



Globalising the Curriculum: A Case Study of Global-Local Curriculum Policy Tensions for an 'Independent' School

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ABSTRACT

This paper reports a single case study from a larger research project on curriculum policy in non-government schools in a variety of English-speaking developed countries. The Singapore case study school is exceptional in terms of its rapid development of policy and practices aimed at globalising its curriculum. The strategies it employs provide valuable insights into curriculum policy development generally.

Globalising the curriculum of the school is a process which is being negotiated within constraints at the local level in Singapore. Such constraints include a government mandated central curriculum framework; pressures from parents that the school continue to perform at the top of the league tables based on local external examinations; and time limitations.

A series of curriculum policy tensions were revealed when teaching staff were interviewed, and many of these tensions coalesce around contradictions in global-local orientations. There is no intention to imply that these tensions will necessarily be mirrored in other schools in other countries. However, many schools are now developing curriculum within a context of globalisation, as well as national/state outcomes-based curriculum frameworks and league tables. Thus, this exploratory study provides 'food for thought' in supporting work towards the most desirable effects of a global curriculum orientation, while helping to avoid the least desirable effects.

INTRODUCTION AND METHODOLOGICAL FRAMING

This paper is located within the domain of 'curriculum policy' research. A decade ago, Elmore and Sykes (1992, p. 189) concluded that future research on curriculum policy should "deal more systematically with the actual nature of teachers' work and its relationships to external influences" and "explore the variability in influences across settings". The study reported here takes up the challenge within the non-government schooling sector which continues to be neglected in the curriculum policy literature.

The current paper presents the findings from a single case study school in a larger project on 'whole' curriculum policy at the individual school level in non-government schools in a variety of English-speaking countries in the developed world - specifically New Zealand, Ireland, Australia and Singapore. 'Whole' curriculum, as opposed to one centered on particular school subjects like history or mathematics, entails considering the range of curriculum objectives sought by a school and how these objectives are characterized; the school's underlying values and beliefs; whether or not objectives are prescribed for some or all students; the pattern of components into which the curriculum is divided; how teachers and students are grouped in relation to this pattern; the methods used to evaluate the success of the work; and how the methods relate to the objectives. Notwithstanding that distinctions between government and non-government schools are blurring as the market ideology becomes more entrenched in education policy, non-government schools can be differentiated from government or state schools in at least two ways (Walford, 1989). First, they can be defined as schools that were privately founded, and secondly, they are schools

other than those under the governance of a local public school board or a government department.

The stimulation for adopting such a research focus emerged from reflections on the large corpus of literature which has emerged on the implications for government schooling arising out of various forces shaping educational policy internationally. In particular, the implementation of state-mandated, outcomes-based curriculum frameworks in many countries across the globe is having a profound impact on schools, and consequently there has been growing research attention to curriculum change in government schooling sectors. However, there does not appear to have been a parallel growth in research on curriculum policy in non-government schools. This lack of attention to non-government schools is particularly surprising in the case of curriculum reform, since, in a number of national/state contexts, initiatives which are now mandatory for both government and non-government schools go well beyond previous levels of state influence exercised through a certain amount of inspection and the preparation of students for public examinations. At the same time, not all forces attempting to influence curriculum policy are state-initiated only. Also, there are instances where such forces, while significant, are not state-initiated at all; they can be more global and/or more local in nature.

This study of 'whole' curriculum policy in individual non-government schools is guided by three research questions:

1. What are the main factors influencing curriculum change in the case study school?;
2. What is the nature of curriculum policy production in the case study school?;
3. What are the effects/consequences of curriculum development in the case study school?

These questions are derived from a 'policy cycle' approach (Ball, 1994) to policy analysis. According to this conceptual framework, a number of different contexts of the policy process are distinguished for analytic purposes. The first of these contexts is that of 'influence', where interest groups struggle over construction of policy discourses (research question 1). The second context is that of 'text production', where texts represent often complex and contradictory policy (research question 2). The third context is that of 'practice', where policy is subject to interpretation and recreation, and the policy produces effects and consequences which may represent a significant transformation from the original policy intent (research question 3).

