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Recovery of the Education System in Myanmar

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Abstract: *Myanmar's education system is in a very weakened state. The physical condition and human resource capacity of the system is poor by any standard, and teachers, whether in schools, colleges or universities, have few opportunities and little incentive for professional development. A process of recovery is getting underway, but it will take years before significant improvements are evident. Major cultural change is required in the style of leadership and management at all levels of government, and there is also a desperate need for more financial resources. This paper documents the current state of the education system in Myanmar and advances three priority areas for immediate attention.*

Keywords: *Myanmar; education; development; Southeast Asia; reform*

Introduction

Myanmar's transformation from military dictatorship to civil society is by no means yet complete, but the momentum for political and social change is now stronger and the country is no longer a pariah state, shunned internationally because of its rejection of democratic institutions and a poor human rights record. As a result of over 50 years of military rule, however, Myanmar is now one of the world's poorest countries, and its education system is in a very weakened state. The system's physical infrastructure is poor; teaching methods have not progressed much beyond those widely practised in the 1940s and 1950s; and teachers, whether in schools, colleges or universities, have few opportunities and little incentive for professional development. Prior to the imposition of military rule, Myanmar (then known as Burma) had one of the better education systems in Southeast Asia. Now its education system must undergo a prolonged process of recovery that will present challenges.

This paper seeks to document systematically the current state of the education system in Myanmar. It advances three selected priority areas requiring immediate attention. The paper is based on interviews with students, teachers and educational managers during site visits to educational institutions in Myanmar over the period from 2011 to 2013, a time of rapid change for the education system, and one in which access by foreigners to information about the system has improved enormously. It builds on the existing literature, and especially on recent publications by one of its authors (Martin, 2011, 2013), and it draws heavily on reports recently made available in English by the Ministry of Education (see, for example, MOE, 2012a, 2012b), and on survey data available from an Integrated Household Living Conditions Survey conducted in 2009-10 (UNDP, 2011), and a Multiple Indicator Cluster Survey, also conducted in 2009-10 (UNICEF, 2011). Also of note is a recent comprehensive report on opportunities and challenges for Myanmar (ADB, 2012)

The Setting

Myanmar is in the World Bank's 'least developed nations' category. It has a population of about 60 million, a large landmass (the second largest in Southeast Asia), and a level of GDP per capita

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that is currently estimated to lie somewhere between US$800 and US$1,000 (World Bank, 2013). Agriculture is the most significant sector of the economy, generating 43% of GDP and providing a livelihood for over 70% of the population (World Bank, 2013). Myanmar's Human Development Index, though slowly improving, remains relatively low, and poverty, especially among the two-thirds of the population living in rural areas, affects over 25% of the population (UNDP, 2013; World Bank, 2013).

Ethnic diversity is a distinctive characteristic of Myanmar. It has as many as 135 different ethnic nationalities within its borders (Oxford Burma Alliance, 2013). The Burmans, accounts for 68% of population, and tend to live in the lowland and more economically developed regions of the country. Other nationalities, accounting for much smaller proportions of the population, include the Shan (9%), Karen (7%), Rakhine (4%), Chinese (3%), Indian (2%) and Mon (2%). They live mainly in the upland and more remote parts of the country. Myanmar was known as Burma until 1989 when the military government decided on a name change to recognise the non-Burman ethnic nationalities. Many inside and outside Myanmar resisted the change because of the undemocratic way in which it was decided. Over time, however, Myanmar has become widely accepted as the country's name.

Burman political and social dominance is an ongoing source of ethnic tension in Myanmar. British colonial authorities sought to advance the interests of the minority ethnic nationalities by recruiting large numbers of them into the police, the army and the bureaucracy. Burman resentment towards this policy fuelled pressures for independence from Britain during the 1930s, and again after the War in the 1940s. In 1948, independence was finally secured, but civil unrest based to a large extent on ethnic rivalries intensified, resulting eventually in political and economic collapse and a military takeover in 1962. A new Constitution promulgated in 1974 declared Burma to be a socialist State. Military rule, which has been vigorously contested on many occasions, continued until quite recently, in March 2011.

Myanmar now has a limited parliamentary democracy – one in which the military retains control over one-quarter of the parliamentary seats. Recent changes in the political landscape are contributing greatly to increased political freedom and to the opening up of the country's institutions to international engagement. There has recently been a re-establishment of diplomatic relations with the West, and external investment is now flooding into Myanmar at a rapid pace (Reuters, 2013). Ethnic rivalries have not disappeared, and military action to quell civil unrest continues in several parts of the country.

In February 2012, the Ministry of Education, drawing on funds from an international consortium of development partners, initiated a Comprehensive Education Sector Review (CESR), the purpose of which was to promote a "learning society capable of facing the challenges of the Knowledge Age". Though at an early stage of its functioning, the CESR is already of immense symbolic value because it gives hope that the State is becoming more committed to ensuring that every child in Myanmar should have the opportunity to complete a full cycle of basic education of good quality.

Basic Education

Basic education in Myanmar currently consists of five years of primary education, four years of lower secondary education, and two years of upper secondary education. The 5-4-2 structure of the education system is under review and will eventually be replaced by a 6-4-2 structure. Pre-school education is also available, but the pre-school sector is not effectively integrated with the rest of the education system and only about one-fifth of all eligible children attend a pre-school, with children in rural areas being the least likely to participate.

Primary school education is compulsory, but the net enrolment rate in primary school in 2010-11 was estimated to be only 84.6% (MOE, 2012b,: p.26), indicating that not all primary school students remain until successfully completing primary school at the end of grade 5. Data extracted from the Multiple Indicator Cluster Survey conducted in 2009-10 (UNICEF, 2011) show that the main loss occurs during the first two years of primary school, mainly for reasons of affordability and access. The data also show that by the end of the primary school years, only about 70% of students

who commenced in primary school five years earlier remain enrolled, and that the transition from primary to secondary school brings about a further loss of students. By grade 6, only about 50% of students who commenced in primary school six years earlier remain enrolled. The loss continues, and by grade 10 only 23% of students who commenced in primary school 10 years earlier remain enrolled. Between grade 10 and grade 11, there is a further significant loss, and by the final year of secondary school only 10% of the students who commenced in primary school 11 years earlier remain enrolled (UNICEF, 2011).

While some of the loss of students during the secondary years may also be attributed to affordability and access, what mainly impacts on retention during these years is the increasingly selective nature of the examination system. By grade 11, when students sit for the Basic Education High School Examinations, most secondary students have left school because they have not been able to pass the succession of examinations leading up to the completion of grade 11. Given that it is rare for more than one-half of candidates for the Basic Education High School Examinations to achieve an overall passing grade, the success rate of students who commence a secondary education program is indeed relatively small.

Both girls and boys are equally likely to remain in school through to the final year of secondary education. Girls are consistently more likely than boys to achieve better results in the Basic Education High School Examination, and they are also more likely to proceed to higher education – in 2012, for example, 60.1% of all higher education students were female (MOE, 2012b, p.26).

Young people from rural areas, and especially young people from poorer households, are the least likely to remain in school through to the final year. Data collected in 2009-10 by UNICEF, in collaboration with several ministries, show, for example, that whereas 76% of children aged 10 to 15 years from urban areas were enrolled in school, the comparable figure for children in the same age group from rural areas was only 52% (UNICEF, 2011, p.106). The data also show that, whereas over 85.5% of children aged 10 to 15 years from the richest quintile of households were enrolled in school, the comparable figure for children in the same age group from the poorest quintile of households was only 28.2% (UNICEF, 2011, p.106). These patterns are consistent by other survey data (see, for example, UNDP, 2011).

The Ministry of Education is mainly responsible for the provision of basic education in Myanmar. Two other ministries also involved are the Ministry of Religious Affairs (responsible for monastic schools) and the Ministry of Border Affairs (responsible for schools in the troubled border regions of Myanmar).

Vocational and Higher Education

Entry to pre-employment technical and vocational education (TVET) may occur upon completion of lower secondary education, and entry to higher-level TVET and to higher education may occur upon completion of upper secondary education. The boundaries between TVET and higher education are not clearly defined, and both sectors, but TVET especially, are structurally very fragmented.

The Ministry of Science and Technology is the largest of the public TVET providers. It manages a national network of technical universities, technological colleges and technical institutes, offering degree and diploma qualifications. The Ministry also supports a network of technical high schools and vocational schools. Many of the TVET programs provided by the Ministry require intensive full-time studies and provide pathways to a degree. Other ministries, together with an increasing number of private-sector providers, also conduct TVET programs, but these are more likely to focus on short-term training skills related to areas of specialist technical need. Little is known about where students who complete TVET programs find employment, or about whether the knowledge and skills they acquire during their studies are even relevant to their future workplaces.

The TVET sector has many deficiencies, succinctly summarized as follows: the limited relevance of curricula, materials, methodologies, and program designs; the lack of an alignment across TVET, higher education, and secondary education; quality control and accreditation, particularly in the

context of a proliferation of institutions and programs of varying quality; inadequacies in the qualifications of teaching staff and in the quality of professional support systems; and weaknesses in links to labour market demand, especially in emerging sectors and skill areas (ADB, 2012,: p.26). As a consequence, the sector does not enjoy a good reputation for the quality of its programs. In addition, trade skills, and hence TVET, are remarkably undervalued in Myanmar – workers with trade qualifications are not necessarily paid any better than workers without trade qualifications, and qualifications from universities are universally accorded far greater social status than TVET qualifications. Participation rates in TVET are not reliably known, and program completion rates are widely claimed to be less than 50% - though there are not sufficient data available to verify this claim. A lack of trained technical personnel is becoming increasingly apparent in areas of basic infrastructure, such as electricity, water and basic sanitation, especially in rural and remote areas of the country, but, to date, the TVET sector appears unable to respond with increased numbers of trained personnel. There is an almost complete absence of any direct participation by private-sector employers in the design and delivery of training programs.

The structure of the higher education sector remains largely as prescribed by the *University Education Law* of 1973, a rudimentary legislative instrument that serves only to restrict the development of the higher education system. As officially documented (MOE, 2012a), there are 13 ministries that exercise line-management responsibilities for a total of 164 universities and colleges. The Ministry of Education is the dominant ministry – its 66 universities and colleges account for 77% of all higher education enrolments. The Ministry of Science and Technology is also a significant provider – it now manages as many as 61 technical universities, technological colleges and technical institutes, accounting for 18% of all higher education enrolments. Whether higher education institutions belonging to the Ministry of Science and Technology should all be classified as higher education institutions, as opposed to being classified as TVET institutions, remains quite unclear – many programs offered by the Ministry's higher education institutions are qualitatively different from traditional higher education programs, and are more like trade training programs. Two other important ministries are the Ministry of Health, which manages 15 higher education institutions, and the Ministry of Defence, which manages five higher education institutions.

Nearly all universities and colleges, other than the longer-established and more traditional liberal arts and science universities (for example, the University of Yangon, and the University of Mandalay), are highly specialized, whether in economics, teacher education, foreign languages, engineering, computer studies, maritime studies, agriculture, forestry, medicine, nursing, veterinary science, and so on. Remarkably, but consistent with the pattern in basic education, 82.6% of all academic staff members are female. Most (60.3%) students enrol part-time, and, though there are some universities in Yangon and Mandalay with more than 15,000 full-time enrolments, the average full-time enrolment per higher education institution is only 1,145 students, reflecting a policy adopted by the military of seeking to contain student radicalism by avoiding large concentrations of full-time students at any single higher education institution, especially in the larger cities. This policy contributed significantly to a surge in the number of higher education institutions established during the 1990s and sprinkled across the country.

Challenges

Myanmar's education system faces enormous challenges. These are evident in relation to finance, governance and management, pedagogy, equity, and quality. They also exist in different forms across the school, TVET and higher education sectors.

Finance

The education system is grossly underfunded – a state of affairs that has existed for a very long time. The underfunding is related to Myanmar's status as a poor country, but, more importantly, it

has occurred because, under military rule, the importance of the education system was deliberately undervalued. Recent national budget figures for 2013-14 indicate a 4.4% allocation of the national government's budget to the education system – an improvement on previous years, but well short of the allocation of 20.8% being made to support the military (Htet, 2013). Furthermore, an allocation of only 4.4% of the national government's budget to education compares poorly with the proportions allocated to education by governments in the Association of Southeast Asian Nation (ASEAN), to which Myanmar belongs. Vietnam, which allocates almost 20% of its national government budget to education, stands out as a leader, but there are other countries, including Malaysia, that are not far behind. Not surprisingly, total expenditure on education as a proportion of Myanmar's GDP is also low. In 2012-13, it was only 1.7%, compared with an ASEAN average of 3.5% (World Bank, 2013). By comparison, the OECD average in 2009 was 5.1% (OECD, 2011).

The lack of sufficient public funds rests at the heart of a great many of the current problems being experienced by the education system in Myanmar. Because salaries for teachers, particularly for primary school teachers, are relatively unattractive, capable graduates are less inclined to pursue a career in teaching. Male graduates seem especially wary of becoming teachers because the salary levels for teachers are widely viewed as being insufficient to enable them to assume the role of sole provider for a family. In the absence of better salaries, teachers have a strong incentive to provide fee-based private tutoring classes, mostly delivering exactly the same material as they would have delivered in their regular classes, but with more of an eye on the needs of individual students. And, because of insufficient funds, schools, colleges and universities are typically in a very poor physical condition, with inadequate or even non-existent library and laboratory resources. Teachers must also manage large classes, though less so in the more remote regions of the country where schools must be provided by the national government even though student enrolment numbers are low.

Another aspect of the problem is that there is a significant reliance, thought to be increasing, on private household expenditure. The main items of private household expenditure on education include learning materials and textbooks, tuition fees and private tutoring classes. Attendance at primary school is supposed to be free, but, as in many ASEAN countries, fees are unofficially levied in order to supplement teacher salaries and to meet the capital costs of school construction and maintenance. These costs can amount to a significant proportion of household income. Private tutoring, in particular, can be quite expensive. Its impact has been investigated more closely in the context of higher education, where private tutorial classes in cities such as Yangon and Mandalay are estimated to cost in excess of US$250 per month – the cost is usually shared between students in a group. This additional income for university lecturers is well above the mid-point salary level of a university lecturer (estimated at about US$150 per month), which explains why academic staff members are most willing to conduct the classes. Attendance is universally agreed to be important to academic success, and students appear to prefer attending the classes because they feel more like they belong to a community of learners. However, the classes also present an opportunity for unscrupulous exploitation, and they potentially detract from the public esteem traditionally accorded in Myanmar to the role of teacher. At a practical level, they also reduce the amount of time that teachers have available for class preparation, and, in universities, they represent a more lucrative alternative to engaging with research.

Governance and Management

Challenges relating to governance and management are also significant. Issues of governance particularly concern the higher education sector, which in Myanmar has little or no self-governing capacity. The level of familiarity in Myanmar with a Western tradition of universities being self-regulating communities is unclear, but it is evident that this tradition held little or no attraction to the government while Myanmar was under military rule. The *University Education Law* of 1973 effectively deprived universities and institutes of institutional and financial autonomy. Instead, a highly centralised process of decision making was instituted whereby a Universities Central Council,

chaired by the Minister for Education and with a membership that included deputy-ministers from a wide range of ministries, director-generals from various government departments, rectors of universities, principals of colleges and institutes, and various other appointees representing political and community interests, numbering 42 persons in total, makes nearly all of the important decisions concerning the higher education system. Matters not decided upon by this body are decided by a subsidiary body, the Council of University Academic Boards, also chaired by the Minister for Education, and with a membership of 55 persons, many of whom are also members of the Universities Central Council. Within universities and institutes, any remaining decisions to be made tend to be purely procedural in nature.

The management culture across the whole of the education system is one of top-down decision making. The curriculum in schools, for example, is centrally determined, with negligible regard to local needs and circumstances, and it relies very largely on rote learning. Textbooks and materials are prescribed centrally. School principals, though accorded a high level of respect in their school communities, are primarily administrators. The incentives provided by the management system place more value on compliance with bureaucratic expectations than on the achievement of distinctive outcomes that meet the needs of local communities. There is negligible transparency in decision-making at the upper levels of management. A bureaucratic culture, manifesting itself in a passive indifference to problems, prevails. Excellent performance at any level within the education system is difficult to reward, and it is generally quite difficult to take disciplinary action against under-performing teachers or administrators, all of whom are civil servants.

Badly lacking in Myanmar's education system is a vision that is realistic and unifying. While 30-Year Long-Term Development Plans, commencing in 2000-01, have been developed for each of the sectors, these seem already to be slipping in terms of their relevance and impact. They have recently been supplemented by more specific National Development Plans. A characteristic of all of the Plans, though, is that they do not assign clear and specific accountabilities for the achievement of key objectives, and the timelines they propose are very loosely attached to the attainment of key objectives. Furthermore, the declared vision for the education system, which is "to create an education system that will generate a learning society capable of facing the challenges of the Knowledge Age" (MOE, 2012b), is lofty in aspiration but lacking in concrete relevance to Myanmar's current situation. The education system might well be better off focusing on a vision that explicitly recognises the long-term strategic importance of quality, efficiency, unity, equity and, most importantly, internationalisation.

Pedagogy

Fundamental challenges continue to exist in relation to pedagogy. In what is a very thorough review of the education sector conducted in 1992 by the Myanmar Education Research Board, it was stated that: "Myanmar's rigid school examination system, which encourages elitism, is a relic of the colonial period that survived Myanmar's gaining independence in 1948 and still dominates the education system. With failure rates high, success in examinations became an important target of education." (MOE, 1992, p.26) Two decades later, an examination culture continues to flourish. Teachers feel compelled to teach what will be tested, and students are inclined to learn only whatever might be on the exam. To make matters worse, parents often judge teachers on the basis of student success in examinations, and school authorities often judge teacher performance on the same basis, leading in some instances to teachers being even more anxious than their students about examination results.

The dominance of an examination culture impacts adversely on school retention and educational participation rates. The impact of the Basic Education High School Examination, which involves examinations across a selected set of six subject-based examinations, and which marks the completion of secondary schooling and is utilized for determining matriculation to higher education, is a case in point. In 2012, of 467,849 students who presented for the matriculation examination, only

34.4% passed. In other words, of the relatively small proportion (10%) of students who remained in school from the start of primary school to the end of secondary school, two-thirds were then blocked from proceeding further with formal education. Examinations are employed throughout the education system in Myanmar to identify those who are most capable of passing them, rather than to affirm levels of attainment achieved by all students sitting for them. This approach is wasteful of talent, and it is also socially inequitable – students who perform well in examinations come disproportionately from the more socially privileged class of society (Naing, 1992, p.22).

There is widespread agreement that teaching quality and teaching methods at all levels of the education system in Myanmar need improvement. Against a background of restricted resource availability, teacher-centred approaches reliant mainly on information dissemination are commonly adopted. In this regard, little has changed since 1992 when, according to the education sector report referred to earlier:

> The emphasis in teaching strategies must be shifted away from the narrow goal of succeeding in examinations by regurgitating facts, towards a more functional use of learning. … Most Myanmar students cannot think critically, raise questions or solve problems. Classroom instruction focuses primarily of getting students to understand and memorize the facts in textbooks, which are often out of date. (MOE, 1992, p.44)

Student-centred approaches to learning are now being officially encouraged (MOE, 2012b, p.15). The success of these approaches will, however, be affected by the availability of more library resources and by students and teachers having more freedom to access to the Internet. These approaches will also require retraining opportunities for teachers, few of whom have had much formal induction to student-centred teaching methods, and most of whom model their teaching practices on the examples provided by their own teachers. Recent initiatives implemented to encourage the exploration and application of new styles of teaching and student assessment are evident, but anecdotal reports suggest that, once back in their workplaces, teachers who attend professional development programs on these new styles tend quickly to revert to the traditional styles favoured by the majority.

Equity

Equity issues have been referred to earlier in this paper. The main point made was that young people from rural areas, and especially young people from poorer households, are the least likely to remain in school through to the final year. Data about the influence of social and economic advantage on educational participation and academic success derive principally from a Multiple Indicator Cluster Survey conducted in 2009-10 (UNICEF, 2011). The advantages associated with having more educated parents and with coming from a better-off household are easily identified at every level of the education system, though these advantages appear to be especially pronounced in secondary education, where the pressure exerted by examinations becomes progressively more intense.

As also referred to earlier, traditional gender inequity, with boys succeeding at the expense of girls, is not immediately evident in Myanmar. Girls are, in fact, over-represented among higher education students. Of special note is the extent to which the teaching profession is predominantly (86%) female (UNESCO, 2011a). It is widely argued that the reason for this situation is that girls remain in school and are more likely to go on to higher education because they want to become teachers – teaching being traditionally regarded as a female occupation in Myanmar. A more likely explanation is that girls remain in the education system longer because they have fewer opportunities for paid employment if they stop studying. They are better represented in teaching because male students avoid teaching on account of its generally lower salary levels.

