HMSO*. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/272238/6737.pdf. [Accessed 23 February 2016].

Drayton, B. (2006). *Everyone a Changemaker: Social Entrepreneurship's Ultimate Goal. Arlington, VA: Ashoka Innovators for the Public*. Available at https://www.ashoka.org/files/innovations8.5x11FINAL_0.pdf. [Accessed 9 February 2016].

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, *91*(3), pp. 481-510.

Grimshaw, D. and Rubery, J. (2012). The end of UK's liberal collectivist social model? The implications of the coalition government's policy during the austerity crisis. *Cambridge Journal of Economics*, *36*(1), pp. 105-126.

Higher Education Statistics Agency (HESA). (2017). *Data and Analysis*. Available at https://www.hesa.ac.uk/data-and-analysis/students/destinations. [Accessed 5 March 2017].

Irwin, W. and Maxwell, R. (2015). *When changemaker and employability met education*. Presentation at the 2015 Ashoka U Exchange, University of Maryland, 26-28 February.

Kerlin, J. A. (2006). Social enterprise in the United States and Europe: Understanding and learning from the differences. *Voluntas: International Journal of Voluntary and Nonprofit Organizations, 17*(3), pp. 247-263.

Kerlin, J. A. (2010). A comparative analysis of the Global emergence of social enterprise. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *21*(2), pp. 162-179.

McLendon, M. K., Hearn, J. C., and Deaton, R. (2006). Called to account: Analyzing the origins and spread of state performance-accountability policies for higher education. *Educational Evaluation and Policy Analysis*, *28*(1), pp. 1-24.

Machado, N. M. C. translated by João Paulo Moreira. (2011). *Karl Polanyi and the New Economic Sociology: Notes on the Concept of (Dis)Embeddedness. RCCS Annual Review 3/2001(3).* Available at http://www.ces.uc.pt/publicacoes/annualreview/ficheiros/003/3345_7.AR3_Machado_en_10.11.pdf. [Accessed 9 February 2016].

Murray, R., Caulier-Grice, J. and Mulgan G. (2010). *The Open Book of Social Innovation*. *UK: The Young Foundation*. Available at https://www.nesta.org.uk/sites/default/files/the_open_book_of_social_innovation.pdf . [Accessed 9 February 2016].

Naidoo, R. (2003). Repositioning higher education as a global commodity: Opportunities and challenges for future sociology of education work. *British Journal of Sociology of Education*, *24*(2), pp. 249-259.

Newing, R. (2011). *Social Enterprises: Filling the Gap Where Market Has Failed. Financial Times*, November 2. Available at http://www.ft.com/cms/s/0/8744e0ba-d16c-11e0-89c0-00144feab49a.html#axzz41SzgeVVa. [Accessed 11 January 2016].

Peattie, K. and Morley, A. (2008). *Social Enterprises: Diversity and Dynamics, Contexts and Contributions. London: Social Enterprise Coalition*. Available at http://orca.cf.ac.uk/30775/1/SE%20Monograph%20Published.pdf. [Accessed 5 March 2017].

Phillips, D. and Schweisfurth, M. (2006). *Comparative and International Education: An introduction to theory, method and practice.* London: Continuum.

Sen, P. (2007). Ashoka's big idea: Transforming the world through social entrepreneurship. *Futures*, *39*(5), pp. 534-553.

Sorrel Youth Café. (2016). *Somewhere to be, SYC Home*. Available at http://www.sycafe.org/. [Accessed 23 February 2016].

Thomas, E. and Clegg, P. (2016). Transformative agendas and educational demands in the British and Dutch overseas territories of the Caribbean. In T. D. Jules (Ed.), *The Global Educational Policy Environment in the Fourth Industrial Revolution: Gated, Regulated and Governed.* Bingley: Emerald Group Publishing Limited, pp. 243-266.

University of Northampton (UoN). (2010). *Raising the Bar Strategic Plan 2010-2015*. Available at http://blogs.northampton.ac.uk/institutionalstrategyblog/files/2011/02/Strategic-Plan-2010-15.pdf. [Accessed 18 January 2016].

Williams, G. (2015). England: Higher Education. In C. Brock (Ed.), *Education in the United Kingdom.* London: Bloomsbury, pp. 83-105.

Book Review

Asia as Method in Education Studies: A Defiant Research Imagination. By Hongzhi Zhang, Philip Wing Keung Chan and Jane Kenway (Eds.) (2015), 182pp. ISBN: 9781138785960, New York: Abingdon, Oxon.

This book is an edited volume of ten chapters with "Asia as method" as their thematic focus. This phrase, used by all chapter authors and editors to frame their discussion, comes from the title of a book by Kuan Hsing Chen published in 2010. It refers to the reclamation of Asian scholarship from Western dominance, and is a subject of great import but insufficiently discussed. Often associated with colonialism, this phase has passed but Western education has spread not only by large numbers of students studying for higher degrees in the West but by the expansion of transnational education.

If the contents of these chapters are anything to go by, the book by Chen must have offered much food for thought. The topics covered by these chapters traverse a wide landscape, ranging from discussions of concepts to empirical studies. Of the former type are the relationship between colonisation and imperialism related to education (Wu in Chapter 4), the concept of "self" compared in Asia and West (Nguyen and Leihy in Chapter 5), and an argument against Asia-centrism as the remedy for Western academic hegemony (Singh in Chapter 9). Empirical studies dealt with case studies of China – Australia research (Zhang, et al. in Chapter 2), the Japanese notion of silence in the Australian context of academic discourse (Bao in Chapter 3), education strategies in Indonesia (Kuswandono, et al. in Chapter 6), language teaching practices in Vietnam (Vu and Le in Chapter 7), education research in Bangladesh (Rashid et al, Chapter 8) and a curriculum incorporating China – Australia knowledge co-production at the University of Western Sydney (Singh in Chapter 9).