The research reported here is framed within the interpretivist paradigm as the perspectives of teachers and senior managers in case study schools are sought on each of the research questions. A later meta-level of cross-case analysis draws on more critical theoretical perspectives. Interpretivism is based on a belief that social actors construct a world of lived reality by attaching specific meaning to local situations. As described by Crotty (1998, p. 67) interpretivism "looks for culturally derived and historically situated interpretations of the social life-world". The research methods employed here are based on qualitative approaches within individual case study schools. Case studies are appropriate because they allow detailed data to be collected at a single site, thereby enabling the researcher to gain an understanding of the complexities of that site (Coffey and Atkinson, 1996). Case studies are also appropriate where the aim is exploratory and a sense of 'wholeness' is to be preserved (Punch, 1998). The principal methods of data collection involve the use of documents and interviews. Initially, semi structured in-depth interviews are conducted with focus groups of 4 or 5 teachers (a total of approximately 20 respondents), as focus groups allow for participants to interact in exploring their own perceptions (Morgan, 1997). Then, individual follow-up interviews are conducted with key participants who have particularly rich

insights to offer. As part of the larger project, cross-case analysis will facilitate the identification of curriculum policy trends common to the different case study non-government schools in different countries as well as those which are unique to the specific context of individual schools.

The focus in this research is primarily on the curriculum policy perspectives of teachers and, to a lesser extent, senior managers in each case study school. Although a wider variety of stakeholders, including politicians, bureaucrats, employers, parents, and students might have been included, at this point an emphasis on teachers is justified since, in the final analysis, any change which is likely to take place at the centre of the educational enterprise, namely, the classroom, is dependent on how the classroom teacher interprets the policy texts constructed at the school level as a result of the various forces influencing their production. Thus, the assumption is that while powerful policy actors at the macro level can (and do) constrain curriculum policy processes occurring in individual schools, teachers can (and do) operate with some degree of agency to become, themselves, producers of localised curriculum policy.

While the data is collected within individual schools, the 'bigger picture' is kept in mind with attention to the dynamic interrelationships between 'the local' and 'the global'. Since studies are usually at the global or the local level, the important interrelationships between the two levels are neglected. On this, Rosenmund (2000) observes that even within countries which are very different, there has been a convergence of curriculum policy processes in the closing decades of the twentieth century, but he also emphasises, that there is constant tension between universalistic and context-specific curriculum processes. The current research is nestled within this tension.

The single case study reported here is that of Chinese High School (CHS) in Singapore. It is presented as a stand alone case study for two main reasons. First, it is an exemplar of a case study of curriculum policy in non-government schools. Second, what has emerged from this single study site is a particularly interesting case of a school which has developed a global orientation to its curriculum policy, and which has incorporated 'the global' into 'the local' extremely rapidly. This curriculum transition, however, has not been without its tensions and costs, as revealed in the analysis of the case study below. Subsequent to the case study, the paper concludes with a discussion of the 'bigger picture' implications of the findings. While there is no intention to generalise from a single case study, issues which emerge from the detailed investigation of curriculum policy processes in one non-government school are used as a basis for critical reflections on some 'bigger picture' themes.

THE CASE STUDY: CHINESE HIGH SCHOOL (CHS)

Prior to presentation of the data generated by documents and interviews with 20 teachers and senior managers, the context for the research is overviewed, consistent with the understanding that 'cases' are nestled within their own specific localised context and should not be studied in isolation from appropriate contextualisation. First, the national setting of education policy development in Singapore is briefly introduced. Then, the more specific setting of CHS is detailed. The subsequent three sections of the case study analyse the factors influencing curriculum change at the school at global, national and local levels; the nature of curriculum policy production at the school; and the effects and consequences of changing curriculum policy at the school.

The national setting

Singapore gained independence as a nation-state in 1965. Throughout its brief history the country has invested heavily in education for national development. Three main phases can be identified: the 'survival-driven' phase (1960s/70s); the 'efficiency-driven' phase (1980s); and the current 'ability-driven' phase (from the late 1990s). The latter phase has emerged due to explicit demands on the education system to "produce a creative and innovative workforce with the skills required in an increasingly competitive global economy" (Kam and Gopinathan, 1999 p. 101). The policy document, *Thinking Schools, Learning Nation* (Ministry of Education, 1997), with an emphasis on thinking skills, group and project work, and information technology (IT), is a major response to these demands.