The role of monastic schools is of note. Education provided by Buddhist monks is a tradition dating back to the 11th century. Currently, monastic schools provide supplementary education for

needy children and orphans – filling a significant gap in the education system. However, the impact of monastic education is difficult to estimate. Sources differ on the likely number of students attending monastic schools – the figure may be somewhere between 100,000 and 250,000 children, accounting for from 2% to 5% of the primary school population (Martin, 2011, p.128; Buncombe, 2013). These schools invariably lack adequate teaching resources. They are heavily reliant on donations from parents and the public.

Quality

The challenge of the lack of quality is pervasive in the education system in Myanmar. To date, no national quality assurance framework appears to have been developed. At the level of basic education, a network of inspectorates functions with the expressed aim of supporting and maintaining the quality of the school system. In fact, however, the role of these inspectorates seems mainly confined to ensuring compliance by schools and teachers with Ministry of Education policies and regulations, though some professional support for individual teachers is also provided.

In the TVET and higher education sectors, there are no system-wide quality assurance frameworks for determining the extent to which the expectations of students, staff and the community at large are being met. Legislation regarding the quality and academic standards of the higher education sector has been discussed at length, but never approved. Myanmar is a member of the Asia-Pacific Quality Network, the ASEAN Quality Assurance Network, the University Mobility in Asia and the Pacific organisation, the ASEAN University Network, the Association of Southeast Asian Institutions of Higher Learning, and the Association of Pacific Rim Universities, but it is at a very elementary stage in terms of developing a quality assurance system for its higher education sector. The lack of institutional autonomy and the slowness of centralised decision-making are significant impediments to progress.

A matter of special concern for the TVET and higher education sectors is that there is no unifying national qualifications framework. In 2007, the Government established a National Skills Standard Authority under the Ministry of Labour with a brief to develop such a framework. Its focus was to develop occupational competency standards, and it did agree to a qualifications framework that had potentially significant implications for the higher education sector. It assigned bachelor and postgraduate degrees to particular levels within the framework, and proposed that graduates should routinely be required to complete a test to ensure that their skills, knowledge and competencies complied with standards expected for the relevant qualification level. The Authority's deliberations were never properly concluded, however, and, to date, its proposals have not been addressed by the higher education sector. Setting a test for all graduates for the purposes of establishing compliance with standards specified in the framework would be costly and administratively complex. A simpler approach might be to ensure that preferred graduate attributes are explicitly embedded in the curriculum for all bachelor and postgraduate programs.

UNESCO's International Standard Classification of Education (ISCED) appears to offer a sound basis for a national qualifications framework for Myanmar (UNESCO, 2011b). In areas relating to tertiary education, the ISCED distinguishes between: 'post-secondary non-tertiary' (Level 4) programs (essentially TVET programs), 'short-cycle tertiary' (Level 5) programs (essentially TVET and sub-degree university programs), and 'bachelor or equivalent' (Level 6) programs. The introduction of this framework to Myanmar might necessitate some uncomfortable but ultimately beneficial reforms. At present, there are far too many bachelor degree programs being delivered by lecturers who would not normally be regarded as being sufficiently well qualified to deliver Level 6 programs, and there are degree-granting universities that might more realistically be classified as providers of Level 5 programs. Addressing these matters promptly is essential to the internationally credibility of Myanmar's higher education institutions, as well as to the international mobility of graduates with degrees awarded in Myanmar.

Priorities for Improvement

There are a great many aspects of Myanmar's education system that require improvement. For reasons of emphasis and economy, only three will be addressed here. The first is the most obvious: the education system needs more public funds. As indicated earlier, the proportion of the national government budget allocated to the education system is completely inadequate to meet the needs of the system, and it also compares unfavourably with benchmarks for other ASEAN member states. As a result of inadequate public funding, the physical infrastructure of schools, colleges and universities in Myanmar is almost uniformly in bad shape, with buildings needing to be repaired, libraries needing to be restocked, and laboratories needing to be reequipped. The human resource capacity of the system is also in a weak state. Significant public investment in Internet technologies for use in teaching and research is especially critical. A distributed system of Internet access across a country the size of Myanmar would provide enormous long-term benefits, as well as contributing significantly to a pressing need for greater internationalization.

The second is that primary school teachers require more support. In the education sector review concluded in 1992, it was reported that:

> Teachers' high social status in Myanmar contrasts with their relatively low economic status, particularly at the primary level. When teachers are under-motivated because of low pay and poor career prospects, even the very best teacher training will not do much to improve teaching. (MOE, 1992, p.45)

This observation remains true. Primary school retention rates must be improved in Myanmar. Providing more public funds to achieve an improvement will not be effective if the skills, attitudes and levels of commitment of primary school teachers are not also addressed. There is a most pressing need to improve the training, professional development and remuneration of these teachers.

The third is that the TVET sector needs to be better developed. A recent declaration by the World Economic Forum that Myanmar's economy has the potential to quadruple in size by 2030 (Sampson, 2013) should be sufficient to indicate the extent to which there will soon be a most pressing need for more well-trained and highly skilled staff in areas of tourism, construction, water management, sanitation, power and agriculture. As noted earlier, the TVET sector remains fragmented, financially constrained and socially undervalued. The capacity of existing TVET providers to train more students is very limited. Ministries determine existing curricula centrally, without much regard to the needs of private-sector employers. TVET provision in rural areas is especially restricted. Better coordination across the TVET system is critical. The TVET sector needs a quality assurance framework, underpinned by a suitable national qualifications framework. Private-sector employers must become more involved in the national system of training for persons seeking trade qualifications.

Concluding Remarks

This paper has sought to document the current state of the education system in Myanmar, and to identify selected priority areas for attention. Trying to bring together in one paper a large volume of detail about an education system as complex as Myanmar's is an ambitious undertaking, but hopefully the paper will serve as a springboard for more detailed investigations and reports. Without doubt, Myanmar's education system is badly in need of repair. A great deal of destruction has been wrought on the system by over 50 years of military rule.

As Myanmar's economy and society open up, opportunities will become more widely available for a new generation of leaders to play a significant role in restoring the education system. These people will need to be able to access far more public funding than is currently being provided to the education system. They will also need to develop and share a common vision for the system –

one that is inspiring and well integrated with global needs. They will need the freedom to exercise initiative, that is, to be free of the present culture of centralized control and top-down bureaucracy. International aid organizations have a great deal of responsibility for helping to identify and develop these future leaders.

An appreciation of the current situation of Myanmar's education system is helpful to an understanding of the stages that many education systems must work through when recovering from the effects of prolonged periods of military rule or civil dictatorship, often in the aftermath to civil war. Indeed, the education systems in countries such as Vietnam, Laos and Cambodia may be seen in the past to have progressed through these same stages. Regrettably for Myanmar, the lesson from the experiences of these other countries is that the recovery process can be slow and difficult (Hayden and Martin, 2011; Hayden and Le, 2013).

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Nation Building, English as an International Language, Medium of Instruction, and Language Debate: Malaysia and Possible Ways Forward

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Abstract: *In this article, we discuss Malaysia's major language policies surrounding Bahasa Malaysia and English as medium of instruction (MOI) since its independence. We show how issues involving a national language vis a vis English are shaped by different ethnic and social groups' competing views regarding these languages. We argue that the language debate in Malaysia is largely an emotive one that carries a historical baggage which no one is yet ready to discard and until such time, it will continue to represent a nation divided by nationalism, race-based politics and globalisation. However, we also interpret the Malaysian government's termination of English as the MOI in certain key school subjects starting in 2012 as not necessarily an arbitrary rejection of English but as a positive move, given the many problems associated with the over-reliance on English in education and language policies throughout Asia. We, thus, see the most recent act known as 'To Uphold Bahasa Malaysia & To Strengthen the English Language' (MBMMBI) as a necessary, firm, strategic and timely response by the Malaysian government to globalisation, nation building, the increasing international role of English, and the pressure to produce knowledge and maintain national cultural identity in today's world*

Keywords: *language debate, English as an International Language, Malaysia, nation building*

Introduction

With the growing emphasis on English in Asia, English as a commercial, political, intellectual, and cultural resource is increasingly appropriated by countries and schools and universities in the Asian region. Systems of education in Asia have accordingly promoted the development of English-medium programs and partnerships with overseas entities, almost invariably through English. Such programs and products are widely assumed to be more authoritative and more advantageous in the global labour market (Singh and Han, 2008).

While English is assumed to be fundamental in educational (reform) strategies, it is not regarded in the same way in all national settings. For example, while it has become abundantly clear that the policies and practices of education are not neutral (Tsui and Toleffson, 2007; Rizvi and Lingard, 2010; Singh, 2010), what is not clear is how specific colonial histories, local politics and cultural traditions shape the role of English and how this is interpreted, projected, promoted and justified in particular national educational settings. As such, to what extent are we really witnessing globally converging notions concerning the educational significance of English? How is this emphasis on English resisted or utilized for individual, institutional and national benefits?

We, in this article, first show how and in what ways the role of global English is interpreted and justified in different countries in Asia, while briefly examining in what ways issues involving a national language vis a vis English in many communities and nation states are far more complex when different ethnic and social groups hold competing views regarding the national language and what meaning each gives to such language. At the same time, utilitarian perspectives and the formation

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of a global elite community closely linked to the widespread use of English has pressured nation states to seriously engage with this assumed most powerful language of our times, as will be seen in the case of Malaysia presented in the subsequent sections. In particular, Malaysia's major language policies surrounding Bahasa Malaysia and English as the medium of instruction (MOI) in schools and universities since its independence are specifically drawn on. We then focus on Malaysia's two major policies regarding MOI: the sudden change from Bahasa Malaysia as the MOI to English for Mathematics and Science in 2003, which was reversed in 2012 following a decade of failure seen from various angles; and the introduction of a new language policy after the reverse, known as '*To Uphold Bahasa Malaysia & To Strengthen the English Language*' (MBMMBI).

We seek to understand how the main ethnic groups in Malaysia, particularly the Malays and the Chinese, have resisted and/or utilised varied emphases on English and Bahasa Malaysia at the individual, community and national levels as well as to claim and exert different kinds of power. We argue that the language debate in Malaysia is largely an emotive one that carries historical baggage which no one is yet ready to discard and until such time, it will continue to represent a nation divided by nationalism, race-based politics and globalisation.

However, we also argue that the Malaysian government's most recent decision to terminate English as the MOI in certain key school subjects is a positive move, given the many well-discussed problems associated with the over-reliance on English in education and language policies throughout Asia, for example in Japan and in Indonesia (Sugiharto, 2008; Huang, 2009; Sakhiyya, 2011; Phan Le Ha, 2013; Supriyanto, 2013). This act ought to be recognised as a good move, given Malaysia's constant dilemma of how to choose between preserving the evolving national identity and pursuing national interests through the English language to actively participate in the international community. This is also a good move in terms of enabling advanced scholarship building in Bahasa Malaysia, alongside the English language.

The Three Circles of English, Their Altering Borders, and Language and Identity in Asia

Studies in relation to the international role of English often cite Kachru's (1985, 1986) premier work, in which he coined and discussed the three circle model of English, the Inner Circle, the Outer Circle and the Expanding Circle. In this model, the Inner Circle constitutes the traditional bases of English, largely referring to native-English-speaking countries (e.g. Australia, Canada, the USA and the UK). The Outer Circle includes countries where English is used as a second and/or official national language. Many of these countries were former colonies, either of Britain (e.g. Malaysia, Singapore, India) or the US (e.g. the Philippines). Finally, the Expanding Circle contains countries that use English as a foreign language (e.g. Vietnam, China, Japan).

Nevertheless, together with the increasing dominance of English and new developments in English language studies particularly in the areas of World Englishes, English as an International Language, English as a Global Language and English as a Lingua Franca (for example, Crystal, 2003; Jenkins, 2009; Kirkpatrick, 2012), this model has been revisited over the past decades. In addition, the growing importance of new economic and knowledge powers such as India, China and Brazil accompanied by the need to promote themselves more effectively through the medium of English has made the borders of these circles even more blurred. As further debated by Rajadurai (2005, p.114), "however, I feel that as revolutionary and valuable as the [Kachruvian] model has been, the pace with which English has spread, the power and politics associated with it, and the sweeping consequences of globalization have made a review of the Kachruvian circles timely".

By the same token, the borders between these circles are being altered by changing language education policies in different national contexts. Specifically, for instance, Malaysia has oscillated between the Outer and Expanding Circles since its independence. In Malaysia, the status of and attitudes towards English are ambivalent, due to the influence of nationalism, the dominance of Bahasa Malaysia (especially in non-urban communities), competing pressures from neighbouring

countries, especially Singapore, and religious agendas concerning Islam (Altbach and Knight, 2007; Hamid and Moni, 2011; Welch, 2011). Singapore, meanwhile, has been quite consistent since the 1960s with its English language policy, placing English at the heart of its educational and administrative system alongside other official languages (Chew, 2007). However, debates surrounding what it means to be Singaporean and what consists of Singaporean national cultural identity have also questioned the dominant role of 'imported' English on this island. As such, Singlish, a colloquial variety of English used in Singapore, seen as a cultural identity marker for Singaporeans has been fought against quite harshly by the government and a number of scholars, who strongly believe in the prosperity and globally competitive advantages 'standard English' has brought about to Singapore (Kramer-Dahl, 2003; Rubdy, 2007; Wee, 2011). According to Rubdy (2007, p. 308), "educators, parents and the lay public often echo similar views in the media, namely, that Singlish is a problem, a handicap, a blot", and hence constructing Singlish "as a less prestigious dialect associated with low social status." Singlish and the Singlish debate in Singapore concern both the government and individual Singaporeans, matters that question the nation's identity and are presented as a national issue (Wee, 2011).

Japan and Korea are among the countries that have been investing the most heavily in English language education to bring the overall proficiencies among their citizens to a more competitive level in the Asian region (Nunan, 2003; Sungwon, 2007; Seargeant, 2008; Rivers, 2011). There have even been initiatives to turn Korea from an Expanding Circle country to an Outer Circle country, shifting the status of English from a foreign language to a second language. Neither of these countries were former colonies of any English-speaking Western countries, but they are both closely connected to the USA through military dependence. This dependence has extended to all other aspects of their societies, among which their pro-English policies are believed to deepen their dependence and enhance their inner capacities and international status at the same time. Following other countries in the region, Vietnam is emerging as a major player in promoting English across its educational system. English is still a foreign language in Vietnam but is on the fast rise with the government's ambitious language policy to make English compulsory from Grade 3 by 2020. To realise this policy, the government has approved the National Foreign Language Project 2020, mobilizing $US2 billion from both governmental and non-governmental sources to promote English language education at all levels (Nguyen, 2011).

Many Asian countries have responded to the global role of English in ways that are specific to their identities, histories, local politics, economic development and nation building strategies and specific to what role English plays in relation to a dominant national language. Former colonies of Britain, such as India, Singapore and Malaysia, in different ways promote English as a shared historical heritage for their national cultural identity formation and for their national, cultural, racial, linguistic and ethnic reconciliation. Other Asian countries including Japan and Korea navigate their foreign language policies towards an almost absolute preference for English to achieve their nation building missions that are also shaped by the globalization of English (Hashimoto, 2007; Rivers, 2011; Seargeant, 2008; Phan Le Ha, 2013). But all in all, the promotion of English does come with problems associated with ethnic relations, access to education, social equity, and cultural identity issues, as we later demonstrate with the case of Malaysia.

A Brief History of the Malaysian Education System

The formal education system in Malaysia began during the period of British colonial rule, when the colonial objectives of exploiting Malaya's rich resources and developing a docile body of native supporters penetrated through the education system in terms of both structure and practice (Malakolunthu and Rengasamy, 2012). In the 19th century, the British introduced labourers from China and India to work in various economic sectors for them, and their practice had resulted in the unequal distributions of Malay, Chinese and Indian communities across the rural and urban areas of Malaya. Most Malays and Indians were left to work in the fields and plantation estates respectively, whereas the Chinese were involved in the mining industry but had also a strong presence in urban

areas as entrepreneurs (Hashim, 2009). By the time of independence, the population of Malaya was mainly comprised of Malays as the dominant ethnic group (50%), Chinese (38%), Indians (11%) and other minor indigenous groups (Malakolunthu & Rengasamy, 2012, p. 147).

Since the British had an agreement with the Malay rulers as to not interfere with the Malay customs and the Islamic religion that dominated throughout rural areas, most of the English-medium schools were established and supported by the British in urban areas (Watson, 1980). The purpose of these English-medium schools was to create a local workforce to undertake the support-staff positions for their administrations (Malakolunthu and Rengasamy, 2012). Primary and secondary level education were made available in these English-medium schools; and they were established in the urban areas and were mainly attended by elite Malays as well as wealthier Chinese and Indians (Ozóg, 1993). Those who attended English-medium schools and became English-knowing bilinguals had better social mobility as they were able to pursue tertiary studies and become professionals (Ozóg, 1993).

The Malay community did not have a formal education system until the late 19th century when the British helped establish vernacular schools for the Malays. These schools only provided primary education with English deliberately excluded from the curriculum since the British had no interest in creating opportunities for them to progress beyond their villages besides training them into being better cultivators and good citizens (Ozóg, 1993; Powell, 2002). Meanwhile, the Chinese and Indian communities established and funded their own vernacular schools with curriculums imported from their respective homelands as they were unregulated by the British (Powell, 2002). Malay and Tamil medium schools, which only offered primary education, were mainly found in rural Malaya whereas the Chinese-medium schools that offered up to secondary education were mostly located in urban centres (Watson, 1980).

As a result, British colonisation created a diverse education system of mainstream and vernacular schools i.e. English, Malay, Chinese and Tamil. This also served to maintain the social and economic segregation among the ethnic groups by limiting the possibility for social mobility and by providing different forms of education to different ethnic groups (Watson, 1980; Powell 2002). Eventually, the British saw that ethnic tensions were rising and realised that the economic, social and political progress in Malaya could be slowed down if these tensions were not solved (Ozóg, 1993).

They recognised that educational and language policies that focus on unity could be a solution (Ozóg, 1993), and hence the drafting of the Barnes and the Fenn-Wu reports in 1951 that outlined various proposals regarding the choice of language used as the MOI (Hashim, 2009). A compromise was eventually reached in the 1956 Razak Report, which proposed the establishment of two types of primary schools: the 'national school' that would use Malay as the MOI, and the 'national-type' school which could use either English, Chinese or Tamil as the MOI (Hashim, 2009). The Razak Report, which became the 1957 Education Ordinance, also recommended that schools at the secondary level had to be national schools, although Chinese secondary schools could still continue using Chinese as the MOI provided that they adopted common syllabi and examinations (Hashim, 2009, Puteh, 2010).

In the first few decades after Malaya gained independence from Britain in 1957, there were several changes in the language policy that were implemented for nationalistic and economic reasons, and which not only impacted the educational system but also the socio-economic environment throughout the nation. On the one hand, language policy was used by the state to achieve national unity for the post-colonial nation through promoting the use of a national language (i.e. Malay) within the educational system. On the other hand, the various changes in the language policy eventually created unforeseen problems that people perceived were disadvantaging the population in an increasingly globalising world, leading to a need to redress the language policy through language planning that promoted the use of English again. However, new issues arose when the new language policy was seen to undermine the privileged status of the national language (Chan and Tan, 2006). The state encountered a dilemma of whether to continue enforcing the use of the national language to maintain national identity or to encourage people to be more proficient in English in order to compete in the globalised world. Consequently, the language policy became a site of contestation

between the use of Bahasa Malaysia and English as the MOI. Specifically, in the past 10 years, Malaysia has introduced two major policies regarding the MOI. The first one involves the sudden change from Bahasa Malaysia to English for Mathematics and Science in 2003, which was reversed in 2012. This reversal has resulted in the introduction of a new language policy, that is, '*To Uphold Bahasa Malaysia & To Strengthen the English Language*' (MBMMBI). In this article, we will focus on these two policies in particular.

Nationalism, the Nation State, and Use of Language to Claim, Exert, Maintain and Resist Power

Anderson (1991, p. 6) defines the nation as "an imagined political community" because every member of the nation is able to visualise the communion with other members despite having never met, heard or even known each other. Anderson states that the origins of national consciousness came about with the rise of print-capitalism, which led to a new form of imagined national consciousness that later set the stage for the modern nation. Print-capitalism enabled "a system of communication with [people] outside their narrow circle of social relations" through using a common language, as well as raising awareness of the millions of people in their respective language-field (Safran, 2010, p.56). Hence, Anderson (1991, p. 134) emphasizes the importance of print when he asserts that "print-language is what invents nationalism, not a particular language per se." That said, the elevation of a single language as the common medium of expression in print does likely facilitate the process of imagining a national community and this is why governments of newly developing nations have focused so heavily on the promotion of a national language.