A range of positions relating to the arguments put forward by Chen, and explained in the first chapter by one of the editors were taken – from elaboration and validation (Chapters 2,3), to doubts about some concepts' applicability (Chapters 6, 7 and 8), and to openly questioning the principles advanced by Chen (Chapter 9). This breadth of views gives the volume a balanced treatment of the subject, even if benchmarked against a single author.

While there is little doubt that the "West" broadly defined dominates the academic arena whether in terms of concepts, theories, pedagogies, and institutions, the use of cold war terminology like imperialism and colonialism exaggerates the divide and exacerbates the "us vs. them" mentality in the discourse. This is no better illustrated in the book's subtitle – "a defiant research imagination". But why does it have to be defiance? The large numbers of Asian students in tertiary education in the West are there by choice. Their decision takes in the fact that foreign degrees are given greater weight by employers when they seek employment, and the general view that Western education institutions are generally better than Asian ones. In making their choice, it cannot be that they are unaware of the fact that they will be learning Western concepts and in English. But it is a choice they make, conscious of what they are getting into. Invoking Cold War terminology to describe a phenomenon that is no longer related suggests a contest of ideology and thereby diminishes, unintentionally or otherwise, the role of pragmatism in decision-making by key stakeholders in education. To be fair, Chen himself would have Asian scholars rise above that divide, but the very fact he thought it important to do so signals its existence in his mind.

Reliance on Western source material, as a source of academic dependency, is only to be expected since instructors in Western universities naturally recommend sources with which they are familiar, and students take cue from their instructors. Further, in much of Southeast Asia, there is a paucity of materials in local languages. For students from countries facing no such constraint,

namely China including Taiwan, Japan, and Korea, efforts need to be made by scholars from these countries to also make use of academic materials written in their own languages.

It is also not true that Western ideologies and models are being peddled against the wishes of Asian universities and academics. On the contrary, universities like the National University of Singapore and others have been trying to benchmark themselves to emulate Harvard and MIT by using Western ranking criteria and systems. And they, as well as leading universities in Asia, are advancing in these rankings. The drive for publishing scholarly work in English has seen China move up to second place globally behind the United States. These efforts – to try to beat the West at its own game – should also be seen as reducing Western dominance and at the same time bringing local contexts to bear in Asian scholarly work.

An interesting issue raised in the book relates to whether the use of a Western language, specifically English, amounts to academic imperialism. As Chapter 7 noted, the debate was framed in terms of nationalism vs. the colonial past. But for former colonial countries like Malaysia, this argument has no substantive merit. In the Malaysian case, the switch from English to Malay was more motivated by affirmative action. In Vietnam, French, not English, is the language of the colonialists. The demand for English in Asia comes from the pragmatic view that English is no longer a colonial language but the *lingua franca* of business.

Another related issue, given the title of the book, is how Asia is defined. As the seminal paper by Milne and Johnson (1997) shows, this is no easy task. Chen echoes this difficulty by embracing a broad and complex definition (Kenway, p. 15). The problem with this definition is that Asia is so culturally and linguistically diverse and beset with so many historical and political fissures that it has become not a particularly useful frame of reference. Some of these problems are discussed in this book, when Kuswandono, et al. (Chapter 6, p. 109) stated that Chen's notion of 'Asia' "do not speak to the Indonesian context".

On the book itself, although its contents are fairly wide-ranging, it draws its contributors from a single faculty (education) in a single university (Monash). Even the contents which have major academic significance are framed against a single scholastic work. This narrowness certainly has done no harm to the breadth and depth of perspectives expressed. But it represents a missed opportunity to explore and debate this important subject about which not just Chen but scholars before (e.g. Alatas, 2003; Marglin, 1996) and after him (e.g. Beigel, 2013; Mentah, 2015) have made contributions. Levelling the playing field in terms of acknowledging the contribution of the many scholars would have added richness to this discussion, moving it beyond the need to address Chen at every turn.

And in terms of the field of study, education, it should be noted that Western academic hegemony has different meanings in different academic disciplines. It is obviously a major issue in the social sciences, of which education is a part, but likely less so in the physical sciences. The law of gravity is the law of gravity whoever seeks to explain it; it just happened that leadership in science fell to the West from the time of the Industrial Revolution. But even in the social sciences it cannot be assumed that Western methodologies should be superseded by Asian-grounded methodologies. Thus, Rashid, et al.'s (Chapter 8) claim that difficulties with implementation invalidated Western data collection methods is unfounded. All methodologies must be adapted to specific circumstances, including cultural practices, whether in the West or Asia.

Overall, both in the breadth of its coverage and the depth of its analysis, this book makes a scholarly contribution to a major subject that has not received as much attention as it deserves. Still, in limiting its scope to focus on a single scholar's ideas, opportunities for a broader debate have been missed. In addition, given this singular focus and the uncompromising use of jargon, the layman reader and even an uninitiated scholar should be forgiven if he/she believes that this is a book written about insiders by insiders for insiders.

Cheong Kee Cheok
University of Malaya