Bottery (2000) identifies a 'Singaporean solution' to the pressures of globalisation as one of greater government intervention to enhance national competitiveness within the global marketplace, with a concomitant subordination of welfare policies, rather than allowing the market 'free' reign. Sharpe and Gopinathan (2002) draw on Brown and Lauder's (1997) two ideal-type national responses to meeting the 'crisis' of global competition when they describe recent reforms in Singapore as a hybrid between a 'neo-Fordist' emphasis on market competition (including the use of published league tables), along with concerns to increase standards on the one hand, and a 'post-Fordist' emphasis on creativity, innovation and teamwork on the other. They argue that this hybridity is a distinct feature of the Singaporean education context.

Notwithstanding recent developments, schooling in Singapore remains largely under centralised control by the Ministry of Education (MOE), albeit with the number of 'independent' and 'autonomous' schools increasing over the last decade in progressive moves towards devolution of governance, consistent with an increasing market ideology. Primary education is structured into four 'foundation' years followed by academic streaming and then two 'orientation' years. Secondary schools offer three streams - Special, Express and Normal. This early streaming reflects a view that a primary function of schooling is to select and allocate individuals to differential positions in a stratified society. Students from both Special and Express streams complete their secondary education by sitting for Singapore-Cambridge General Certificate of Education Ordinary Level (O level) examinations at the end of Secondary Four. By contrast, Normal stream students may take a fifth year to reach O levels or may divert into vocational education. The main difference between Special and Express streams is that the former are given the opportunity to study both English and Mother Tongue (Chinese, Malay and Tamil) at a higher level. Post-secondary education occurs in junior colleges and polytechnics, with junior colleges being the route to university entry through Singapore-Cambridge General Certificate of Education Advanced Level (A level) examinations. There have been consistent efforts to reduce attrition and increase access to university to equip the workforce with skills for the global knowledge economy (Kam and Gopinathan, 1999).

The school setting

Within Singapore, Chinese High School (CHS) is a selective fee-paying secondary school (from Secondary One to Secondary Four) for boys aged 13 to 16 years who meet high academic entrance criteria. The school attracts students scoring in the top 3% in the Primary School Leaving Examinations and it has remained in the top 3 schools in terms of performance in the O level examinations, as reflected in the national league tables which were established in the early 1990s. In 2002, the school has approximately 1800 students and 160 staff. A large new boarding facility which has just opened has the potential to significantly increase the size of the school's population. It also has the potential to enhance

its global orientation, as most of the boarders will be from other countries, especially China, while staff have been recruited from all over the world.

CHS school was established in 1919 as an initiative of a prominent wealthy merchant. During the turbulent 1930s all of its teaching staff resigned, there were temporary closures, and students were arrested for demonstrating. Nevertheless, the school survived, as it did in the 1950s when it was a site of political tension. In 1978 its position in Singapore education was strengthened when it was chosen as one of the Special Assistance Plan schools to nurture bilingualism. Since then it has continued to offer both English and Chinese as first languages, foregrounding its orientation beyond national borders. From the late 1980s students from different parts of Asia, especially Malaysia and China, have been attracted to CHS.

It is largely since it was granted 'independence' in 1988 that CHS has increasingly distinguished itself in the Singapore education landscape. In 1993, a new vision was articulated which continues to drive the school today. This vision clearly signals a more global than national orientation with the aspiration "to be a world class high school - where talents gather to set trends for betterment" and where the mission is "to nurture high academic achievers to be forerunners and leaders in research, technology, business and government in a dynamic environment where tradition meets technology" (CHS orientation pack, 2001). "Tradition" here refers to traditional Chinese cultural values which the school maintains through close connections with institutions and individuals in China.