Fishman (1968) has examined the significant role that a national language can play in fostering a sense of national unity among members of newly developing nations. Newly formed nations encounter problems as their political boundaries do not always correspond to a unified ethnic-cultural entity. Without a common national identity, these new nations "proceed to plan and create such an identity through national symbols that can lead to common mobilisation and involvement above, beyond, and at the expense of pre-existing ethnic-cultural particularities" (Fishman, 1968, p. 6). Such national symbols include choosing a local language and elevating it as the national language, which is frequently invoked as a unifying symbol through which speakers of the language identify themselves as members of the nation; and nationalists view language as representing "the continuity of a Great Tradition with all of its symbolic elaborations in terms of ideologised values and goals" (Fishman, 1968, p. 9). Therefore, a national language does not only work as a symbol to raise a sense of national unity, but it also reinforces and maintains a sense of cultural value and identity. As the nation elevates and reinforces the language of the ethnic Malays as the national language of Malaysia, that national language then serves to legitimise that group's (i.e., the Malays') status and to facilitate its political dominance over other ethnic groups.

No power, however, is absolute, and we see this in the way that national languages are resisted at the same time that they are promoted. Kubota's (2004, p. 22) argument that "language is used to produce particular knowledge that fulfils certain political and ideological purposes and to exert, maintain, or resist power" is evident in the Malaysian context where language has been used in policies to achieve particular ideologies, and to resist certain ideologies. Examples include the use of Bahasa Malaysia as the national and official language by the Malays – the dominant ethnic group – in the early days of independence to claim, legitimise and exert political power. They also include the continued use of English by the non-Malays in the business domain, particularly the Chinese, as a means to resist power as an ethnic minority (Gill, 2005, 2006, 2007; Hashim, 2009; Puteh, 2010; Seah, 2000; Liu and Ricks, 2012).

Bahasa Malaysia as a National Language for Malays to Claim and Exert Power

During the time when the Education policy was shaped, the Barnes Report of 1951 proposed a single inter-ethnic type of national school which aimed to create educational unification based

on Malay-English bilingualism, hence transforming all vernacular schools into this type of national school (Puteh, 2010). However, the proposals of the Barnes Report were superseded by the more influential Razak Report of 1956 which became the Education Ordinance of 1957 that supported the development of mother tongue education and vernacular schools (Gill, 2005).

The decision to allow for vernacular language education over the bilingualism proposed by the Barnes Report was influenced by the British policy of preparing Malaysia for self-rule being conditional on an agreed sharing of power among the ethnic communities (Mead, 1988). Political parties based on ethnic lines developed, with the United Malays National Organisation (UMNO) representing the Malays, the Malaysian Chinese Association (MCA) representing the Chinese and the Malaysian Indian Congress (MIC) representing the Indians. The Malays wanted to legitimise their status as 'sons of the soil' (bumiputeras) in relation to the Chinese and Indians who came as migrants (Gill, 2005, p. 245) and a 'bargain' was struck between these groups where Malay political dominance was informally exchanged for immigrant citizenship (Muhamat @ Kawangit et al., 2012).

This 'bargain' brought about a precarious coalition of parties without a common language, religion, ethnicity or culture, while upholding Malay supremacy. In 1957, Malay-medium schools were endorsed as the national schools and vernacular schools as national-type schools (Malakolunthu and Rengasamy, 2012). This system was allowed only for primary education while education at the secondary and higher levels could only be taught in Bahasa Malaysia. For the Malays, this language policy served as an instrument for nation-building and as a tool to create a national identity (Liu and Ricks, 2012), but allowing for vernacular schools to exist represented compliance with the conditions of the British for independence.

Not long after this system was put it place, it was changed in response to ethnic riots that broke out in 1969. These riots were between the Chinese and Malays and raised concerns about the state of national unity in the country. As a remedy, the government introduced a charter of national principles called 'Rukun Negara', or "National Principles', which became the guiding principles for all future policy making (Malakolunthu and Rengasamy, 2012). At the same time, a policy known as the New Economic Policy (NEP) was implemented in 1970 to assist the Malays to overcome their economic backwardness in relation to the non-Malays (Mead, 1988). This policy brought many direct benefits to the Malays in the educational realm, preference for placement into universities, the establishment of the MARA Institute of Technology which was reserved only for the Malays, the expansion of school facilities to rural areas and the granting of government scholarships for further education overseas (Malakolunthu and Rengasamy, 2012). Finally, as a result of the riots, by 1983 Bahasa Malaysia became the main MOI throughout the educational system, including in public universities (ibid, p. 152).

The Use of English by Chinese to Claim One Power and Resist Another

The changes delivered by the NEP deepened the natural divides in a multi-ethnic society (Malakolunthu and Rengasamy, 2012, p.147). The legitimisation of Malay supremacy through the NEP has permeated Malaysian society at all levels and has left the non-Malays feeling marginalised (ibid, p. 152). The Chinese resist Malay supremacy through maintaining the use of Chinese at national-type schools and English in the business domain where there is no legislation preventing its use (Gill, 2005). The efforts of the Chinese community to retain their ethnic identity through vernacular schools has been aptly described as coming about "only through blood, sweat, tears and the sheer political will of the Chinese community in this country to defend their mother-tongue education. . . truly, a protean saga" (Kua, 1992 cited in Gill, 2007, p.114). This has been described by Canagarajah (1999) who posits that the exercise of power always implies the existence of counter-power or counter discourses, as "power is sustained at the micro-level by diverse local networks encompassing personal and collective domains, that is, in relationships, in social institutions, and in community life. But this interlocking system of power provides scope for tension and conflict between the divergent domains to enable opposition and change" (p. 33).

While English may have officially been relegated to second place through education policy in Malaysia, the Chinese communities' continued use of the language has helped maintain its importance in the private sector. As a result of the preferential placement given to Malays at public universities, many Chinese have had to continue their education at overseas universities where English is the MOI. As such, many educated non-Malay Malaysians of the older generation who enjoyed bilingual MOI under the British colonial administration continue to expect their children t o excel at the English language. In contrast, despite consistent support from the government in all domains of education, the Malays have been more reluctant learners of English (Karchner-Ober, Mukherjee, and David, 2011). The Chinese have been able to resist the dominant group not only through learning the Malay language but also by retaining the use of English, which arguably has the highest linguistic value in the world, in the business domain (Gill, 2006).

Policy Changes due to Industrialisation and Globalisation: The Change from Bahasa Malaysia to English as the MOI for Mathematics and Science (PPSMI)

In the 1980s, Malaysia attracted many direct foreign investments through multinational companies and this led to a need for a supply of skilled workers (Malakolunthu and Rengasamy, 2012). Further, these foreign companies relied heavily on English as the medium of communication (Puteh, 2010). As a response to this phenomenon, the government introduced the Education Act 1996 which allows for the use of English as the MOI for technical areas in post secondary courses; and the Private Higher Education Institute Act which allows the use of English in courses provided through twinning with foreign universities (ibid.).

This new education philosophy incorporated the government's new National Vision 2020 ideals which aim for Malaysia to become an industrialised nation by the year 2020, warranting a change in the education policy to prepare the nation in order to produce and provide the right mix of human capital (Malakolunthu and Rengasamy, 2012). However, the Higher Education policy led to a bifurcation in the tertiary sector where public universities conduct their courses through Bahasa Malayasia as the MOI while the private universities conduct their courses through English as the MOI. As a result, graduates from private universities, because of their fluency in English and the marketability of their courses, were in greater demand in the private sector than graduates from public universities (Gill, 2007). From 1960 to 1990, the civil service was the largest employer of graduates from public universities (Gill, 2005), with over one million employed, making Malaysia the largest employer of a civil workforce in Asia (Gill, 2007). When the government pulled back on its employment of public university graduates, some 40,000 were unemployed in 2002 (Mustapha, 2002 cited in Gill, 2005) and this was largely seen as being a Malay problem as most of the public university graduates were Malays.

The non-bumiputeras (Indians and Chinese) continued to be ahead of the Malays on most economic, social and educational indexes (Khoo, 1995 cited in Gupta, 2010) and on average, achieved higher results than bumiputeras in the Malay-based education system (Schiffman, 1996 cited in Gupta, 2010). The government felt that changes must be made to the policy to ensure that the bumiputeras would not continue to be left behind with a weak competency in English as that would lead to serious problems of unemployment in the private sector for graduates from public universities (Gill, 2006); and this was the impetus behind the change in 2002 from Bahasa Malaysia as the MOI in Mathematics and Science to English as the MOI, termed PPSMI.

Gill (2006, p. 88) noted that the government would not have instituted such a change if it had not been necessary for the progress and development of the Malays. In Malaysia, language policy and planning processes are often 'top-down' processes where people of power and authority make decisions with little or no consultation with the ultimate language learners and users (Kaplan & Baldauf cited in Gill, 2006; Dumanig, David and Symaco, 2012) and must usually be discussed in the context of politics (Karchner-Ober, Mukherjee, and David, 2011). This policy change, however, was even less consultatitve in that it was simply announced through the media by the then Prime Minister

(PM) Dr. Mahathir (Gill, 2007). Gill (2006, p.89), from an interview with the PM, postulated that the possible reason for not wanting to provide the opportunity for consultation and discussion emerged out of the strong resistance posed by Malay intellectuals at public universities to the first attempt at change in the MOI to English for science and technology more than ten years earlier in 1993.

After all, the Malay intellectuals are a strong and cohesive group with social and political clout (Gill, 2006). According to Hall (1997), representation through language is closely tied up with identity and knowledge and when related back to the Malaysian context, a language change would represent a threat to the Malays' identity as the superior ethnic group. When the MOI is Bahasa Malaysia, their bumiputera status is legitimised and this could give them both symbolic and concrete power to influence decision-making on language issues and the nation (Gill, 2005, p.245); but if the MOI is changed to English, which is perceived to be a neutral language to all the ethnic groups in Malaysia, this aspect of their Malay identity may be threatened. Furthermore, this change would further disadvantage the Malays with their lack of competency to access information and to communicate in English as compared to non-Malays (Gill, 2005). However, to the Malay leadership, modernisation is just as important as nationalism.

> The Malaysian bureaucracy and its social institutions are decidedly one of the most modern of post-colonial societies moulded arguably from considerable western influences. Successive Malaysian leaders had striven hard to project themselves as progressive and innovative as any leader of the modern era while maintaining their own distinct cultural identity and embracing traditional values. (Shome, 2002, p.1)

These divergent views within the dominant group calcified into a 'coup' through which the PM changed the MOI to English without consent from the Malay intellectuals.

The way in which PPSMI was announced caused problems that compromised its viability and implementability. Firstly, many academics did not regard PPSMI as a change in policy as it was not legislated for and the National Education policy still stated that "the national language is the main medium of instruction for the national education system" (Gill, 2006, p. 83). There were no directives from the Ministry of Education that stipulated guidelines for the implementation of this policy, hence, in 2005, when the first cohort of PPSMI students entered university, they were disappointed to find that only 30 percent of their courses were conducted in English and the rest were still taught in Bahasa Malaysia (Gill, 2006, p. 91). Secondly, teachers were not qualified to conduct content-based learning in English (Tan, 2011) especially after 30 years of cultivating Bahasa Malaysia as the MOI and this was exarcebated by the short time of six months from the time of the announcement of the policy in June 2002 to its implementation in January 2003. Tan's study (2011) found that the buddy system in place at schools between English language teachers and Mathematics and Science teachers were insufficient to compensate for the lack of skills for language teachers to teach content-based materials.

Resistance also came from the Chinese. The Malaysian-Chinese Schools, backed by the United Chinese School Committees' Association of Malaysia (Dong Jiao Zong) is a very powerful organisation which ferociously guards the rights of Chinese to retain their language (Karchner-Ober, Mukherjee, and David, 2011). Before PPSMI, national schools used Bahasa Malaysia as the MOI for all subjects except for English while national-type schools used Tamil or Chinese as the MOI for all subjects except for English and Bahasa Malaysia (Asmah, 1987 cited in Gill, 2007). With PPSMI, however, the national-type schools and the national schools were to become similar in that they were both supposed to teach Mathematics and Science in English. However, since students in Chinese MOI schools had long outperformed their counterparts in the national schools, they did not feel the need to change to English, hence, a negotiation ensued and it resulted in a compromise where Mathematics and Science were taught in both English and Chinese in the Chinese schools (Gill, 2007). At the same time, Lim and Presmeg's (2010) study found that the learning culture in the Chinese schools did not promote the usage of English, hence it did not facilitate their learning in English and this had serious repercussions on the academic futures of students from Chinese schools in

the Malaysian educational system which measures academic achievements through standardised, high stakes, public examinations.

The switch from Bahasa Malaysia to English as the MOI for Mathematics and Science was justified by Dr. Mahathir's reconceptualisation of nationalism from a "linguistic nationalism. . . [to] knowledge-driven nationalism and development-orientated nationalism" (Gill, 2006, p. 84), which provided a space for the national identity to be renegotiated, particularly within the Malay community. In light of this reconceptualization of nationalism, we can argue that the Malaysian cultural identity had the opportunity to strategically reposition itself through the construction of English as a tool for national development rather than as the ex-coloniser's language, as learning English was considered as an act of patriotism. This reconceptualisation of nationalism, as such, showed that there are other possible ways for Malaysians to be patriotic (i.e. nationalist) without destabilising the national identity.

However, Dr. Mahathir's approach in implementing the change of the MOI without consultation with the Ministry of Education resulted in poor structural implementation as the educational system was unprepared to adapt to the sudden change. Studies have found that the teaching of Science and Mathematics in English was problematic and did not improve students' proficiency in English as desired (Hashim, 2009). Specifically, according to the Ministry of Education Malaysia (2010), many schools continued to deliver both subjects in the Malay language. As for the schools that did attempt to teach in English, when students experienced difficulty learning both subject matters in English, teachers were forced to teach in Bahasa Malaysia to help students understand the subject matter better. This problem was prevalent especially in rural areas, and a widening gap in academic performance for both subjects emerged between the rural and urban areas during the period of the implementation of this policy (Ministry of Education Malaysia, 2010).

'To Uphold Bahasa Malaysia & To Strengthen the English Language' (MBMMBI): The Way Forward

The unsuccessful implementation of English as the MOI for Mathematics and Science for schools eventually pressured the Malaysian Government to reverse its actions by introducing a new language policy in 2010, that is, '*To Uphold Bahasa Malaysia & To Strengthen the English Language*' (MBMMBI). The MBMMBI aims to uphold the rightful position of Bahasa Malaysia not only as the national language but also as "the main language of communication, language of knowledge, and the language for nation-building crucial towards achieving the objectives of 1Malaysia" (Ministry of Education Malaysia, 2010, p. 6). Furthermore, the MBMMBI strives to strengthen proficiency in the English language as the international language of communication and knowledge, hence enabling the exploration of knowledge that is vital for one to compete nationally and globally.

The ideological repositioning of Bahasa Malaysia and English beyond their respective roles as national and international languages of communication not only suggests that Bahasa Malaysia has been taken for granted as part of a national identity for nation-building, but that it also has the potential to produce its own body of knowledge at the same time that English is relied on to empower the nation's citizens to compete in today's era of globalisation. Furthermore, the process of privileging the status of Bahasa Malaysia beyond being a marker of the Malay(sian) identity involves complex negotiations for what it means to be a Malaysian today. On the one hand, being nationalistic means to uphold the explicit markers that define the nation's identity (i.e., the Malay language). On the other hand, being nationalistic also means acknowledging the importance of strategically harnessing the benefits of the antithesis of those markers that work to the advantage of the nation on the global stage (i.e., the English language).

However, a nation's language policy is nowadays often driven by national as well as regional and global factors, among which the nation building project, the increasing international role of English and the intensification of globalisation tend to be the most heavy-weight (Tsui and Toleffson, 2007; Phan Le Ha, 2013). In particular, the process of globalisation has involved many individuals in networks

that "negate political and linguistic boundaries" (Wright, 2012, p. 75). The advent of globalisation also democratises the flow of knowledge, especially through the World Wide Web, which means that for many people, "the imagined community to which they belong is no longer exclusively the nation" (Wright, 2012, p. 76); and as such, knowledge of the national language is no longer sufficient as "people need a linguistic repertoire which allows them to cross linguistic boundaries" (ibid, p. 76).

In this regard, we argue that English should be given a more stable and strategic status alongside Malay as the national language to formally recognise the role of English in aiding the development of the nation, as argued by many scholars, including Hashim (2009), Dumanig, David, and Symaco (2012) and Ali (2013). This recognition also echoes Former Prime Minister Mahathir Mohammed's strategic view on nationalism/patriotism discussed earlier (i.e. knowledge-driven nationalism and development-orientated nationalism), in which the mastery of English could serve the nation in many fruitful ways. Rather than having a fixed view on English as the ex-coloniser's language, Malaysia as one nation can strategically reposition itself through embracing English for national development. There are indeed other possible ways for one to be patriotic (nationalist), and learning English would be considered as an act of patriotism. This is what has already taken place in Singapore, as documented by Silver (2005), Rappy and Wee (2006) and Chew (2007) to name a few.

Furthermore, English could also be positioned as a language of strategic neutrality whereby the status of English as a lingua franca for Malaysians to communicate with the global community is promoted (Wee, 2010). By acknowledging the strategic neutrality position of English, English might then not be perceived as a threat to Malay, the national language. Nevertheless, it is important to note that other ethnic languages, such as Mandarin and Tamil, may one day fight for their rights to be recognised as official languages. As reminded by Hashim (2009, p. 49), "it should not be forgotten that language planning and education policy should not rest entirely on economic considerations but on the recognition of and respect for linguistically expressed cultural identities". This is also what Phan Le Ha (2013) has argued in her analysis of Japan's language and education policy.

To further our line of thoughts, if the implementation of Malay as the MOI has successfully established national unity and a common identity whereby "Malaysians of all ethnic groups are generally able to interact in Malay and use Malay in communication between different ethnic groups," as discussed by Hashim (2009, p. 45), then on the basis of this shared identity, a strategic balanced plan to promote the use of English as an MOI in certain key areas at the university level would benefit Malaysia's self-projection as a hub of international education and knowledge (Ministry of Higher Education, 2010). This can also be another identity for the nation, which does not have to contradict or disadvantage the Malay community either.

It is still too early to say if this new policy will be a success, and we acknowledge that there are multiple ways in which one can read the policy. Nevertheless, taking into consideration many issues concerning the over-reliance on English in education and language policies throughout Asia (Rappy and Wee, 2006; Tsui and Toleffson, 2007; Phan Le Ha, 2013) and the many advantages of multilingualism (Philippson, 2009, 2010, 2012), the MBMMBI policy change can be seen as a positive move that might ensure the preservation and progress of Bahasa Malaysia alongside the English language. Hypothetically, while the promotion of Bahasa Malaysia as MOI may not be viewed favourably by non-Malay ethnic groups in Malaysia in the first place, this at least responds to the social, economic, intellectual, cultural and linguistic needs of the Malays who are still the majority in the nation, most of whom would benefit much more from having their native language as MOI while enjoying more access to English.

We also argue that this MBMMBI policy could enable the government to further develop bilingual capabilities, at least within the Malay population, at a scholarly level that could enable the creation of a body of knowledge that concurrently engages in intellectual exchange within Malaysia through Bahasa Malaysia and with the international community through English.

As stated in the Malaysian Education Blueprint, the language policy aims for attainment of bilingual education which will continue to uphold Bahasa Malaysia and seek for improvement in English (Ministry of Education Malaysia, 2012). English has already earned its place within Malaysia

as the language of commerce and of higher education in the private sector and will continue to be regarded as a language laden with desirable capital, given what has been discussed in this article so far. If the status of Bahasa Malaysia is not supported through language policy in education, it may be at risk of being usurped by English through globalisation of all kinds. The motivations of learning English as a second language can be seen as being synonymous with the understanding that people will acquire a symbolic resource that has a good return on investment in the global knowledge economy.

The advent of globalisation has contributed to making English a necessity for international communication, and this has highlighted the need for nation-states to preserve national identity to distinguish themselves against each other, as recently noted by scholars working in Malaysia, including Dumanig, David, and Symaco (2012). While the mastery of English enables Malaysia to achieve a cosmopolitan identity (Dumanig, David, & Symaco, 2012) and much more, the act of upholding and elevating the status of Bahasa Malaysia beyond its role as the national language could be regarded as a strategic move to redirect the purpose and importance of using Bahasa Malaysia. Despite the high cultural capital of English, Bahasa Malaysia will always remain relevant to the Malaysian society if it manages to successfully establish itself as the "the main language of communication, language of knowledge, and the language for nation-building" (Ministry of Education, 2010).

However, we also want to emphasise that oscillating between English as the MOI and Bahasa Malaysia as the MOI has so far contributed to ambiguities in language choice for teaching at public universities in Malaysia, and Ali (2013) argues that this will likely continue to impact the ability of universities to plan their curricula to equip the younger generation with proficiency in English so that they can participate in the global economy. Policy directives towards achieving bilingualism in education run the risk of failing if not well conceived and implemented. Therefore, when this new policy rightly positions Bahasa Malaysia as a legitimate language of advanced intellectual exchange and knowledge production, it has the potential to balance the over-reliance on English for scholarly and academic knowledge generation, if well received and realised by all parties involved. This very issue has been well discussed in Phan Le Ha (2013) in which she documents Japan's English language and higher education policies and their impacts on the internationalisation of intellectual engagement and knowledge production when the over-reliance on English has become the norm in numerous government policies these days.

To conclude, although we support Hashim's (2009, p. 45) argument that "bilingualism and multilingualism must be promoted for national identity, for instrumental use, for ethnic and personal identity, and the importance of culture and values", we contend that Malaysia is not ready for bilingualism and multilingualism throughout its entire educational system yet. Therefore, the implementation of '*To Uphold Bahasa Malaysia & To Strengthen the English Language*' (MBMMBI) is important, necessary and timely, as it will enable Malaysia to take gradual steps to achieve its aims and to respond strategically to the many problems associated with the over-reliance on English and the over-promotion of this language, as discussed earlier. This policy is also a necessary, firm, strategic and timely response by the Malaysian government to globalisation, nation building, the increasing international role of English, and the pressure to maintain national cultural identity in today's world.

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Globalising the Class Size Debate: Myths and Realities

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Abstract: *Public opinion reflects a 'common sense' view that smaller classes improve student academic performance. This review reveals that the 'class size' effect of increased academic performance, although significant for disadvantaged students and students in the very early years of schooling, does not necessarily transfer to other student groups. Moreover, the literature indicates there are other more cost-effective variables that enhance student learning outcomes such as those associated with teacher quality. Internationally, large-scale interventions concluded that systematic class size reductions were more resource intensive requiring more personnel, training and infrastructure. From the large quantitative studies of the 1980s to the more qualitatively focused research in the last decade, there is a now an understanding that class size reductions function to provide opportunities for more student-focused pedagogies and that these pedagogies may be the real reason for improved student academic performance. Consequently, the impact of class size reductions on student performance can only be meaningfully assessed in conjunction with other factors, such as pedagogy.*

Keywords: *class size, learning outcomes, educational policy, schooling, pedagogy*

Introduction

The vast majority of research about the effectiveness of class size reduction on increasing student academic achievement, at first glance, confirms what many members of the general public would regard as 'common-sense'. Namely, that class size reductions improve student performance (Finn and Achilles, 1999; Schanzenbach, 2007; Konstantopoulos, 2009). This is because research findings are evaluated simultaneously at two levels. The first is at the level of the research itself while the second is in terms of 'common-sense' expectations (Hanushek, 1998; Pritchard, 1999). This means that the media, teachers and members of the general public as well as researchers read and interpret research with a view to confirm their 'common sense' expectations. It is only when research findings clearly contrast with what is expected that they are questioned or alternative interpretations sought. Consequently, when research findings about class size are criticised (Hanushek, 1989; Hedges, Laine and Greenwald, 1994; Hanushek, 1996; Prais, 1996; Hoxby, 2000) the reasons for the criticisms may be 'subconsciously' devalued or questioned in line with 'common-sense' expectations.

Historical Background

Towards the end of the 1990s and into the 2000s researchers were beginning to strongly voice their opinion that class size reductions should not be expected to improve student academic performance and that the relationships between class size reductions and student improvement was relatively weak. They began to re-examine, re-think and therefore re-interpret the evaluations of previous studies.

In particular, there were three studies that have investigated the relationship between class size reductions and student academic performance that have survived multiple evaluations over many years and so make these studies very credible and also very influential in all aspects of the debate about class size reductions. Together, these three studies have profoundly influenced international

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thinking about the impact of class size on student achievement so a thorough understanding of what they do say and what they do not say is essential. The three studies are the:

a) Student-Teacher Achievement Ratio (STAR) project;
b) Student Achievement Guarantee in Education (SAGE) project; and
c) California Class Size Reduction Program (CSRP).

Although these three studies were conducted to find out if reductions in class size improved student achievement, they were not designed to show how or why smaller class sizes improved student achievement. Nevertheless, knowledge of these three studies is essential to contextualise a rigorous interrogation of the role class size plays on student achievement.

Student-Teacher Achievement Ratio

The best known of these studies is the Student-Teacher Achievement Ratio (STAR) project, a four year experimental study conducted from 1985 to 1989 (Finn and Achilles, 1990; Mosteller, 1995; Konstantopoulos, 2009). The project compared the academic achievement of small classes of 13 to 17 students with the 'regular' class size of 22 to 26 students across kindergarten, first, second and third grade in the American state of Tennessee (Finn and Achilles, 1990; Mosteller, 1995; Konstantopoulos, 2009). The project also compared the academic achievement of the 'regular' classes with and without an instructional aide to assist the classroom teacher. None of the teachers participating in the study received professional learning about teaching strategies specific to the class size they were teaching (Konstantopoulos, 2009). The reliability of the project findings was enhanced because the experimental design included a control (Finn and Achilles, 1990; Mosteller, 1995; Konstantopoulos, 2009).

The study was large scale. It included 79 schools, over 300 classrooms and about 7,000 students (Pritchard, 1999). Class sizes were maintained within their size limits for the four years of the study using an elaborate, predetermined process. The reliability of the findings was further enhanced by randomly assigning the teachers and students to each of the three different types of classrooms (Finn and Achilles, 1990; Mosteller, 1995; Pritchard, 1999; Konstantopoulos, 2009). All schools and classrooms made a similar contribution to the study by having, and maintaining, at least one class in each of the three classroom categories (Pritchard, 1999).

The findings showed that students in the smaller classes outperformed students in the larger classes whether the larger classes had an aide or not (Finn and Achilles, 1990; Pritchard, 1999; Konstantopoulos, 2009). Overall, the STAR project found that students in smaller classes outperformed students in larger classes on both standardised and curriculum-based tests. This was the case irrespective of whether the students were white or members of minority groups or whether they lived in the inner-city, urban, suburban or rural environments (Word et al., 1990). Specifically, the achievement effect of smaller classes on minority students was twice that for white students at the beginning of the experiment and remained that way over time (Pritchard, 1999; Konstantopoulos, 2009).

The Lasting Benefits Study was a follow-up study of the STAR Project. It began in 1989 to provide additional evidence about the effects of class size reduction on academic performance (Pritchard, 1999). Specifically, the Lasting Benefits Study was designed to find out if the benefits of small class size persisted when the students were returned to regular size classes (Pritchard, 1999). The findings showed that in the fourth grade, the original kindergarten students from the smaller classes outperformed students from the larger classes in all academic subjects (Achilles et al., 1993; Finn and Achilles, 1999; Pritchard, 1999; Konstantopoulos, 2009). The same students were better behaved (effort, initiative and disruptiveness) than students from the larger classes. The study also showed that through to the eighth grade, the original year four students from the smaller classes were still academically outperforming students from the larger classes. However, the level of outperformance decreased each year (Pritchard, 1999).

Project Challenge was the third phase of Project STAR and sought to implement its findings. It began in 1990 with 16 of Tennessee's poorest school districts (Pritchard, 1999). Project Challenge phased in small classes from kindergarten to third grade. The project was evaluated by ranking school districts based on their performance in a state-wide achievement test (Pritchard, 1999). The 16 school districts that participated in Project Challenge moved from the bottom of the performance table to the middle in reading and mathematics for second grade classes (Nye, Hedges & Konstantopoulos, 1999; Pritchard, 1999). Project Challenge also found that the number of students who repeated a grade was reduced in project classes (Pritchard, 1999).

Overall, the three Tennessee studies showed that small classes have an advantage over larger classes in school performance in the early primary grades (Finn and Achilles, 1990) and provided strong evidence regarding the positive effects of class size reductions. However, Hanushek (1998) summarised the whole project with a single insight. He states that at the end of kindergarten the children in the smaller classes scored higher than those in larger classes. He then agrees that the difference between the scores was maintained over the next three years. The fact that it did not widen, Hanushek (1998) argues, is clear evidence that the advantage of smaller class size ceased after kindergarten. Kindergarten was the only year in which class size reductions improved student academic performance.

Hanushek (1998) argues that significant reductions in class size, about one third less than 'normal' class size, may result in improved achievement for kindergarten students. He states that reductions to 18 or 20 students in kindergarten classes may not be as effective since this order of reduction is similar to the decline in the student to teacher ratio achieved between 1950 and the year data were collected for Project STAR. He suggests that no reasonable interpretation of the findings from Project STAR indicate that reductions in class size would improve student academic performance beyond kindergarten.

Student Achievement Guarantee in Education

The Student Achievement Guarantee in Education (SAGE) program began in 1996. The program was based in Wisconsin and phased in class size reductions from Kindergarten (1996-7) to grade three (1998-9) over three years in school districts where students came from low-income families (Molnar et al., 1999; Pritchard, 1999). The program lasted a total of five years and reduced class size to a student to teacher ratio of no more than 15:1 (Molnar et al., 1998; Pritchard, 1999). This does not mean that classes consisted of 15 students per teacher. Classrooms ranges from 'normal' arrangements of 15 students per teacher, through teams of two teaching 30 students to more elaborate arrangements reflecting site constraints and teacher availability (Molnar, Smith and Zahorik, 2000). When the evaluation of the program began in the 1997-8 school year there were 30 schools in 21 districts participating in the program with 14 schools across 7 districts taking part in the evaluation (Pritchard, 1999).

The SAGE program evaluated student achievement at the beginning and end of first-grade and second-grade. The results were compared with those of similar schools with 'normal' sized classes. The comparison schools were similar in terms of grade levels, enrolment, socioeconomic status, ethnicity, race and gender (Pritchard, 1999). It was found that SAGE first-grade students performed consistently better than students in schools with 'normal' size classes.

The achievement difference between SAGE and comparison schools was greatest at the end of the first test period (first-grade) and then, although still greater, the difference decreased in subsequent years (Molnar et al., 1999; Pritchard, 1999). The achievement gap between white and African-American first-grade students was less for SAGE schools compared with students in schools with 'normal' size first-grade classes (Pritchard, 1999). Although the achievement for second-grade SAGE students remained higher than for students in schools with 'normal' size classes (Molnar et al., 2000; Graue and Oen, 2009), the difference did not increase over time but remained the same (Blatchford, Goldstein and Mortimore, 1998; Grissmer, 1999; Pritchard, 1999).

It is important to acknowledge that as well as a reduction in class size, the SAGE schools simultaneously implemented a rigorous academic curriculum as well as professional learning and after school programs (Molnar et al., 1998; Krueger, 1999). The researchers responsible for the program indicated that these additional components of the program did not have time to impact student achievement. However, an influence cannot be ruled out (Blatchford, Goldstein and Mortimore, 1998; Grissmer, 1999). The study was also criticised because SAGE schools were not similar enough to comparison schools and the variation in what constituted a student to teacher ratio of 15 to 1 was too varied and often inconsistent across the SAGE and comparison schools (Blatchford, Goldstein and Mortimore, 1998; Grissmer, 1999; Pritchard, 1999). Other criticisms were that both teachers and students were not randomly allocated to classes and that the study did not match pair SAGE and comparison schools (Pritchard, 1999). Researchers also criticised the SAGE program because classroom composition changed in both SAGE and comparison schools annually (Blatchford, Goldstein and Mortimore, 1998; Pritchard, 1999). Also, the SAGE program did not continue the evaluation beyond fourth grade. However, the greatest criticism of the program was that increased achievement of SAGE students was due not only to reduced class sizes but to the increased attention paid to students as a result of the rigorous academic curriculum, professional learning and after school programs (Molnar et al., 1998; Krueger, 1999).

California Class Size Reduction Program

The California Class Size Reduction Program (CSRP) attempted to implement the findings of the STAR project across the state of California (Mitchell and Mitchell, 1999; Stecher and Borhnstedt, 2000). The program was phased in over four years. However, there was no longitudinal dimension to the program.

The CSRP was evaluated by Mitchell and Mitchell (1999) two years after its implementation and involved over 80 schools across eight school districts in Southern California. Reading, language and mathematics subtests were analysed from the Stanford Achievement Test (SAT) as well as more than 30 variables related to student demographics, classrooms, teachers and schools. The demographic variables included gender, student poverty, ethnicity and the language spoken at home (Mitchell and Mitchell, 1999). When these variables were controlled for, it was found that students in reduced class sizes made small but statistically significant gains in achievement when compared with students in 'normal' size classes. Reduced class size was considered to be not more than 20 while a class size over 20 was considered to be 'normal' (Mitchell and Mitchell, 1999).

The evaluation concluded that other factors may have contributed to gains in achievement (Mitchell and Mitchell, 1999). The other factors included new requirements for teacher education programs, revisions to bilingual programs, new curriculum frameworks and materials, new statewide tests and a new performance accountability system (Mitchell and Mitchell, 1999). None of these factors were taken into account during the implementation of the program and any or all of them could have influenced the results of the program and the findings of the evaluation.

Stecher and Borhnstedt (2000) also evaluated the study and found small increases in academic achievement by students in small classes. However, closing the gap between majority and minority groups was found to be not as significant. In addition, Stecher and Borhnstedt (2000) criticised the design of the program because it did not include a control group as part of its quasi-experimental design. They also found no basis for how 20 students was considered to be the difference between a small class and a 'normal' class.

Researchers (Mitchell and Mitchell, 1999; Stecher and Borhnstedt, 2000; Funkhouser, 2009; Jepsen and Rivkin, 2009) found that increased student attention in class and the attention paid by teachers to students as a result of the smaller class sizes contributed to increased student achievement. Specifically, teachers in the smaller classes spent more time teaching, were able to address individual student differences, had more interactions with each individual student and were able to minimise class disruptions compared with classes of 'normal' size. The question remains,

could these reasons for increased student achievement have been achieved in ways other than reducing class size?

In addition to the above, an evaluation by Jepsen and Rivkin (2009) found that the statewide scale of the Californian project led to a shortage of qualified teachers. Paradoxically, the teacher shortage was most acute in low income school districts. To overcome this problem, teachers were employed who were less qualified, lacked teaching experience and who were in other ways less suitable to teach at-risk, low income students. Consequently, Jepsen and Rivkin (2009) qualified their evaluation by indicating that their findings did not reflect a study of only one variable, namely, a reduction in class size. The evaluation conducted by Funkhouser (2009) concluded that the increases in student achievement may have actually been underestimated because of the reduced teacher qualifications. However, Funkhouser (2009) also pointed out that any increase in student achievement was also likely to be attributed to the other programs that were simultaneously implemented across the state.

Overall, the studies carried out by Mitchell and Mitchell (1999) and by Stecher and Borhnstedt (2000) found that the large scale of the program meant it was extremely expensive to implement. The expenses were a result of the increase in the number of teachers employed and the additional classrooms required. The researchers found it difficult to attribute the small gains in student achievement to reduced class size because of the problems associated with the quasi-experimental design of the program, the lack of a rationale for deciding that the difference between reduced and 'normal' class size was twenty students and because there were no base-line data for student achievement established using pre-tests before the program was implemented. However, the evaluations carried out by both Mitchell and Mitchell (1999) and Stecher and Borhnstedt (2000) cited the lack of the random assignment of students to the treatment groups as the greatest threat to internal validity. Therefore, the various teams of researchers concluded that the Californian CSRP did not replicate the STAR project as a controlled randomised longitudinal study.

Recent Research About Reductions in Class Size

During the 1990s research on class size reduction was dominated by the STAR (Tennessee), SAGE (Wisconsin) and CSRP (California) studies with an emphasis on quantitative analyses. The following decade was influenced by research studies that included both quantitative and qualitative methodologies seeking to articulate more specifically the relationship between class size and attainment while focusing on other contextual mediating variables. Class size reduction seems to be a variable that, while it can be investigated in its own right, can only be understood in the context of other school reforms that influence academic achievement such as new views about curriculum, emerging pedagogies, the introduction of standards-based testing and teaching quality. Like any other educational analysis, any class size reduction investigation must also take into account a broad range of socio-cultural characteristics exogenous to the school such as socio-economic disadvantage and ethnicity.

An emerging theme from a review of the literature after the year 2000 is that class size reductions, in general, have an effect on the very early years of schooling as well as for disadvantaged groups. Studies that draw this conclusion make more use of qualitative methods in the quest for contextualising and understanding class size reductions within a broader framework including not only a uni-dimensional relationship to standardised achievement but also in terms of group dynamics, school subjects, interactions in class and / or socio-cultural variables.

This next section presents class size research reported mainly after the year 2000 from English speaking countries such as Australia, the United Kingdom, Canada, the United States and New Zealand.

Australia

Unfortunately, there is no published research about class size reductions based on Australia data. The only reference to Australian class size data comes from the Third International Mathematics and Science Study (TIMSS) which reported that the actual class size (or grade-average class size) for

13-years-old mathematics classes is 26.962 students (Woßmann and West, 2006). The other TIMSS sample countries, with average mathematics class sizes provided in brackets, are: Belgium-French (20.087), Belgium-Flemish (20.330), Canada (27.813), Czech Republic (25.367), France (25.567), Greece (28.555), Hong Kong (40.611), Iceland (20.136), Japan (36.334), Korea (50.513), Portugal (25.645), Romania (27.436), Scotland (26.190), Singapore (32.493), Slovenia (24.215), Spain (28.551) and the United States (25.909).

United Kingdom

Relevant among those studies using mixed mode research identifying class size effects is the work conducted by Peter Blatchford and his associates at the Institute of Education, University of London. Blatchford et al. (2001) investigated the links between class size and within class groupings with 6,672 Reception, Year 2 and Year 5 classes in 331 United Kingdom schools. The researchers suggested that class size had an effect on the size and number of groups within a class which in turn influenced student learning experiences. In general, the authors suggested that class size was inversely proportional to group size but directly proportional to number of groups. For example, larger classes in the study tended to work in groups while smaller classes seemed to adopt a whole class approach. Furthermore, it was found that children in larger classes worked and were taught in group sizes above the average.

A year later the study was extended to Year 4 to Year 6 students aged 7-11 years from over 200 schools (Blatchford et al., 2007). The researchers found more individualised teaching in smaller classes but, in contrast to the previous study, teachers used more whole class teaching in both larger and smaller classes. The authors suggested that this might be due to the pressure of covering the required content particularly in mathematics, science and literacy as the students and curriculum moved from primary towards secondary education. The authors also argued that in smaller classes opportunities were not always available for group work because of the less differentiated nature of the curriculum. The researchers argued that teachers in smaller classes still used pedagogies appropriate for larger classes and this was corroborated by previous research (Betts and Shkolnic, 1999). They said, “there is no guarantee that smaller classes will automatically lead to more productive work in groups” (p. 169). The study also revealed that there were more teacher-student interactions in smaller classes. Larger classes seemed to pose difficulties with classroom management, student passivity, group size and teaching / learning space in the classroom. In addition, teachers expressed their concerns about the larger amount of marking in large classes and a strong belief that small classes facilitate reaching individual students.

Blatchford et al. (2002) investigated class size effects in the subject English with students in Key Stage 1, made up of Reception, Year 1 and Year 2 students (4-7 year olds). The study focused on the achievement of 9,330 students in 220 schools. The authors concluded that there was a positive relationship between class size and initial achievement particularly for low achievers and for students entitled to free school meals (low family income levels). However, there was no relationship found between class size and student achievement in mathematics. In this study smaller classes ranged from 18 to 25 students.

Through systematic classroom observations the effect of class size on student classroom engagement and teacher-student interaction was investigated in 49 randomly selected primary and secondary schools (Blatchford, Bassett and Brown, 2008). The findings supported the belief that in small classes low performing students tended to receive more teacher attention in the form of active interaction with the teacher for all levels of achievement. Similarly, smaller classes provided an environment where the teacher-student interaction increased compared with larger classes. In the study there were positive interactions between attainment groups and class size for secondary but not for primary students.