In 1999, a decade after gaining 'independent' status, CHS was recognised as a national educational leader by the Permanent Secretary of Education: "CHS has indeed germinated a substantial number of innovative practices... which other schools can learn from. ... Chinese High has taken very good advantage of its autonomy" (Chiang, 1999). The Education Minister spoke in similar vein: "Chinese High has grown from strength to strength. ... due to its ability to respond nimbly to the demands of the changing times while retaining its place as the premier school in Singapore" (Teo, 1999). A new Principal was also appointed in 1999 and the first steps were taken towards restructuring using the concept of 'consortia' to create 'mini-schools' (or 'schools-within-a-school'). The term consortium was chosen from industry to signal closer connections with the corporate world where 'lean' companies respond quickly to changing external environments. The concept evolved during the period 1999-2002, with the primary aim being to break down rigid hierarchies in the school and empower teachers and students to make educational choices. There are currently four different consortia under the 'umbrella' of CHS. In the curriculum, the intention is to promote greater interdisciplinary linkages and collaboration in teaching and learning, consistent with a stronger emphasis on the holistic development of students.

This paper now moves on to analyse curriculum policy developments at CHS, as reported by teachers and senior managers. Reflecting the three central research questions, the data were collected and analysed under the three headings of: factors influencing curriculum change at the school; the nature of curriculum policy production at the school; and effects/consequences of changing curriculum policy at the school.

Factors influencing curriculum change at the school

Global Influences

When respondents were asked to identify factors influencing recent curriculum change at CHS there was a high degree of consensus that global influences are the most significant impetus, followed by national influences and then local ones. All referred to the demands of the global economy and the need for Singapore to be proactive in globalisation. They

pointed to the global vision of the school as the reason for broadening the scope of the curriculum and making it relevant in the global context. When asked to illustrate how the CHS curriculum has responded, most pointed to the three 'cutting edge' content knowledge priority areas of Information Technology (IT), Life Sciences and Photonics. The CHS curriculum also places an emphasis on learning processes such as team project work and research skills; processes which are increasingly deemed to be essential for an individual's participation in the global knowledge economy. Furthermore, the school is actively seeking global strategic alliances with a variety of organisations, including industries and universities. Alliances with corporations such as Apple, Sun, IBM and Fujitsu are providing significant sponsorship to establish the expensive support required for strategic curriculum enrichment areas. While it is recognised that these companies benefit from having a platform to trial their latest products, most respondents indicated that industrial sponsors set only general conditions and do not make many specific demands on the curriculum content. By contrast, tertiary institutions from a variety of countries, including Harvard University in the United States (US), have a strong impact on the curriculum content as academic specialists are actively consulted in the preparation of new courses.

In proactively positioning the school in the competitive global environment, around quarter of the staff travel each year to conferences in a wide range of countries, including the US, Finland, Sweden, France, England, Korea, and Australia. This travel is seen as a key feature of staff development - one classroom teacher gave the recent example of attending the National Science Teachers' Conference in the US. Then there are 'mission trips', when staff can take students on excursions to a wide range of different countries, including Kenya, Nepal, Malaysia, Thailand, Australia and China. During these trips staff identify new ideas and new people to bring back to CHS. In addition, there are 'incentive trips' for staff, usually taken during school holidays. While these involve a few visits to other schools, the main focus is recreation as a reward for being a high-performing teacher.

CHS hosts a frequent stream of international visitors. While these visitors seek information about innovations at the school, they are also invited to discuss and participate in strategic developments at the school. The school also seeks out global trends through extensive networks, including alumni associations in the Asian region, in the UK and in the US. Further, through an arrangement where staff study for a Master of Education degree taught on site at CHS by a traditional 'sandstone' Australian university, global influences are brought directly into the school.

National Influences

While the major national influence on CHS curriculum was identified as the Ministry of Education (MOE), the school is afforded considerable leeway by the Ministry to experiment with the curriculum because of its 'independent' status. According to one respondent: "we try to incorporate MOE requirements but if it doesn't fit in we don't do it. Mostly it does". At the same time, the school has largely remained within the acceptable limits of MOE expectations. Also, most respondents strongly felt the constraints placed on the curriculum by the highly competitive external O level examinations (at the end of Secondary Four) in which the school is expected to achieve 'top' status.

Other sources of influence on CHS curriculum are industries operating within the Singapore national context. In 1999 an industrial attachment program for students to gain work experience commenced, thus signalling a change from the traditional highly academic orientation. Although they involves only a relatively small percentage of students, industrial attachments are clearly carving a space in the curriculum and have extended as far as an industrial attachment for students in Silicon Valley in the US. Respondents indicated that

through such industry experiences, teachers in the school have realised the gaps in preparing students for the workforce and have moved to modify the curriculum accordingly.