Class size also had an effect on student off-task behaviour particularly for lower performing groups in both primary and secondary contexts with off-task behaviour increasing as classes

become larger. The variable 'student focus on teacher' also increased as class size decreased for all attainment levels. It was also noted that the amount of teaching increased with class size. For example, in secondary schools "An increase in class size of 5 pupils was associated with the odds of teacher teach [teacher instruction] increasing by 8%" (Blatchford, Bassett and Brown, 2008, p. 17). Blatchford, Bassett and Brown (2008) also found that classroom management incidences such as disruptive classroom behaviour increased with class size for low and medium performing primary students and for medium performing secondary students. In their analysis of this and other studies Konstantopoulos and Chung (2009) concluded that, in general, class size effects go beyond the early primary years and that this is consistent with previous research.

Overall, the research from the United Kingdom on the relationship between class size and student achievement found that reductions in class size increased student performance although this was not always the case. It can be concluded that increases in student performance were related to implementing pedagogies that provided more opportunities for individual and small group work. In addition, greater academic performances were achieved for lower performing students and for students from lower socio-economic backgrounds particularly in the earlier years of schooling.

Canada

Two studies in Alberta and Ontario, Canada revealed improvements in student achievement as a result of class size reduction programs. The Alberta study (Bascia and Fredua-Kwarteng, 2008) investigated the effect of class size on achievement in first grade 'high-needs' schools in Edmonton. In partnership with the public education sector, classes of 15 or fewer students were created. A distinctive feature of the Alberta study was the provision of professional learning programs that were implemented with the class size reduction program. The project reported substantial improvement in academic scores after five months. A reduction in disruptive behaviour was also reported. Achievement was measured using the Canadian Test of Basic Skills (CTBS), Developmental Reading Assessment (DRA) and the Highest Level of Achievement test (HLA). Teachers completed questionnaires and were interviewed to assess the effects of integrating reading, writing and speaking. The researchers suggested that class size reduction programs should target specific student populations, be accompanied by professional learning programs and support, be implemented gradually starting from the early years of schooling and have sustainable funding.

The Ontario class size reduction program aimed to ensure that 90% of all primary school classes had no more than 20 students and that 100% of those classes had 23 or fewer students. Funding was provided to sustain new teachers as well as infrastructure as early as 2004. The participation goal was met in the 2009 / 2010 school period. An initial assessment of the program in 2007-2008 (Bascia et al., 2010) using qualitative methods such as interviews and observations revealed positive results in teaching and learning. This included more meaningful communication in class, more frequent one-to-one work with students, increased group work as well as a greater diversification in teaching strategies particularly in literacy. It is noteworthy that the class size reduction program was accompanied by professional development initiatives particularly in literacy. Teachers reported their satisfaction in being able to monitor students more closely, providing more personalised delivery of the curriculum and being able to run open-ended projects with their students. They also appreciated that smaller classes facilitated dealing better with disadvantaged students which was a focus of the program. Less disruptive behaviour was also reported as another benefit of the class reduction project. As one teacher reported, "I can stay on top of everything more. I know how they (students) are doing in all areas. There is no place to 'hide' in a small class" (ibid, p. 74). More classroom space became available as a result of fewer students in a class, which helped provide a more suitable environment to conduct group activities. However, the report noted that some teachers could have taken greater advantage of smaller classes to employ a more differentiated approach to teaching and learning and to help students from disadvantaged backgrounds.

The Canadian studies affirmed the finding that smaller class sizes provide opportunities to implement different pedagogies and that it is the pedagogy employed that facilitates increased student / teacher communication, one-to-one work, group work and an increased diversity of teaching strategies that is, in turn, responsible for increased student performance. The shift in emphasis from quantitative to the inclusion of qualitative studies provides the opportunity for researchers to investigate the reasons for and an understanding of increased student performance rather than simply noting that improved achievement occurs sometimes yet not at others. The Canadian studies also confirmed that improved student achievement is increased in 'high needs' schools, when the intervention occurs in the earlier years of schooling and when accompanied by professional learning. Consequently, it is becoming increasingly clear that when class size reduction programs are implemented, their success in improving student achievement seems to be related to the opportunity they provide to implement different, more learner focused pedagogies. The Canadian studies also indicate that it may be the professional learning programs that were part of the overall initiative that helped teachers to become aware of and then implement pedagogies that promote learning in smaller classes.

United States

In 1999, as a result of the momentum gained from earlier class size reduction initiatives, particularly as a result of the success of the Tennessee STAR project, Congress approved a federal program to facilitate class size reductions to no more than 18 students in grades 1 to 3. An additional 110,000 new teacher graduates were employed (Scudder, 2002) and by 2005, 24 states had mandated or implemented class size reduction programs (Education Commission of the States, 2005).

Most of the United States studies on class size reduction revealed increases in academic performance although some contradictory findings were reported. Milesi and Gramoran (2006) analysed standardised test data from the Early Childhood Longitudinal Study – Kindergarten Class of 1998-99 and found no statistically significant relationship between class size and student achievement in either mathematics or reading. This was a national study which included 21,260 children enrolled in approximately 1,000 kindergartens and grouped according to three different class sizes: small (17 or fewer students), regular (between 18 and 23 students) and large (24 or more students). The study found no class size effects based on race or ethnicity and economic and academic background.

Funkhouser (2009) followed the academic achievement of Californian second grade students from 135 schools that had participated in class size reduction programs from kindergarten. A comparison group was formed using a kindergarten cohort that had, at no stage, been part of a class size reduction program. Funkhouser (2009) found a class size reduction effect in reading and mathematics but not in language and spelling. Similarly, the impact of class size reduction programs for Latino and non-English speaking background students was found to be minimal with the greatest variation in test scores attributable to student demographic and economic background and to teacher characteristics. Funkhouser (2009) concluded that compared to demographic, economic and teacher variables, the influence of class size reductions on student achievement although positive was relatively immaterial.

In a similar study Stecher, McCaffrey and Bugliari (2003) examined the effect of class size reduction programs with third grade students from 1,918 Californian schools. The sample consisted of students who had entered kindergarten in 1995-96, 1996-97 and 1997-98. As a consequence of the timing of the federal class size reduction program, the students across this range of entry into kindergarten experienced up to four different class size reduction programs from kindergarten to grade three. For example, third grade students who entered kindergarten in 1995-96 had no exposure to class size reduction interventions while those who enrolled in kindergarten in 1997-1998 had participated in up to four class size reduction programs. In general, Stecher, McCaffrey and Bugliari (2003) found no relationship between student academic achievement and class size sequence of exposure.

The findings from the Stecher, McCaffrey and Bugliari (2003) study contrast with previous research (Stecher, McCaffrey and Burroughs, 1999; Stecher et al., 2000). Consequently, Stecher, McCaffrey and Bugliari (2003) argue that judging class size reduction interventions by single year increments is inconclusive. They suggest that class size reduction programs should be evaluated in terms of their cumulative effects.

Maasoumi, Millimet and Rangasaprad (2005) found no overall class size reduction effects across a national representative sample of tenth and twelfth grade student academic scores in reading, social studies, mathematics and science. However, when class size was examined more specifically they found that reducing class size for classes with more than 20 students did not greatly influence attainment scores. However, when class size was reduced below 20, greater effects were found. In classes with less than 20 students test scores increased for students who were below the median test score but decreased for students above the median test score.

Interestingly, two studies in different states using the same statistical methods showed conflicting results. Working with fourth and sixth grade student scores drawn from data across the state of Connecticut, Hoxby (2000) found no class size reduction impact on achievement while Cho, Glewwe and Whitler (2010) working with grade three and four Minnesota students found a small class size reduction effect. The picture that is building about recent research concerning class size reduction programs is that findings are inconsistent and seem to be cohort dependent rather than universally transferable.

Research from North Carolina revealed class size reduction effects on achievement. In 2001 the North Carolina government approved the funding of a class size reduction program targeting kindergarten to grade three classes in 36 high priority schools. The project planned to reduce class sizes to a maximum of 15 students (Casbon, DeMeester and Nalley, 2002). In 1991 Burke County schools in North Carolina had already began a class size reduction program. By 2001 all grade one to three classes in its 17 elementary schools, mostly rural, had reduced their class sizes to below 20. Classroom observations throughout this period showed that teachers in the smaller classes spent more time communicating with students compared with those teaching regular size classes. End-of-grade test score data in mathematics and reading across grades three to seven were collected for students in small classes and compared with those from regular sized classes. Casbon, DeMeester, and Nalley (2002) found an increase in the performance of students in small classes and this level was maintained in subsequent years lasting up to grade nine for English.

In North Carolina, Scudder (2002) investigated the effect of the federal class size reduction program in 23 schools in Wake County during the 1999-2000 school year. Schools were selected based on the number of disadvantaged students. The sample included students from grades one to three who receive free or reduced-price lunches as well as students who were achieving below their grade level. The program hired 23 additional teachers (averaging one teacher per school) to create new classes so that all classes were in the range of from 23 to 18 students. A total of 2,474 students benefited from the class size reduction program. Pre and post literacy county-based end-of-grade tests were used at the beginning and end of the program. To facilitate data analysis, a comparison group was randomly formed from students not affected by the intervention but who were from the same pool of schools. The comparison group reflected the same demographics as the intervention group. Scudder (2002) found that students participating in the intervention increased their academic performance more than those in the comparison group in first and second grade. The increase in performance was quantitatively similar to that of the STAR project. The findings also showed that students who received free or reduced price lunches demonstrated significantly higher improvement compared with those in the comparison group.

The recent United States experience with class size reduction programs supports the emerging view that such programs are seen to increase student academic performance when reductions occur below a class size of 20 and when disadvantaged or low performing students are targeted. More importantly, these more recent studies show that compared with demographic, economic and teacher effects, the influence of class size reductions is not as great. These studies also show that

the reasons for the effects are often associated with pedagogy. However, overwhelmingly, recent United States studies show that research about the influence of class size reduction programs on improving student academic outcomes is inconclusive with many studies showing little or no effect.

New Zealand

Hattie (2009) in his synthesis of over 800 meta-analyses related to student achievement, argues that it is not difficult to find evidence on both sides of the discussion about whether a reduction in class size leads to enhanced classroom learning or not. He discusses the nuanced arguments put forward by researchers in terms of what constitutes a small class, the interpretation of findings and the interaction of class size reductions with other factors such as teacher quality. Hattie (2009) attempts to identify the reasons for the positive effect of class size reductions and in so doing positions its influence in terms of other, interrelated influences. He argues that reduced class size facilitates individualised instruction; higher quality instruction; greater scope for innovation and student-centred teaching; increased teacher morale; fewer disruptions; less student misbehaviour; and greater ease in engaging students in academic activities.

The bottom-line of Hattie's (2009) findings is that reducing class size has little influence on increasing student academic achievement because the pedagogical changes more strongly associated with improved student achievement in small classes are not implemented. In other words, teachers do not change their teaching practices because they are teaching smaller classes. They continue to teach as if they were teaching larger classes. It is not the size of the class that increases student academic performance. Rather, it is the teaching practice or pedagogy that a reduction in class size facilitates that improves student performance.

Hattie positions class size in a hierarchy where class size is one of a number of mediators that enable and then facilitate the potential for pedagogical change – pedagogy that facilitates a more student focused approach to teaching and learning. Hattie makes the point that, in isolation, class size is a small factor in increasing student academic performance. Class size reduction achieves its 'effect size' as an enabler of increased student achievement only when the desired pedagogies are implemented effectively. This takes both time and expertise which goes some way to explaining the inconsistencies associated with class size reduction interventions.

Snook et al. (2009) has made a number of criticisms about class size research. They argue that 'in-school' influences have been the main focus of class size research while the influence of social factors has largely been ignored. Social factors, including culture, influence student performance irrespective of class size and therefore the transfer of research findings across cultural divides may be problematic. The findings from United States studies, although they may be indicative of what could be the case in New Zealand and Australia are contextualised by different cultures and therefore different findings may result. Hattie's synthesis and subsequent interpretations were made from the perspective of being informed from culturally embedded New Zealand worldviews.

Conclusion

Class size reduction has a long history of interventions and associated research. At times this research has simultaneously been read and interpreted in terms of 'common sense' expectations as well as the research in its own right. Consequently, there is a general belief that small classes increase student academic performance almost irrespective of research findings while the reasons for such findings go unexplored. This is a strong statement to make. However, it is supported by both a careful and accurate interpretation of research results (Hanushek, 1998) and an interpretation of the findings from a number of studies over an extended period of time (Pritchard, 1999).

Essentially, more recent research sought to articulate the specific relationship between class size and student attainment while recognising that the relationship was complex and, as a consequence accommodated other mediating variables. The class size reduction variable seems to be a variable

that, while it can be investigated in its own right, can only be understood in the context of other school reforms that influence academic achievement such as new views about curriculum, emerging pedagogies, the introduction of standards-based testing and teaching quality.

One explanation for increases in student attainment not being explored beyond their relationship with class size reduction was the dominance of quantitative methods used to evaluate the early class size reduction interventions. This includes the three seminal United States studies (STAR, SAGA and CSRP). However, a shift towards mixed research methods, which included qualitative data, revealed a variety of influences on student achievement related to class size reductions. In addition, different research designs and methodologies, sample characteristics and educational and cultural backgrounds may also explain the inconsistencies in research findings.

Mixed methods research also revealed the complex interaction of the class size reduction variable with other teaching and learning variables such as group work, classroom management, teacher-student interactions, teacher satisfaction and workload and student engagement. Interestingly, recently reported quantitative research in the United States shows that class size has an effect on student engagement in the middle school. These findings suggest that the cause-effect relationship between class size and achievement is mediated by other factors (Dee and West, 2011). More recent literature confirms these caveats (Galton and Pell, 2012; Cho, Glewwe and Whitler, 2012).

In the lack of more focused studies, further research is needed to articulate the full extent and complexity of this relationship and how far it extends to other mediating variables. Indeed, there is a whole spectrum of emerging research findings that identify these mediating effects as being integral to an understanding of the complex relationship between class size and student achievement.

Despite the vast amount of research about class size, there is no published research based on Australian data. The Third International Mathematics and Science Study (TIMSS) reported that across the world, class size effects were probably a result of teacher quality. Consequently, in an Australian context there are no real research findings that relate class size reductions to student academic achievement. There are only inferences derived from other countries and therefore other social, cultural and economic contexts. One of the emerging findings about class size research is that it tends to be socio-culturally and socio-economically dependent. Therefore, findings from other social, cultural and economic contexts cannot be assumed to apply to Australia, even though they may serve as reference points for further research.

This review has highlighted the fact that changes, over time, in the type of research methodologies employed have helped understand the relationships between class size reductions and student achievement by recognising the presence and importance of mediating variables. These mediating variables add a dimension of complexity to the relationship that goes some way in helping to understand the varied and inconsistent research findings drawn on and used in the debate about class size. Nevertheless, almost irrespective of the presence and influence of mediating variables, it is recognised that class size reduction is linked to increased academic performance for disadvantaged students (Krueger and Whitmore, 2002). The research also highlights the fact that class size reduction effects are greater in the earlier years of schooling, particularly kindergarten, and that this effect can flow into the early years of secondary education. What is not clear is whether maintaining smaller classes over this extended period of time helps to maintain the advantage gained in the early years or whether the advantage would persist without continuing with smaller classes. What is clear is that class reduction initiatives that have a strong staff professional learning component as part of their implementation appear to increase the potential for enhanced student achievement.

Perhaps the most significant outcome of this review is that it positions the relationship between class size reduction and student academic performance as dependent on pedagogy. Specifically, smaller classes do not achieve their expected performance outcomes if they are not accompanied by pedagogical changes that facilitate a more student-centred focus on teaching and learning. Teachers must be provided with learning opportunities that enable them to understand and use pedagogies that promote increased academic performance in small classes (Hattie, 2009). This might include a more differentiated learning environment that accommodates a diversity of student interests and

ability, the use of open-ended investigation techniques, an emphasis on collaborative group work, remedial assistance, and increased interactivity that discourages student passivity and includes the development of student help-seeking behaviours (Blatchford et al., 2007).

When the research on class size is viewed as a whole it is becoming increasingly clear that the 'common sense' view that class size reductions improve student academic performance need to be seen from the perspective that small class sizes may be an enabler and that the actual reasons for the perceived influence of small classes is they provide an opportunity for a more student-centred approach to teaching. It is this change in pedagogy that is really the 'common sense' component. This then raises the provocative question, can pedagogical change facilitate improved student achievement without the huge expense of employing more teachers, providing more classrooms and funding the increased infrastructure to support increased system management? Is it not better to spend far less money to achieve improved student performance by providing professional learning opportunities for teachers to learn how to teach in a more student-focused way? It is only then, when more student-focused pedagogies are in place that the actual effect of reducing class numbers can be evaluated. It may then be that class size reductions, in their own right, may enhance student performance.

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Myanmar's Rohingya Refugees in Malaysia: Education and the Way Forward

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Abstract: *The Rohingya, a persecuted minority, has faced decades of harsh treatment and made stateless by the military government in Myanmar. To escape from this severe repression, most Rohingya flee to Bangladesh, Thailand or Malaysia. In Malaysia, this community has been living invisibly for more than three decades. Just like other refugees, the Rohingya are not allowed to work legally and do not have access to free healthcare and education in this country. Many of these refugee children learn in the learning centres run by the community with the help of UNHCR and local NGOs and in madrasah[1] after school hours. Nevertheless there is a huge gap in education for these children, especially for girls and boys over 15 years old. This paper addresses the gap, discusses the teaching and learning provided in the refugee learning centres and the future of these refugee children in Malaysia.*

Keywords: *refugees, learning centres, quality, education.*

Introduction

> Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages…Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.
> (Article 26, The Universal Declaration of Human Rights)

The latest available figure of refugees in the world is 10.4 million in the beginning of 2012 (UNHCRb, 2013) with a further of 4.8 million Palestinian refugees living in camps set up since 1949. Conflicts have lasting impacts on people who have been displaced either internally, seeking refuge in another country or who return home from exile due to man-made disasters such as civil wars or natural disasters such as earthquakes. Emergencies cause major disruption in schooling (Sinclair, 2007). In situations such as in Myanmar, children in conflict areas do not have access to schools due to security problems, lack of educational resources and infrastructure deterioration. Therefore, appropriate educational experience should be made possible to the excluded and marginalised groups who have no access to the mainstream education (Brock and McCorriston, 2008). Education provided for children affected by emergencies is defined by INEE (2007, p.1) as:

> Education that protects the well-being, fosters learning opportunities and nurtures the overall development (social, emotional, cognitive, physical) of children affected by conflicts and disasters.

Education provided during emergencies can help children to (Sinclair, 2007: 52-53)

a) provide a sense of normality;
b) restore hope through access to the 'ladder' of education;
c) support psychological healing from traumatic experiences through structured social activities in a 'safe space';
d) convey life skills and values for health and prevention of HIV/AIDS, gender equality and prevention of gender-based violence, conflict resolution, peace-building, responsible citizenship and environmental awareness

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However, education and refugees are increasingly seen as being on opposing ends of a spectrum. The Rohingya are acutely aware of this having earned the dubious distinction of being "stateless". Their country of origin, Myanmar, refuses to recognise them leaving them with no option but to look elsewhere for support. As is often the case, the children whose lives are forcibly disrupted, are the direct and indirect victims of this ethnic discrimination. This paper charts the situation of Rohingya refugees in Bangladesh, Thailand and Malaysia where they are mostly found. This situation directly influences the provision of education for the refugee children. The second part of this paper discusses the education provided in Malaysia, and the quality of it by using the INEE (Inter-Agency Network for Education in Emergencies) Minimum Standards Framework. If education is indeed the central pillar of humanitarian response (Brock, 2011) then the Rohingya situation is dire as this paper will show that the level of education of Rohingya students is far below what is recommended by the Framework. The INEE Framework is used to enhance the quality of education and increase access to safe and relevant learning experience as it provides the minimum education standards required for children affected by calamities. This Framework is also used globally for programme and policy planning, advocacy and preparedness in order to achieve the Education for All (EFA) goals (ActAlliance, 2011). This paper will suggest recommendations at the end to improve the Rohingya situation. The recommendations are not only for the Rohingya but also other refugees who have made Malaysia their temporary or permanent base.

The Situation in Rakhine State Today

To understand the unrest in the state of Rakhine today, it is important to begin with its history. Rakhine (formerly known as Arakan) is a state in Myanmar on the western coast. It borders with the Chin State in the north and the Ayeyarwary, Bago and Magway regions in the east. The Bay of Bengal is in the west and Bangladesh's Chittagong division to the northwest. The State's population is as 3, 836, 000 in 2010 according to the official Myanmarese figures (SPDC, 2010). It is important to note however that there has been a lack of proper census in this state, and the country as a whole since 1983; hence the figure may be higher than stated in official documents. The Rakhine State, as other parts of Myanmar, has a diverse population. The ethnic Rakhine constitute to the majority of the population, with a number of other ethnic minorities such as the Chin, Dainet, Mro, Khami and Rohingya. The two main religions practised by the people in this state are the Theravada Buddhism and Sunni Islam. The Rohingya are the Muslims of Mayu Frontier area, present-day Buthidaung and Maungdaw townships in Rakhine which borders with Bangladesh (Chan, 2005). After the riots of 2012, various local surveys conducted found that the Rohingya Muslims constitute to about 40.75% of the population in Rakhine state, which makes them the second largest ethnic group after the Rakhine Buddhists (The Economist, November 3 2012).

The 1982 Burma Citizenship Act does not recognise the Rohingya as an ethnic group, which has left them officially stateless for decades. They are regarded in Myanmar as immigrants from Bangladesh even though they have long lived and born in the country. Bangladesh, on the other hand, does not recognise them as their people. United Nations High Commissioner for Refugees (UNHCR) and Médecins Sans Frontières (MSF) (also known as Doctors without Borders; an international medical and humanitarian aid organisation) describes the Rohingya as one of the most persecuted people in the world (Robinson and Rahman, 2012). Their struggle and oppression has been one of the most under-reported humanitarian crises in the world. The international media and community have practically ignored the situation of these people (MSF, 2010). Violence erupted in June 2012 in north western Rakhine state following the rape and murder of a Buddhist Rakhine woman allegedly committed by three Muslim Rohingya men. The quasi-military government of Myanmar declared a state of emergency, and the military went on to commit acts of "violence and other human rights abuses against the Rohingya including killings and mass scale arrests of Rohingya men and boys in North Rakhine State" (Refugee International 2012). Human Rights Watch 2012 accused the security forces in Myanmar of 'ethnic cleansing' against the Rohingya. Tensions were reignited again in October

2012 and more clashes happened in March 2013. Media reported that 192 people were dead and more than 140,000 Rohingya had been forcibly displaced (Radio Free Asia, April 29, 2013). Those who have been displaced have been denied access to humanitarian aid and not allowed to return home (Human Rights Watch, 2013). At the time of writing, this state is still in disquiet.

The prolonged unrest has left many Rohingya fleeing the Rakhine state for fear of life to mainly Bangladesh, Thailand and Malaysia due to religion and geographical factors. They face different sets of challenges in these three countries, including the way and quality of life, living space, and educational experience. For example, the Rohingya refugees live in makeshift camps in Cox Bazaar in Bangladesh but in Malaysia, they live in rented flats in cities. Bangladesh, Thailand and Malaysia are not parties to the 1951 Convention relating to the Status of Refugees nor to its1967 Protocol, just as most South-East Asian countries (UNHCR, 2011). This means refugees, the Rohingya including are not entitled to any formal protection from these countries. The section below details the life of Rohingya refugees and educational experience provided for the children in these three countries

Rohingya Refugees in Bangladesh

Many Rohingya sought refuge in Bangladesh because of their similar social, ethnic and religious characteristics, in particular their common observance to Islam. After a major influx of refugees in 1992[2], the Bangladeshi authorities have forced them back to Myanmar, but they again returned to try to seek refuge and self-settle in the South-eastern parts of Bangladesh (Haque, 2011). According to UNHCR reports, there were some 29,000 recognised refugees in camps in Kutupalong and Nayapura in Cox's Bazaar District in south- eastern Bangladesh (*see table 1*) and an estimated 36,000 unrecognised refugees who are in makeshifts with limited humanitarian aid access in the sub-districts of Teknaf and Ukhia (Kiragu, Rosi and Morris, 2011). It is also reported that there are over 200, 000 undocumented Rohingya refugees living within the community.

Table 1: Myanmar Refugees in Bangladesh, 2006-2010

Kutupalong camp	2006	2007	2008	2009	2010
Age group 0-4	1730	1944	2158	2164	2074
Age group 5-17	3974	4090	4340	4475	4646
Age group 18-59	4198	4439	4335	4408	4514
Age group 60+	242	235	214	204	235
Total all age groups	10,144	10,708	11,047	11,251	11,469
Nayapara camp	2006	2007	2008	2009	2010
Age group 0-4	2866	2898	3206	3122	2905
Age group 5-17	6205	6473	6840	6946	7316
Age group 18-59	6560	6939	6704	6713	6962
Age group 60+	379	369	326	310	364
Total all age groups	16,010	16,679	17,076	17,091	17,547

(Source: Kiragu, Rosi, Moris, 2011)

Bangladesh is not party to the 1951 Refugee Conventions or its 1967 protocol. It is also not a party to the 1954 and 1969 Statelesness Conventions. Therefore, the Rohingya lack of support for proper housing, healthcare and education. They are not protected from the law and authority and have an economic condition worse than any other community in Bangladesh (Haque, 2011). Children under the age of 18 make up 50% of the refugee community living in camps in Cox's Bazaar (*see Table 1*), and a similar proportion for the undocumented refugees although official statistics is not available (Feeny, 2001). The Bangladeshi government had not allowed schooling to take place in

the camps until 1997, but even now it is non-formal (primary only)and of low quality, taught by the refugee volunteers (ibid). There is no provision for secondary and tertiary education. For years, these children have been deprived of proper schooling which has greatly reduced their opportunities to overcome their economic situation and lead a better life by developing their academic and vocational skills. They are often subjected to human trafficking, rape, early marriage, teenage pregnancy and domestic abuse. In 2000, Concern Worldwide, a non-governmental organisation working with the poorest people in several countries, has been given the responsibility to reshape the educational programmes provided in the camps in Cox Bazaar. They constructed 14 new schools with 5 classrooms in each were in both camps. Refugee teachers were given incentives in the form of monthly provision and clothes as a form of motivation to teach. Parents were also encouraged to send their children, especially girls to school. Students attend formal assemblies where they sing the national anthem of Myanmar and awareness on health and clean sanitation was raised (Concern Worldwide Bangladesh, 2001). Although these certainly were a boost to an otherwise poorly maintained school, problems in terms of quality, teaching materials, curriculum and dropout rates still persist.

Rohingya Refugees in Thailand

Thailand has nine official refugee camps built along the Thai-Myanmar border, housing more than 140, 000 refugees (Oh, 2011). Most of these refugees are from the Karen and Karenni ethnic groups. In total there are 70 schools in the seven Karen camps and 11 in the two Karenni camps in the north. Pre-primary, primary, secondary, vocational and adult learning are made available in these camps. Progress is also on the way to certify the learning in these camps. Thailand like many other countries in Asia is not a signatory to the 1951 Convention relating to the Status of Refugees. It does nonetheless allow local and international aid organisations to operate in these camps where essential services are provided for shelter, food, water, sanitation and education. However, the Rohingya refugees do not benefit from these services, in particular education. Since the conflict in the state of Rakhine in June 2012, more than 6,000 Rohingya 'boat people' have arrived in Thailand (Reuters, February 9, 2013). The Thai Department of Foreign Affairs announce on January 25, 2013 that the Rohingya refugees will be allowed to stay in the shelters in the country for six months while the government prepares a new policy (O'Toole, February 12, 2013). The Thai government has also agreed to provide basic humanitarian aid for these people, however, education not being part of it.

Rohingya Refugees in Malaysia

The Rohingya have been seeking refuge in Malaysia since the 1980s. As of end of April 2013, there are some registered 28,120 Rohingya refugees in Malaysia (UNHCR, 2013a) and a large number remain unregistered, with the refugee community themselves estimating the number of unregistered to be the same as registered (personal communication, 2013). Refugees in Malaysia do not live in camps. They live within the local community, as invisible as they could. They usually live in cramped low-cost flats in the city where they could find odd jobs in the restaurants and factories. Many Malaysians are themselves not aware of these refugees and often mistaken them for illegal immigrants (Letchamanan, 2010). A huge number of Rohingya children are born in this country, but since Malaysia does not practise the principle of *jus soli*, citizenship is not granted to these children. Malaysia is also not a signatory to the 1951 Convention relating to the Status of Refugees. The Malaysian government is allowing the refugees to stay in Malaysia on humanitarian grounds while waiting to be resettled to a third country. The Rohingya were given a reprieve in 2006 when the Malaysian government began issuing IMM13 permits which offered some form of legitimacy. This would protect them from being harassed by the authorities or even being arrested. Unfortunately the efforts to legitimise the Rohingya were halted when the government decided to relook at the overall refugee situation. This has since caused them undue distress and prevented them from integrating into Malaysia society. The UNCHR has also adopted a wait and see approach

since December 2005 and only make exceptions for cases considered to be vulnerable (Garcia and Olson, 2008; Rahman, 2009).

Many refugees from Malaysia have been resettled to a third country over the years, with the help of UNHCR and other international aid and faith-based organisations. The Rohingya however have not been included in this resettlement process. From the interviews conducted by the author, the refugees believe the third country, usually either Australia, Canada, the USA, Germany or France refuse to accept the Rohingya because of their religion. Another fact that hinders the resettlement process for this community is because many of them are married to Muslim migrants from Indonesia who overstay in Malaysia. At least eight refugees whom the writer met during interviews[3] are married to Indonesians.

The ethnic-based clashes in Myanmar recently spilled over to Malaysia with several clashes between the Buddhist and Muslim Myanmarese have occurred in the city, resulting in two deaths and another two in critical condition (The Star, June 11, 2013). The Malaysian police have been quick in detaining some 1,000 Myanmarese workers following this dispute; mostly refugees working illegally.

The Rohingya, along with other refugees are not allowed to work and do not have access to free healthcare and public education in Malaysia. UNHCR with the assistance from local non-governmental and faith-based organisations operate learning centres for refugee children. There are about 120 such learning centres in West Malaysia, mostly in Klang Valley, Johore and Penang. Majority of the teachers in these schools are from the refugee communities themselves with local and foreigners volunteering on regular basis. These learning centres are located also in flats, and are usually cramped with 60-100 children, although there are centres with smaller number of children. Learning centres are opened where there is a big number of refugee community living in that area.

Education for Rohingya Refugees in Malaysia

In respect of the educational dimensions of conflict and post-conflict situations (Davies, 2004), they are part of 'education in emergencies' that is, in turn, part of 'education as a humanitarian response' (Brock, 2011). Many research have been done on education for refugees in their places of resettlement, but in comparison, research on the provision of education in places of temporary settlements is less comprehensive (Preston, 1991). Malaysia is a temporary settlement for refugees as it only allows them to stay on humanitarian grounds while waiting to be resettled or repatriated, hence providing limited or no opportunities and benefits for them. However, education is essential in ensuring stability and a sense of normalcy for the refugee children. It is also important for a better future either when repatriated or resettled to a third country.

The Rohingya refugees have been living in Malaysia for more than two decades without proper access to basic healthcare and education. This means a generation without formal education. Many adult Rohingya refugees are illiterate, with some able to read and write *Jawi* and after years of living in Malaysia, the Malay language. The Rohingya refugee children attend learning centres operated by the community and faith-based organisation with the assistance of UNHCR. For the Rohingya refugee community, the purpose of education is for their children to succeed and have a better life than theirs.

> Our students are interested in learning. We as the parents want our children to succeed so that they have a better life. Not like ours. I can't read and write. I don't want my children to be like me too. (Refugee parent, from interview, translated)

Methodology

For the purpose of this research, the writer visited two learning centres for the Rohingya children; one operated by Taiwan Buddhist Tzu-Chi Foundation located in Cheras, Kuala Lumpur and the other by the Rohingya community themselves in Puchong, Selangor (Rohingya Community School Puchong). Semi-structured interviews[3] were carried out with the two principals and three

teachers of these learning centres. The first learning centre has 116 students with four teachers and the second has 31 students with one teacher. The principal and three out of four of its teachers in the Taiwan Buddhist Tzu-Chi Foundation School are Malaysians. The teacher and principal of the Rohingya Community School Puchong are refugees themselves.

In both the learning centres, UNHCR assists by providing textbooks, compensation for the teachers and teacher training. The children are taught Malaysian syllabus using books given by UNHCR. They learn Mathematics, English, Science and Malay Language. In Taiwan Buddhist Tzu-Chi Foundation School, there are two sessions; morning and afternoon separated according to grades with the older children attending the morning session and the younger ones in the afternoon. The Rohingya Community School Puchong does not have the facilities to conduct classes for different levels. All students aged six to thirteen attend the same class together. Monthly compensation is given to the principal and teachers in the form of cash, but from the interviews, it was gathered that this compensation is very little and insufficient. Teacher training is provided to all refugee school teachers by Dignity School with the assistance of UNHCR. Trainings provided include pedagogy and leadership.

It is important to acknowledge the work done by UNHCR, their implementing partners like the Taiwan Buddhist Tzu-Chi Foundation and also the community in their initiative to educate the children. They operate with limited resources and more often than not they too are ill-equipped to provide teaching and learning. Nonetheless to say, a huge gap remains in the quality of education provided in these centres.

The underlying argument is one that contrasts access to education and access to quality education. While proponents of access retention and completion were successful during the 1990s, the tough process has undergone a subtle but significant shift. Where access is a given, the next step is to focus on quality with a long term view. The demands of the modern and mobilised workforce in particular are reflected in the 2000 Dakar Framework for Action where the explicit goal is quality of education:

> (…) improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills. (The Dakar Framework for Action, 2000:8)

Providing education is important, but more important than that is to provide quality education that would benefit these children in the future. Education, as much as it needs to solve the immediate problems, need also address the long term goals and prepared the refugee children to be independent and uplift them from poverty. Without this, they will go on living in a state of limbo for generation to come. This is especially pertinent in the case of the Rohingya refugees because they are not resettled to a third country. Nor are they repatriated because their country of origin has declared them stateless. For that, many have come to call Malaysia their home.

The INEE Minimum Standards Framework is used in this paper to benchmark the quality of education provided and received by the Rohingya refugee children. This framework is used as a basis because it provides the minimum standards that each learning centre should have to provide quality education. Quality in education can be understood in many different ways, depending on the values and priorities of the host country, international organisations and other stakeholders. For this paper, 'Quality education' is defined as education that is available, accessible, acceptable and adaptable (INEE, 2010). This definition of what a quality education should be, is indeed apt for the refugee children living in Malaysia. The INEE Minimum Standards are derived from the Sphere Project's Humanitarian Charter. This is based on the principles and provisions of international humanitarian law, international human rights law, refugee law and the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief. The Humanitarian charter has the sole purpose to ensure that all people impacted by any kind of disaster, natural or otherwise are to receive basic relief that guarantees their safety and dignity despite unwillingness or neglect by relevant authorities. In such cases, the Charter provides guidelines that

clearly state the legal obligation of parties concerned and will ultimately ensure that some form of Humanitarian relief is provided to victims by other organisations.

The INEE Minimum Standards (2010) are organised in four main domains; access and learning environment; teaching and learning; teachers and other educational personnel and education policy, with foundational standards as the fifth domain which includes coordination and community participation, and applied across all the other four domains.

Access and Learning Environment

This domain focuses on access to safe and relevant learning opportunities. It also highlights other important sectors such as health, water and sanitation, nutrition and shelter that help to enhance security, safety and physical, cognitive and psychological well-being of the Rohingya refugee children. Quality is ultimately defined by how much learning that takes places, but for that to happen, the conditions that allow learning has to be firstly created. Most of these learning centres are located in places where there is a high density of Rohingya refugee community. Children are usually sent to these centres by their parents. Some centres do provide transport where children are picked from their houses. From interviews, the writer also found that some older children do walk to the centres although this is not encouraged because they may be detained by the police on their way. The learning centres for refugee children in Malaysia are usually flats and houses converted into a few classrooms. It is important to distinguish between a school and a learning centre. These learning centres do not have facilities such as field, proper and comfortable classrooms, library and laboratories that a typical school would normally have.

The learning environment in these centres is not conducive for learning. All the teachers whom the writer interviewed felt the classrooms are too crowded no proper partitions for the different classrooms. This increases the noise level and both the teachers and the students find it hard to concentrate in such environment. The Rohingya Refugee School Puchong had only one teacher for all of its 39 students who aged from five to fifteen and are at different levels but put in the same classroom to learn because of lack of facilities and teachers. The principal of this school mentioned that it was not possible for one teacher to cater to the varying needs and levels of these students at the same time. There is no play area for these children, although some do have access to the field or playground in the neighbourhood. Recent work in cognitive science shows that intelligence is not fixed genetically, and that it can be significantly enhanced when the child is put in a nourishing, supportive and sensory-rich environment (Perkins, 1995; Levinger, 1994). This scientific evidence undermines many of the traditional assumptions governing approaches to the disadvantaged, who were treated, if at all, through the application of special educational programmes (Bereiter and Scardamalia, 1993). What is now recognised is that all children respond well in a loving, nourishing, challenging and stimulating learning environment (Gardner, 1983, 1993; Levinger, 1994). For these Rohingya refugee children to develop in a holistic way, a conducive learning environment is pertinent. Although not ideal classrooms, realistically the learning centres should have separate classrooms with proper lighting and ventilation for each level. Classrooms should also be able to accommodate the number of students in each level. In levels where there are more students, bigger space should be used as classrooms.

Teaching and Learning

These standards focus on critical elements that promote effective teaching and learning, including curricula, training, professional development and support, instruction and learning processes, and assessment of learning outcomes. The learning experience of all refugee children should be the main concern of all stakeholders. What are they learning? Who is not learning and why? The latter is seldom addressed as most are only concerned with the children who are learning. At many times, children can attend the learning centres yet not learn anything. Teaching and learning should address the children's different learning needs and provide opportunities that attract them

to participate actively in groups and individual learning activities (American Institute for Research, 1999). More importantly, what the Rohingya refugee children learn in the centres should be relevant for them and they should be able to gain essential skills for effective life-long learning. As mentioned earlier in the paper, the students are taught the Malaysian syllabus using workbooks given by UNHCR. However, from beginning of 2013 the publisher has stopped printing books in English since the medium of instruction in all national schools in Malaysia has been changed to Malay language, and therefore the publisher has stopped supplying books to UNHCR. The learning centres have not received any books from UNHCR for the year 2013. From the interviews conducted, all teachers answered that they teach the Malaysian curriculum. This in itself is a misconception that the learning centres have because they are not teaching the Malaysian curriculum, but the workbooks by private publishers which are aligned with the syllabus taught in the public schools in Malaysia.

How relevant is this syllabus for these children is something pertinent to be pondered. They are not allowed access to public schools, nor can they work legally in this country. Hence, the question of what will the use of teaching Malaysian syllabus to these children be arises. An appropriate curriculum should be developed or adopted for these children; a curriculum which will prepare them for the challenges in a rapidly evolving world. The content should incorporate the acquisition of literacy, numeracy and life skills as well as knowledge in gender, HIV/AIDS prevention, health and peace (Sinclair, 2007). Vocational and technical skills are useful for adolescents who will leave the centres once they reach the age of fifteen or sixteen to work and contribute to the family. The curriculum should also teach the children their rights as refugees so that they are aware of them even when they resettle to a third country (ibid). The Rohingya refugee children should not grow up to live the same way as their parents do.

Teachers and Other Education Personnel

Standards in this domain cover administration and management of human resources in the field of education. This includes recruitment and selection, conditions of service, and supervision and support. Quality education can only be achieved if the teachers are well-equipped and motivated to teach. It is important to note that most of the teachers in these learning centres are refugees themselves. They too have gone through the conflicts, and therefore may need psycho-social counselling along with other trainings provided. At present, all the teachers except for one whom the writer interviewed from both schools have attended teacher trainings organised by UNHCR. These trainings provide input on creating lesson plans, fun activities for the children and leadership and management skills. The teachers felt these trainings have given them some idea and insights into developing lessons. However, quality improvement is a package because the factors are not independent of each other (Craig, 1995). Teacher training is unlikely to improve the quality of education provided if appropriate and relevant materials and equipment are not provided. Many of the refugee teachers are high school leavers or university graduates from their country of origin. They do not have the experience or pedagogical skills to teach. They also lack the English language skills. The trainings given are not sufficient to cope with the lack of these skills. Another important motivation to teach will be the compensation. The little compensation given is insufficient because these teachers also have their own families that they have to provide to. In the cases where a refugee teacher is unregistered with UNHCR, compensation is not given.

Volunteers also form an important part in improving the quality in education. The volunteers in these centres are Malaysians and foreigners. They work with the children on certain days in a week by organising activities and games. Some volunteer on regular basis to teach Mathematics, Science or English. As mentioned by a Korean volunteer teacher in one of the learning centres:

> I have been volunteering here for the past one year. I teach them Maths and Science. It is difficult to teach with limited resources but I work with what I have. I also create my own materials. I enjoy teaching these refugee children although we had language barrier in the beginning.

The efforts by the volunteers certainly need to be recognised and applauded. However, in some centres, it is difficult to get volunteers or to have committed volunteers. Perhaps, UNHCR as the main organisation involved could source for more committed volunteers and even provide transportation for them to go to these centres as some are located in quite remote parts of the city. By doing this, the centres will always have a pool of volunteers and more quality activities can be carried out.