Local Influences

While a high level of parental support was especially noted in the school's Gifted Programme (CHS is one of the 7 centres for the MOE's Gifted Programme in Singapore), all respondents believed that the local community, especially parents, have only a very limited influence on curriculum change in the school. Largely, parents are happy to leave the students in the school's hands. Yet, at the same time, several respondents did note the tendency for parents to be a conservative force for maintenance of an academic curriculum and some had offered resistance to the broader 'preparation for life in an era of globalisation' mission of the school. The response of the school was to attempt to 'sell' its broader mission to the parents.

The nature of curriculum policy production at the school

Respondents reported that over the last 10 years there had been little change to the O level subjects offered at CHS. The core curriculum is standardised, with very little choice available to students. Several respondents explained that the strong emphasis on science and mathematics was because these subjects tend to score more highly in the O level examinations and therefore enhance the school's position in the national league tables. By contrast, it is in the 'enrichment curriculum' at CHS that development has been exceptional and the school is seen as a curriculum leader in Singapore. CHS's Five Year Plan for 2000-2004 involves '*bringing in*' best practices from outside and '*going beyond*' to immerse teachers and students in cultural diversity and higher order academic and industrial applications.

The enrichment curriculum largely sits in parallel to the more standardised MOE curriculum. The school made an early attempt to enrich the curriculum the year after it gained 'independent' status by abolishing mid-year exams and replacing them with an annual camp for the whole school to develop non-academic pursuits. Respondents explained that, in general, the enrichment curriculum focuses on knowledge and skills required for engaging with the new global economy, in particular student-centred learning, problem-based learning, experiential learning, collaborative learning, interdisciplinary studies, and extensive use of IT. Project work, which occupies one-third of curriculum time, integrates many of these facets. Affective education, based on the life concepts of *Zi Qiang Bu Xi* (loosely translated as 'continuous self strengthening'), and the *Win-Win* philosophy, is given high priority with the appointment of both a Deputy Principal and a Dean of People Development, and four Senior Affective Consultants.

The enrichment programmes differ across consortia. Each consortium is given autonomy to plan its own enrichment curriculum, within the frameworks prescribed by both the MOE and the senior management of CHS. One consortium emphasises practical, hands-on learning, including industrial attachments; another emphasises constructivist learning, especially using travel and conferences to develop global awareness; while the consortium for gifted students features interdisciplinary problem solving projects. New curricula are usually developed through teamwork in a consortium and then they are 'marketed' to attract students who compete to enter the most favoured programmes and consortia. To mitigate against curriculum exclusivity, popular specialised curriculum from one consortium can be offered to both staff and students of other consortia.

Learning and Research Centres which supplement the core curriculum are a distinctive feature of CHS, with 10 Centres operating across all consortia and with no standard

structure. While the selection of each Centre's focus is based on global market trends, it is also driven by the interests of teachers and students, thus bringing together 'the global' and 'the local'. Amongst the Centres are those entitled 'Business and Finance', 'Chinese Language', 'English Language', 'Environmental Science', 'Information Technology', 'Mathematics', 'People Development', 'Photonics' and 'Biological Sciences'. While they "serve as hyper-learning centres at the cutting edge of their respective disciplines" (CHS orientation package, 2001), over three-quarters of them also have a strong economic orientation in terms of the direct industry links. Private companies provide both funds and expertise to run the Centres, and they generate revenue by marketing courses to other schools.

Most of the enrichment curriculum focuses on the lower secondary years (Secondary One and Secondary Two) as the upper secondary curriculum is still very much bound by the O level exams at the end of Secondary Four, thus restricting opportunities for new initiatives in those final years. Even in the lower secondary years, however, the enrichment curriculum sits in potential tension with the core curriculum. There have been occasional outcries from students - even the 'gifted' ones - asking why the curriculum needs to be enriched so much. Most of the enrichment work occurs after school when there are many competing demands on students' time. Several respondents explained that 'gifted' students are often 'gifted' across a number of different domains and therefore they are torn between choices in the enrichment curriculum. Time is a prevailing constraint.