Education Policy

Standards in this domain focus on policy formulation and enactment, planning and implementation. Education policies for the Rohingya refugee children should be formulated and implemented by UNHCR as the international organisation which deals with refugees. Others such as non-governmental organisations, faith-based organisations and educationists could assist UNHCR to formulate policies. Fundamental to a quality education is relevant and effective policies for these children. One pertinent aspect of the policy is to award certification to children who complete each grade in their learning centre. The long term, positive impact of education is compromised when student learning is not validated through official recognition (MacEwen, 2009). The value and quality of education programmes diminishes. Careful planning and co-ordination between the different actors involved in implementing and validating education programmes are essential. By effectively addressing certification issues, the quality, impact and sustainability of programmes are more likely to be guaranteed (ibid). As asked by a parent whose two children are in the learning centre:

> I send my children to this place [learning centre] every day. Yes…they learn but what happens after they finish studying here? Can they go anywhere? They don't get any certificate when they finish studying here.

This concern is shared by many other parents too who wish to see their children being awarded recognised certification which would allow for mobility and enable them to have access to tertiary education or secure a proper job.

The Way Forward

It is clear that the educational needs of the Rohingya children in Malaysia deserve immediate attention. The case of Rohingya refugees is unique and should be treated differently from the other refugees. Firstly they are stateless, therefore they have little or no hope in returning unless some drastic changes in politics happen in Myanmar, and secondly no Rohingya refugees have been resettled so far (personal communication with UNHCR personnel). They are the longest living refugees in Malaysia, and most probably will go on living in this country for the next few decades. All parties concerned must be able to look into this situation realistically. A structured and stable learning environment equipped with the necessary tools is pivotal to compete but also cater for their psycho-social needs. The current situation as explained above is clearly insufficient. A quality education in this scenario needs to ensure that one of two outcomes takes place. Either the student is given a pathway that eventually leads to an internationally recognised Pre-University certificate e.g. International Baccalaureate (IB) or they are provided an alternate pathway that leads to skilled work or technical work. Either outcome may provide opportunity for the refugee child to be employed in today's modern and mobilised workforce. Quality education should empower the refugee children to be able to survive in the challenging world.

> We want our children to get proper jobs here in Malaysia…to go to university here. My son wants to be a doctor and my daughter a teacher. (Refugee parent, from interview, translated)

> I have been living in Malaysia for 32 years. All these years I have been doing odd jobs to survive and take care of my family. Life is tough. We are very poor. Often we eat only rice and salted fish. It is difficult to pay rental every month. I don't want my children to suffer like us too. Only education can help them. (Refugee parent, from interview, translated)

> I am married to an Indonesian. So I don't think I have any chance of resettling to a third country. Our children were born here but they are not awarded citizenship. School gives hope to the children and parents that life in Malaysia for us will be normal in the future. (Refugee community school principal, from interview, translated)

Education without purpose disadvantages the student and the family as only uncertainty awaits after years of classroom schooling (IIEP-UNESCO, 2009). The movement by universities to offer online learning as alternate means has proven reasonably successful, for example Massachusetts Institute of Technology (MIT) and Yale University. A curriculum that is holistic and meets the requirements set out and can take advantage of technological advances might help refugee students obtain quality education. All that is needed is computer and access to internet, amenities that are considered basic and available cheaply and easily. Although there are obvious drawbacks with remote or even blended learning, the benefits are easily seen as the students will have access to what is universally regarded as quality materials. The teacher who is already onsite can play the role as administrator to ensure that lessons take place. The BRAC[4] system in Bangladesh and Bridge International Academy[5] in Kenya for impoverished children provide an existing model that can be further enhanced to cater for the needs of refugee children in Malaysia. Joint efforts with the government and United Nations sponsored NGOs might lead to a stabilising influence on refugee communities. Funding which has gone to resettling and supporting learning centres can instead be used for these purposes which are more sustainable.

Notes

[1] Madrasah is an educational institution for the study of Islamic religion, usually placed in the mosques for students from the neighbourhood.

[2] Bangladesh has experienced two major influxes of refugees from Myanmar, mostly the Rohingya; first in 1978 and the second in 1991-92. A large scale of expatriation exercise followed after each influx, which was mainly involuntary.

[3] The interviews were conducted as part of the research funded by the University of Malaya Research Grant (UMRG) to determine the quality of education in the refugee learning centres in Malaysia. The outcome of this research was shared with UNHCR to assist them in implementing better standards to improve the quality of education in these refugee learning centres.

[4] BRAC is the largest non-governmental development organisation in the world established to alleviate poverty. It reaches out to children who have been excluded from the mainstream education due to extreme poverty, violence, gender discrimination and displacement.

[5] Bridge International Academy provides low-cost, high quality education to families living on less than USD$2 per day. It uses the model Academy-in-a-box to reduce the investments often needed to build a school, including staff, infrastructure and developing curriculum.

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School Turnaround as National Policy in the United States: Considerations from Three Studies Conducted in the Midwest

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Abstract: *School turnaround policy has become prominent in American education discourse. Some federal initiatives specifically target the lowest achieving five percent of schools in the nation, with the goal of bringing schools out of improvement status rapidly. This paper considers and extends the work of three recent studies of school turnaround. Collectively, the studies demonstrate how a strong federal initiative can impact public education on multiple levels, including the state, district, school, and individual levels. School turnaround demonstrates the power of federal initiatives in the United States to impact the public school system at all levels. State departments of education have responded in ways to obtain federal funding. Districts and schools generally with the least capacity to enact change have been challenged with an opportunity to win substantial dollars, but many elected not to compete. Increases in student achievement through such reform appear to be possible, but the human and social costs have yet to be adequately considered.*

Keywords: *turnaround, school reform, low-performing, school improvement, policy*

Introduction

The topic of "turning around" chronically low-performing schools has become prominent in American education discourse. The U.S. Department of Education (2009), independent researchers (e.g., Meyers and Murphy, 2008; Duke, 2012), and practitioners (e.g., Wolk, 1998) have called for drastic improvement in the academic performance of the lowest-performing schools. A key part of the call for school turnaround has emphasized a need for identifying schools that chronically underperform, most typically on state assessments. Such processes of identification are under way, but no consistent method for identifying schools in need of turnaround has been established, although standardized assessments could make this possibility a reality (Murphy & Meyers, 2008).

Herman et al. (2008) draw on several case studies of failing schools that have successfully turned around. The authors acknowledge that their recommendations are based on weak evidence. The evidence is weak for a number of reasons—the primary reason being a lack of experimental or quasi-experimental research. Their review also highlights another substantial limitation: The case studies referenced provide readers with no procedures for identifying chronically low-performing schools or measures for determining successful turnaround. In other words, there is no consistent measure to determine when schools have turned around or even when schools are in need of turnaround.

Despite unsettled statistical analyses for school turnaround identification and the limitations of current research on school turnaround in general, a national emphasis on implementing recently developed federal models of turnaround has emerged as a central component of drastically improving school performance. Competitions at the state and local levels for federal funding in the form of School Improvement Grants (SIGs) are relatively recent developments, and although clear processes around eligibility and funding have been designed and implemented, little has been reported regarding performance indicators of schools that are eligible for SIG funds, schools that are part of district applications for SIG funds, schools that are awarded SIG funds, or schools that competed for but did not receive SIG funds.

This paper[1] draws on three recently completed or forthcoming publications that are tied directly to the growing phenomenon of school turnaround and in which the author has been a contributor.

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After setting the stage by reviewing information and literature relevant to providing a definition or explanation of school turnaround and School Improvement Grants, the paper provides an overview of a study of Chicago public schools that underwent turnaround-like school reforms in the previous 15 years. It should be noted that Chicago turnaround reform models are the basis for the Obama administration's current federal policies. Then, the paper shifts to demonstrate how an independent organization in conjunction with a state education agency developed a statistical model to identify turnaround schools (and explain how that model was nullified soon after when SIG competition rules were established). Next, the paper highlights performance indicators of those schools competing for SIG funding in seven Midwestern states. The paper ends with a considerations section that draws on the three studies to point out some of the intersections between national, state, and local levels with regards to the current movement to turn struggling schools around.

Setting the Stage

The emergence of school turnaround, at least in concept, should not be surprising given the direction of American public education over the last twenty years. A movement across states in the 1990s to develop accountability systems evolved into No Child Left Behind (NCLB), a reauthorization of the Elementary and Secondary Education Act. NCLB supports standards-based reform, emphasizing measurable goals for schools with substantial consequences for their inability to meet federal expectations, including eventually demonstrating proficiency for all students. Despite some successful countries' (for example, Finland) movement away from top-down policies of standardization, accountability, and competition, little consideration of international perspectives appeared to be given during the initial surge for federal American standards and accountability. The consequences attached to consecutive years of failure in meeting targeted levels of achievement were severe enough (including the loss of students and resources to eventual state takeover) to begin labelling schools as low-performing or even failing, while warranting an expectation that schools unable to meet standards would make every effort to change behaviour. After nearly a decade of federal standards, those schools that were unable to demonstrate any meaningful improvement were obvious. Years of state test data – the primary basis of labelling schools as low-performing in the United States – confirmed their position as persistently low performing. And given the NCLB structure with the expectation of incremental but rapid growth, the worst schools seemed entrenched. For example, Balfanz and Legters (2004) point out that a relatively small percent of schools drive the dropout crisis and achievement gap.

What became increasingly clear is that intractably low-performing schools could not be motivated by rewards or consequences alone into becoming good schools. The problems inherent in those schools and their surrounding communities required a more drastic but focused initiative to improve student achievement, and based on prior failings, that initiative would necessarily impose fast and substantial change in outcomes. The idea of turning around a low-achieving school quickly began to crystalize, but the way to accomplish the process quickly bifurcated. The first strategy focused on the rapid improvement of student achievement through an infusion of research-based practices, with the distinction on past efforts such as whole school reform being twofold: Put all reasonable strategies in place simultaneously and expect near-immediate results. The second strategy, however, was to operationalize a top-down practice that demonstrated some initial success in Chicago by disrupting the school with substantial administrative and faculty turnover. Both continue to be used and, to varying degrees, considered as viable ways to initiate school success. This paper demonstrates how the federal conceptualization of school turnaround has become the more politically feasible one for state departments.

Dual Conceptualizations of the Term School Turnaround

School Turnaround Conceptualization #1: Rapid Improvement in Student Achievement

Turnaround in education is a relatively new concept (Murphy and Meyers, 2008), but much of the initial scholarship on the topic has focused on the idea of rapidly improving student achievement

in schools that have been persistently low-performing (Herman et al, 2008; Murphy and Meyers, 2008). A U.S. Department of Education report published in 2001 (p. 6) suggested that little is known regarding the "process of transforming low-performing schools". According to Brady (2003), school turnaround centres on the transformation of struggling schools into successful ones. Hassel and Steiner (2003, p.2) also suggest that the idea of rapid improvement in underachieving schools rests on "the heroic assumption that the fundamentals of a school's culture and practice can be changed via external pressure, professional development or new leadership". More specifically, Kowal and Hassel (2005, p.5) state that "a successful turnaround produces a dramatic increase in student achievement in a limited amount of time". This two-pronged expectation – dramatic increases in student performances in a short timeframe – with regards to school turnaround has been increasingly emphasized by researchers (Simmons, 2006; Meyers and Murphy, 2008) and external providers (see Calkins et al., 2007). Indeed, the Institute of Education Sciences (IES) practice guide *Turning Around Chronically Low-Performing Schools* (Herman et al., 2008) seemed to, at least in part, institutionalize school turnaround as an effort to improve student achievement significantly and rapidly.

As an extension of the call for the identification of persistently low-performing schools and turnaround schools, some significant research to identify both sets of schools statistically has been undertaken recently. Hochbein (2011) has operationally defined and statistically identified schools that are persistently low-performing. Researchers involved in the evaluation of Comprehensive School Reform grantees conducted an exploratory study of changes in school-level achievement among the grantee schools (U.S. Department of Education, 2010b). They found that certain broad categories of reform that have been identified within the school reform literature (e.g., new leadership styles and instructional strategies) were indeed associated with positive outcomes. However, the authors stress that the details of these reforms varied widely across schools and that consequently, it is difficult to draw conclusions about the "one best system" for turning schools around.

Stuit (2010) investigated the success rates of charter and traditional public schools in eliminating chronically underperforming schools "via dramatic turnarounds in performance and/or shutdowns" (p. 10). Over 250 charter schools and 1,700 traditional public elementary and middle schools across ten states were identified as failing schools, or schools within the lowest ten percent of state proficiency rates. The researcher concludes that turnaround work is currently a "dismal state of affairs" (p. 10), as only one percent of schools across sectors demonstrated turnaround (defined as increasing school proficiency rates to at least the 50th percentile within a state) within a five-year period.

School Turnaround Conceptualization #2: Federal Models for Organizational Change

In 2009, the U.S. Secretary of Education and former superintendent of Chicago Public Schools announced that the U.S. Department of Education would be awarding $3.5 billion in Title I[2] School Improvement Grants (SIG) (Kutash et al., 2010). The new program was created with the intention of turning around the nation's lowest-achieving five percent of schools, a goal similar to that of conceptualization one of school turnaround discussed above. In addition to this goal, however, was the coinciding expectation that states, districts, and, most importantly, schools would make drastic organizational changes, as some had undergone previously in Chicago. For a district (and subsequently a low-performing school) to receive federal financial awards, the identified school was required to implement one of four federal models of turnaround, shifting the conceptualization of turnaround away from results and onto processes. In other words, national leaders recently amplified the attention given to school turnaround by defining and promoting four models that involve "dramatic change, including fundamental, comprehensive changes in leadership, staffing, and governance" (State Fiscal Stabilization Fund Program: Final Rule, 2009, p. 58462). A brief explanation of the four federal models of turnaround follows:

Turnaround Model. In the turnaround model, the local education agency (LEA) replaces the principal, reviews the current staff but rehires no more than 50 percent of it, creates a new governance structure, and offers operating flexibility to school leaders. The model stresses the use

of data to inform differentiated instruction, and provides job-embedded professional development to build staff capacity. It also calls for increased learning time and the use of a specific instructional model based on school need. The turnaround model implements social-emotional and community oriented services for students.

Restart Model. In the restart model, the LEA converts a school and/or closes and reopens a school under a charter school operator, charter management organization (CMO), or an education management organization (EMO). The partner is chosen through a rigorous review process that is also reviewed by the state. The new school must enrol former students that are interested in attending.

Closure Model. The closure model requires the LEA to close a failing school and enrol the students in another school within the LEA that is high achieving. Students reserve the right to attend charter or new schools for which student achievement data are not yet available.

Transformation Model. The transformation model replaces the principal and implements a new evaluation system for teachers that specifically uses some measure of student growth as a significant indicator of success. Teachers who are identified as increasing student outcomes are rewarded, while those who are not are removed. Much like the turnaround model, job embedded professional development is provided, a specific instructional model based on need is implemented, learning time is increased, and social-emotional and community-oriented services are provided. Transformation also calls for ongoing technical assistance to be provided.

School Improvement Grant (SIG)

Federal guidelines for school turnaround emphasize the use of one of the school turnaround models: turnaround, restart, closure, or transformation. The U.S. Department of Education recently expanded funding for the SIG initiative, with the stated goal of rapidly improving the nation's 5,000 lowest performing schools (U.S. Department of Education, 2009). SIG funding is provided for under section 1003(g) of the Elementary and Secondary Education Act and supplemented by the American Recovery and Reinvestment Act (ARRA) of 2009. State education agencies (SEAs) are eligible to receive a SIG, with 95 percent of the funds to be allocated directly to LEAs. SIG funds specifically target the lowest achieving five percent of schools in the nation, with the goal of bringing schools out of improvement status and meeting Adequate Yearly Progress (AYP) (U.S. Department of Education, 2010a). Awarded schools were given US $500,000 to $2 million to enact a turnaround model. All 50 states and the District of Columbia applied for and received SIG grants.

Only LEAs that receive Title I funding designated for schools with high numbers or high percentages of students from low-income families and that have one or more Tier I, Tier II, or Tier III schools may apply to receive state SIG funds. School tier status is determined by U.S. Department of Education criteria. Table 1 highlights details of federal expectations for the tiers presented above. The LEA is the only entity that may apply for SIG funds from the SEA. The LEA's application to the state must list the Tier I, Tier II, and Tier III schools that theLEA commits to serve along with the appropriate intervention model slated to be used with each identified school.

For each of the schools the LEA commits to serving, a needs analysis must be conducted and the LEA must illustrate its capacity to implement the intervention. If the LEA chooses not to serve all eligible Tier I schools, it must explain its lack of capacity to do so. The LEA must describe its implementation of the specific intervention, its process regarding the recruitment and approval of external providers, its processes and policies that enable implementation, and its ability to sustain reform beyond the granting period. The LEA must include a timeline of intervention implementation and an outline of annual student achievement goals for Tier I and Tier II schools. Regarding Tier III schools, the LEA must identify the services it will supply and define goals of accountability for the schools. LEAs also must supply an extensive budget and must work with stakeholders of Tier I and Tier II schools regarding the SIG application and implementation of the intervention.

Table 1. Federal Definition of Tier Status

Tier	Schools That an SEA *Must* Identify in Each Tier	Newly Eligible (as of 2010) Schools That an SEA *May* Identify in Each Tier
Tier I	Any Title I school in improvement, corrective action, or restructuring that: Is among the lowest achieving 5 percent of Title I schools in improvement, corrective action, or restructuring, or the lowest achieving five Title I schools in improvement, corrective action, or restructuring in the state, whichever number of schools is greater.	An elementary school eligible for Title I, Part A funds AND that: Has not made AYP for two consecutive years OR Is in the state's lowest quintile of performance based on reading/language arts and mathematic proficiency rates AND Is not achieving greater than the highest achieving school identified by the SEA as a persistently lowest achieving school in Tier I.
Tier II	Any Title I school in improvement, corrective action, or restructuring that: Is a high school that has had a graduation rate that is less than 60 percent over a number of years.	A secondary school eligible for Title I, Part A funds AND that: Has not made AYP for two consecutive years OR Is in the state's lowest quintile of performance based on reading/language arts and mathematics proficiency rates AND Is not achieving greater than the highest achieving school identified by the SEA as a persistently lowest achieving school in Tier II OR is a high school that has had less than a 60 percent graduation rate for a number of years.
Tier III	Title I schools in improvement, corrective action, or restructuring that are not in Tier I.	A school eligible for Title I, Part A funds AND that: Has not made AYP for two consecutive years OR Is in the state's lowest quintile of performance based on reading/language arts and mathematics proficiency rates AND Does not meet the requirements to be a Tier I or Tier II school.

Three School Turnaround Studies

Study 1: Impacts of Chicago School Reform Efforts

Researchers from the Consortium on Chicago School Research at the University of Chicago and American Institutes for Research (AIR) recently examined reform initiatives in Chicago Public Schools (CPS) that target persistently low-achieving schools (de la Torre et al., 2013). The five reforms in the study occurred between 1997 and 2010. Each of the reforms required actions similar to the current federal model of turnaround, including the replacement of the school principal at all schools in addition to other locally determined organizational changes (e.g., significant staff replacement, longer school days, altered governance structure).[3] The report details the changes in student populations, teacher workforce, and student outcomes that occurred in 31 targeted Chicago schools. Descriptive analyses were conducted to highlight any post-reform shifts in teacher and student populations in these schools. A difference-in-differences approach was employed to compare pre-/post-reform trends in reading and mathematics achievement for elementary schools and absences and on-track-to-graduate rates for high schools. Student outcomes were compared with a group of matched schools that did not experience the intervention.

First, descriptive analyses comparing students enrolled in the school the fall before intervention to students enrolled in the fall right after intervention in the same grades were conducted. Seventy four percent (23 of 31) of schools enrolled fewer students after the reform, with five schools enrolling at least a quarter fewer students. With the exception of schools in the Closure and Restart model, the schools re-enrolled between 55 and 89 percent of students who could re-enrol, which

were similar to re-enrolment rates in the years prior to intervention. Although tracking students who exited turnaround schools were beyond the scope of the study, the composition of students by demographics was largely similar before and after the reform. Still, our inability to track exiting students is a clear limitation in the study because student turnover after intervention could be for reasons that are unobservable.

Descriptive analyses comparing the teacher workforce the year before reform to the teacher workforce the first year after reform were also conducted. The extent of teacher rehiring varied widely with the model of intervention. Post-reform teacher workforces across reform models were more likely to be white, younger, and less experienced than those teachers who were at the school prior to the intervention. In addition, post-reform teachers were more likely to hold provisional certification.

Then, reading and mathematics achievement for students in Grades 3 through 8 in reform schools were compared before and after the intervention and with similar schools that were not selected for reform. In the first year after reform, both reading and mathematics scores increased. However, these increases were not significantly different from the gains made in comparison schools. In the subsequent three years, reading and mathematics scores in elementary schools in reform improved gradually while scores in comparison schools did not. Controlling for student background characteristics and prior achievement, these differences were statistically significant.

Finally, the researchers examined trends in absences and on-track-to-graduate rates in high schools before and after the intervention and compared them with similar schools not selected for reform intervention. The on-track-to-graduate indicator used for this study was developed by the University of Chicago Consortium on Chicago School Research, where the number of "F's" or failing grades a student receives in their first year of high school and the number of credits that a student accumulates in that first year of high school predict whether or not the student will graduate on time (see Allensworth and Easton, 2005, for details). No significant differences in improved rates of absences or on-track-to-graduate rates after reform were evident in comparison.

As noted in the report, the study has several limitations. As with any quasi-experimental study, estimating causal effects and eliminating selection bias is always an issue. Schools were carefully matched in three different ways (e.g., nearest neighbour, calliper, and propensity score analysis: please see the de la Torre et al., 2013 study for complete details) on observable variables,[4] but even schools that have similar observable characteristics could differ in ways not accounted for in the matching. Similarly, changes in student enrolment and teacher demographics could be interpreted as confounds for the positive findings. On observable characteristics, student turnover seems consistent with previous mobility studies in Chicago (de la Torre and Gwynne, 2009), but it is possible that student mobility occurred in different ways or for different reasons when happening in turnaround schools. If so, we would find this antithetical to increasing student achievement by potentially displacing low-achieving students from the schools. But there is nothing in the descriptive data to suggest that this is the case. Differences in teacher demographics and experience, however, appear to be influenced by the reform. Although these changes can have lasting impacts beyond the scope of this study, the purpose of the turnaround model is to disrupt the norms of schools that persistently demonstrate low levels of student achievement. The social and political implications of such turnover are outside of the scope of this study. Further, it is plausible that the comparison schools might have been affected indirectly by the reform efforts in that they were selected from a pool of schools already identified for probation status.

Study 2: Turnaround Identification Process in Minnesota

At the request of some Minnesota state education agency leaders, researchers from American Institutes for Research assisted in the development of a statistical procedure that can be applied to school-level data to identify schools that have "turned around" or made substantial improvements in school-wide academic performance in a short amount of time (Meyers et al., 2012). Publicly available school-level data were obtained from the Minnesota Department of Education's website.

The data used for these analyses consist of school-level results on the Minnesota Comprehensive Assessment, Series II (MCA-II), Minnesota's standards-based high-stakes test administered to school children in reading (Grades 3–8 and Grade 10) and mathematics (Grades 3–8 and Grade 11). A pool of 1,381 public open-enrolment schools in Minnesota that had school-level data available between 2004 and 2009 were analysed.

Because no clearly defined statistical model for such an analysis existed at the time of this request, a statistical model was developed based on inclusion criteria cited in Herman et al.'s (2008) practice guide *Turning Around Chronically Low-Performing Schools.* Some refinements were made to this model to accommodate Ho's (2008) cautions regarding reliance on percent proficient and several questionable data patterns that may arise, all of which are discussed below.

The ongoing use of MCA-II as the state assessment over the years 2006–2009 made it possible for analysts to (1) create school composites using average MCA-II scores for students in each grade level and subject for each year; (2) determine which schools were "low performing" in the years 2004, 2005, and 2006; (3) identify which chronically low-performing schools (for years 2004–2006) made average gains equivalent to 0.25 standard deviations across the subsequent three years; and (4) to verify that these schools had been making constant nonnegative progressions from year to year. The analytic process used to identify these "substantial-improvement schools" involved the following steps (see Meyers et al., 2012):

1. The categorization of all schools by grade levels served, with nine categories or school types (e.g., K-2, 6-8, 9-12, etc.) total.
2. For each category of school, 2006 MCA-II averages for grades and subjects were factor analysed from principal component analysis. The primary factor represented schools' overall "performance." The schools in each category having the factor scores in the lowest 25th percentile were considered "*low performing*" in 2006. Lacking a clear definition of *poor performing*, the analysis team chose a cut-off point of 25th percentile as the benchmark for the poor-performing schools. Arbitrary and relative as this definition may be, it is clear that academic performance of students in these schools is substantially less than standards set by the state.
3. Similar factor scores were calculated for schools' MCA scores separately for 2004 and 2005. Schools within each category that were consistently in the lowest 25 percent based on their factor scores for 2004–2006 were considered "*chronically* low performing." Note that 2004 and 2005 data for schools are based on scores from a different test (MCA). However, the same grades and subject areas were tested in the same schools. The process of factor analysing school means by grade and subject for each school adjusts for differences in scaling.
4. For the chronically low-performing schools in each category, the differences in mean scores for each grade and subject area between 2009 and 2006 were calculated and scaled into an index known as Cohen's *d* (or standardized mean difference) by dividing by the pooled standard deviations, which were devised using each grade and subject area. Schools showing positive effect sizes for each grade level and subject area were considered "*improved.*"
5. The MCA-II averages for these improved schools for each grade/subject combination were plotted across years. Those schools showing nonnegative trends in school-level MCA-II averages by grade/subject in 75 percent of the years were considered "*steadily* improving."
6. Among those schools that were steadily improving, the net increase between 2006 and 2009 had to be large enough to signify clear improvement. The benchmark of average *d* values over 0.25 was established, and these schools were *initially* considered "substantial-improvement schools." A *d* of 0.25 was adopted based on the benchmark suggested in Herman et al. (2008).
7. Four schools were removed from the pool of initially identified substantial-improvement schools. One school had demonstrated a major change in school population when it merged with another neighbouring school. Three other schools demonstrated significant improvements since 2006, but these schools remained in the bottom 25th percentile of schools for their category.

After ruling out schools experiencing substantial demographic shifts, the research team identified the number of low-performing schools for each of the nine school categories. When also ensuring low performance for the two previous testing years (2004 and 2005), depending on school category, 11 percent to 48 percent of schools were no longer considered chronically low performing. Of these remaining schools, few (0 to 30 percent, depending on category) were able to demonstrate achievement gains in all grades and subjects from 2006 to 2009. More schools fell out of the running as substantially improving when the 75 percent year/grade/subject combinations and other considerations were taken into account. Ultimately, seven schools met all criteria: two K–4 schools, two K–5 schools, one K–6 school, one 5–8 school, and one 7–12 school. No traditional high school was determined to be substantially improved. This rigorous process for identifying turnaround schools was endorsed by state department personnel originally, as a related event occurred in the state capital at which principals of turnaround schools presented their success stories to peers. At approximately the same time, the federal government announced its parameters to be a school in need of turnaround in its School Improvement Grant competition. Although notably different and arguably less rigorous than the identification work developed on behalf of the state department of education, turnaround school identification and subsequent research and development were based on the new federal competition.

Study 3: School Improvement Grants in Midwestern States

Previous studies of School Improvement Grants examined schools in terms of eligibility status for SIG funds, school award status, and district applications for school funding (Klein, 2010) and analysed schools in terms of state identification of school tier level (a way to distinguish the lowest achieving schools), state prioritizing of funding awards, state determination of local education agency (LEA) capacity, and state monitoring and support of SIG implementation (Hurlburt et al., 2011). These analyses, however, are limited to schools eligible for and awarded SIG funding and have not considered differences between school achievement characteristics. Moreover, the analyses do not currently include indicators of school achievement.

This study focused on 2010 SIG funding in the Midwest and examined the academic performance of four sets of schools in each state: schools that were eligible for SIG funding, school that were included in district SIG applications, schools that were awarded SIG funding, and schools that were included in district SIG applications but were not awarded the funding (Meyers and Wan, 2012). This study addresses the following research question and sub-questions:

1. What are the school performance characteristics of Midwestern schools involved in the 2010 SIG process?
    a. What are the school performance characteristics of schools eligible for SIG funding?
    b. What are the school performance characteristics of eligible schools that were included in district proposals?
    c. What are the school performance characteristics of schools that were awarded funding?
    d. What are the school performance characteristics of schools included in district applications but not awarded funding?

To address these questions, we obtained publicly available data on school demographic, performance, accountability, and SIG application and award status from state education agency (SEA) websites and National Center for Education Statistics (NCES) website. Descriptive summaries of the four sets of schools in each state were recorded for four key performance indicators: AYP designations, school improvement status under the Elementary and Secondary Education Act (ESEA), percentage of students' proficient on statewide reading and mathematics tests, and high school graduation rates.

Key findings for each question may be summarized as follows.

AYP Designation. The percentages of schools that did not make Adequate Yearly Progress (AYP) overall in 2008–09 ranged from 76 percent to 100 percent among the four sets of schools in the seven Midwestern states. In general, higher percentages of proposed schools as compared to eligible schools failed AYP mathematics or reading proficiency requirements for the "all students" group and most student subgroups in five of the seven states (Illinois, Indiana, Iowa, Michigan, and Minnesota). In Ohio, higher proportions of eligible schools than proposed schools failed mathematics or reading proficiency requirements for the "all students" group and for most student subgroups.

In Illinois, Indiana, and Iowa, none of the funded schools or unfunded schools made overall AYP. In Michigan and Minnesota, larger percentages of unfunded schools failed overall AYP as well as most of the subgroup AYP requirements than funded schools did. In Ohio, higher percentages of funded schools failed overall AYP as well as subgroup mathematics or reading proficiency requirements than unfunded schools did.

Federal School Improvement Status. In all states but Indiana, the majority of the four sets of schools (ranging from 63 percent to 100 percent) were identified as in need of improvement under federal ESEA. In Illinois, Indiana, Iowa, Michigan, and Ohio, the majority of funded schools had been in improvement status for multiple years and hence concentrated in the more severe sanction categories. In Minnesota, funded schools scattered across improvement categories, and, in Wisconsin, half of the funded schools were in their first year of improvement.

In all states but Iowa, the four sets of schools contained schools that were not identified for improvement under federal accountability. Most of these schools in the four states (Illinois, Indiana, Michigan, and Ohio) that operate a state accountability system alongside the federal ESEA system were either identified as in need of improvement under ESEA or did not receive satisfactory ratings from states' own accountability systems. The percentages of schools not in improvement among funded schools ranged from five percent in Ohio to 50 percent in Indiana.

Performance on Statewide Tests: Grades 3–8 Tests. Proposed schools had lower average proficiency rates on statewide reading and mathematics tests for Grades 3–8 than did eligible schools in Indiana, Michigan, Minnesota, and Ohio. In Indiana and Ohio, compared with unfunded schools, funded schools have lower average proficiency rates in both reading and mathematics. In Minnesota, however, funded schools had higher average proficiency rate in both reading and mathematics. In Michigan, funded schools had lower average proficiency rate in mathematics than unfunded schools, but the two sets of schools had approximately the same average proficiency rate in reading.

Performance on Statewide Tests: High School Grades Tests. In Illinois, Michigan, and Ohio, eligible schools had higher average percent proficient rates in both mathematics and reading than did proposed schools. In Indiana and Minnesota, proposed schools had higher average proficient rates in mathematics than eligible schools did. Compared with unfunded schools, funded schools in Illinois and Michigan had higher average performance rates on state tests than unfunded schools in both mathematics and reading. In Ohio, funded schools had lower average proficiency rates in both subjects than unfunded schools. In Indiana and Minnesota, funded schools had higher average proficiency rates in reading but lower rates in mathematics than unfunded schools.

High School Graduation Rate. In five of the states (Illinois, Indiana, Michigan, Minnesota, and Ohio), proposed high schools had higher school graduation rates than eligible schools. Funded schools in Indiana and Iowa had lower average graduation rates than unfunded schools. Funded schools in Illinois, Michigan, Minnesota, and Ohio, however, had higher average graduation rates than unfunded schools.

The School Improvement Grant competition was created to offer the nation's lowest-achieving schools with a financial incentive to enact a model of school turnaround. Although the bottom five percent of schools by state were targeted federally, data presented indicate that only two of the seven Midwestern states actualized the federal goal. Three states had at least 15 percent of their schools identified as eligible for SIG funding. In four of the states, few schools eligible to compete for SIG dollars were actually part of a proposal submission for funding. And of those eligible schools that were part of an application, fewer than half were reward funding in five of the states.

As evidenced by overall AYP, schools with among the lowest levels of student achievement appear to have been selected by states to compete for SIG funding. None of the proposed schools (or subsequently funded schools) in Illinois, Indiana, or Iowa met overall AYP, suggesting that all of the schools in those states that were competing for the SIG funding were low achieving. In the remaining states, at a minimum, 84 percent of proposed schools failed to meet overall AYP. Similarly, at least 75 percent of funded schools failed to meet overall AYP in each state, although it is worth noting that a greater percentage of unfunded schools failed to meet overall AYP in Michigan and Minnesota.

However, a consideration of schools by federal improvement status suggests that schools with among the lowest levels of student achievement were not selected by some Midwestern states for SIG funding as frequently as overall AYP status might indicate. Illinois, Indiana, and Minnesota had noticeably higher percentages of proposed schools failing to meet AYP (100, 100, and 92 percent, respectively) than they did percentages of proposed schools in federal improvement status (68, 31, and 72 percent, respectively). A similar AYP-federal improvement status discrepancy exists in those states regarding schools awarded SIG funding: Illinois (100 versus 70 percent), Indiana (100 versus 43 percent), and Minnesota (90 versus 63 percent). Although the majority of funded schools across the seven states had been in improvement status for multiple years, it appears as though some consistently low-performing schools were not provided SIG funding.

The findings of this study are in no way conclusive, but they do provide an initial consideration of the extent to which the lowest-performing schools in the Midwest were targeted for and received SIG funding. These findings contribute to a baseline level of information for examining potential changes in indicators of school performance for eligible, proposed, and funded schools. This study also suggests that further consideration of the SIG process, including an examination of why states targeted certain eligible schools for SIG proposals and how decisions were made to award funding among proposed schools, is warranted. Finally, a substantial number of schools in each state did not compete for SIG funding although they were eligible, raising questions about district- and school-level decision-making processes on pursuit of federal funding. This has broad implications about policy mechanisms developed to incentivise district or school action for monetary gain. Most notably, it suggests that not all schools can actually compete, and therefore are probably not motivated in the intended ways. In addition, top down federal policy that does not fully consider tipping points might not induce the intended reactions: Schools with fewer resources often did not even enter the competition. Thus any type of policy such as the SIG one should be both substantial enough and attainable enough to warrant the resources that districts or schools would need to spend to compete.

Discussion

The three studies highlighted in this paper illustrate the complexities of both bottom-up and top-down interplay in school turnaround work. In brief, the lack of common definitions or clear criteria appears to hamper efforts at increasing knowledge about how chronically low performing schools can improve and how to know whether they have succeeded in this endeavour. The Chicago paper suggests that some of the "turnaround" processes can work, and SIG funds seem to be a federal attempt to scale up the Chicago approach. However states are taking inconsistent approaches to identify schools worthy of SIG funding. Finally, just as state and federal education agencies should provide some clarity in defining schools needing funds to implement turnaround processes, so, too, should states clarify the indicators for success.

More specifically, the study on students, teachers, and student achievement in Chicago measures the impact of school reform efforts that are similar to the federal models of turnaround, including reconstitution (the precursor for the American turnaround model), closure and restart, and other initiatives that require change in school leadership and other organizational and operational aspects. The primary focus of the study is impact on student achievement. Thus, the study includes and/or addresses both conceptualizations of school turnaround. On one hand, school turnaround is being measured as rapid improvement of student achievement (conceptualization one). On the

other hand, the reforms studied must be similar to the federally defined models of school turnaround (conceptualization two).

Some studies in the vein of the Chicago reform study – where reform initiatives focus on substantial change in administration and faculty – that are similar to the current federal models of turnaround appear to demonstrate increased student achievement. This is an important win for federal policymakers, clearly. At the same time, the study does little to clear up the conceptual disparity that exists when considering the term turnaround. Ultimately turnaround was both implemented and achieved, which begs the question, "which is more important?" If a school successfully increases student achievement in a very short period of time, does the process really matter? The process should be secondary to the primary goal of improving student performance.

It seems, however, that the secondary goal of establishing a process of turnaround often takes precedence over the primary goal of improved student achievement. First, the identification of so many schools (approximately 5,000) nationwide necessitates the implementation of similar models of turnaround for purposes of oversight and management. Second, the amount of money that the federal government has awarded for SIGs and other competitions seems to demand a certain level of cohesion across participating schools. The financial package offered appears to have shifted the understanding of and focus on turnaround from the outcome to the process.

This shift in focus is notable in the Minnesota school identification study. Although similar work to statistically identify turnaround schools has emerged in the last two years, there were few such models postulated at the time that state education officers expressed interest in the development of one. Principals of schools identified by American Institutes for Research (AIR) as turnaround schools were notified at the state's request and an event was held in which some principals of identified schools presented on their individual and organizational efforts to rapidly increase student achievement. At approximately the same time, the U.S. Department of Education made explicit the rules for states to receive School Improvement Grant funding. Some schools that had just been identified as turning around were once again labelled as among the state's worst, as defined federally. In addition, the model developed by AIR has not been used by the state of Minnesota since the federal rules were disseminated. Instead, the state education agency has developed its own model that is in compliance with federal guidelines.

The examination of the SIG funding across seven states in the Midwest of the United States is also suggestive. As evidenced by overall AYP, schools with among the lowest levels of student achievement were most frequently selected by states to compete for SIG funding. A consideration of schools by federal improvement status, however, suggests that schools with among the lowest levels of student achievement were not selected by some Midwestern states for SIG funding as frequently as overall AYP status might indicate. Illinois, Indiana, and Minnesota had noticeably higher percentages of proposed schools failing to meet AYP (100, 100, and 92 percent, respectively) than they did percentages of proposed schools in federal improvement states (68, 31, and 72 percent, respectively). A similar AYP-federal improvement status discrepancy exists in those states regarding schools awarded SIG funding: Illinois (100 versus 70 percent), Indiana (100 versus 43 percent), and Minnesota (90 versus 63 percent). Although, as highlighted in the findings and summary, the majority of funded schools across the seven states had been in improvement status for multiple years, it appears as though some consistently low-performing schools were not provided SIG funding.

The findings of the SIG study are in no way conclusive, but they do provide an initial consideration of the extent to which the lowest-performing schools in the Midwest were targeted for and received SIG funding. These findings contribute to a baseline level of information for examining potential changes in indicators of school performance for eligible, proposed, and funded schools. This study also suggests that further consideration of the SIG process, including an examination of why states targeted certain eligible schools for SIG proposals and how decisions were made to award funding among proposed schools, is warranted. Finally, a substantial number of schools in each state did not compete for SIG funding although they were eligible, raising questions about district- and school-level decision-making processes on pursuit of federal funding.

School turnaround demonstrates the power of federal initiatives in the United States to impact the public school system at all levels. State departments of education have responded in ways to obtain federal funding. Districts and schools generally with the least capacity to enact change have been challenged with an opportunity to win substantial dollars, but many elected not to compete. Increases in student achievement through such reform appear to be possible, but the human and social costs have yet to be adequately considered. The momentum behind federally funded models that are relatively inflexible have necessitated predictable state and local responses – that adaptation of those models for funding. This reaction has shifted needs sensing efforts, teacher development, and community engagement to compliance with one of the models. Little evidence exists to suggest that the models are effective, and even less consideration has been given to how the dramatic changes introduced in schools by these models impact schools and communities.

Notes

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[2] Title 1 originated in 1965 as part of the original Elementary and Secondary Education Act, most recently renewed in 2002 as No Child Left Behind. The purpose of Title 1 is to ensure that all children have fair and equitable opportunities to obtain quality education. Billions of dollars (approximately $25 for fiscal year 2007) are allocated across local education agencies to purchase programs and/or services such as Reading First and Head Start for students from low-income families.

[3] Beginning in 2006, Chicago Public Schools identified schools undergoing certain reforms as turnaround schools. The reform processes undertaken in these schools are reflective of and precursors to the current federal models designated as turnaround, transformation, and closure and restart.

[4] The school characteristics included in the propensity score analysis were school racial composition, percentage of students with limited English proficiency, percentage of students receiving special education services, percentage of students receiving free or reduced-priced lunch, attendance, mobility, percentage of students who were truant, the average concentration of poverty (male unemployment and percentage of families living under the poverty line) and social status (years of education and employment as managers or executives) in the census blocks where students reside, and the size of the school. In addition, reading and math scores and probation status from the prior three academic years were included in the construction of propensity scores.

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