Curriculum policy is continuing to evolve at a rapid rate at CHS and the next move by the school is to gain greater curriculum autonomy by adopting a 'through train' principle. This will involve by-passing O level examinations to offer 6 years of secondary education at CHS. The original plan was to use the International Baccalaureate for the final two years of schooling, leading to direct university entry throughout much of the world, thus further enhancing the school's global orientation. However, given the cost of the International Baccalaureate programme and the fact that Singapore universities would not recognise it as meeting entrance criteria, a modified version of the Singapore A level exams will be retained for CHS. In a separate development the Prime Minister announced in 2001 a policy to allow some schools to privatise, moving further beyond 'independent' status, with possible major implications for enhancing autonomy of curriculum policy in schools such as CHS. The details of what constitutes 'privatisation' of a school were still being negotiated at the time of writing in 2002.

But where does the initiative for curriculum change within the school, especially the enrichment curriculum, come from? The Dean of Studies described the process required to gain approval for new curricula as being initiated by Education Consultants (formerly called Heads of Department) in conjunction with teachers. The initiative is presented to the Dean of Studies who must ensure compliance with MOE requirements and she then unofficially discusses the initiative with the Deputy. The proposal then goes before the Studies Committee Meeting which largely consists of Education Consultants. Information on the proposed change is then given to the Heads of Consortia. The final endorsement comes from the Principal's Committee Meeting, which consists of the Principal, three Deputy Principals, two Deans, two Directors and the Discipline Master. Thus, it would appear that curriculum development at CHS is a bottom-up process. Some respondents, however, identified Heads of Consortia as the main drivers of curriculum change while others identified the Deputy and Principal as setting the key directions for curriculum change, as exemplified by the Principal's instrumental role in establishing Life Sciences as a priority area. Still others indicated that teachers may be requested to develop new curriculum by the school's management team rather than initiating it themselves.

One respondent provided a detailed exposition on the development of the affective curriculum in one consortium to address the perceived weaknesses in the former standardised, top-down, content-dominated approach. The stimulus for change came when a graduating student told the Principal during an assembly that he did not remember what he had learnt in Pastoral Care Moral Education classes. A follow-up study revealed that the majority of students had similar experiences. The compartmentalisation and segregation of moral education from academic education seemed to be a key issue. The Head of one consortium then formed a committee which sought feedback at the 'grassroots' level to draw on teacher, student and parent views of what the affective curriculum should look like. An external consultant was also employed to contribute to the design of the curriculum and planning was undertaken for the professional development of teachers. The new curriculum which emerged was based on activities such as team building games, expeditions, discussions and problem solving. Teachers continue to give spontaneous feedback as this affective curriculum is implemented, so it is ever-changing, and flexibility is maintained.

Overall, then, within the school, senior managers mainly identified teachers as the primary source of curriculum initiatives, but teachers were more likely to identify senior managers as initiators of a top-down curriculum process. It seems that strategic curriculum directions are set from the 'top', or at a minimum, school managers play a 'gatekeeper' role over new curriculum. However, teachers are intimately involved in shaping the specific content and pedagogy. As one teacher expressed it: "Without highly competent and motivated teachers the curriculum initiatives would stall. Curriculum change is ultimately driven by the passion of teachers". Most respondents noted the high degree of support and resources in terms of time and money for those teachers involved in curriculum development. Thus, within the school, curriculum production can be characterised as an interactive network of top-down and bottom-up processes.

Effects and consequences of changing curriculum policy at the school

A number of major themes emerged regarding the effects and consequences of changing curriculum policy at CHS: the changing balance in the curriculum; teacher workload and stress; the status of teachers as professionals; and more broadly the changing boundaries between government and non-government schools (in Singapore the nomenclature is 'independent', 'autonomous' and 'neighbourhood' schools). Each of these themes will now be considered in turn.

Changing balance in the curriculum

Respondents noted that there is not a great tension between content and values' orientations in the curriculum at CHS. The school is non-religious but there has always been a strong emphasis on traditional Chinese values at the school, which teachers have not found difficult to incorporate into their teaching and learning. The majority of respondents stated that the emphasis is somewhat more towards the content end of the continuum, while recognising that there is clear evidence of an increasing focus on values. A large majority of respondents characterised the CHS curriculum as having a strong academic orientation, although several noted that the recent industrial attachments programme is providing some moves towards incorporating vocational themes, albeit in a limited way.

Respondents were quite divided over whether the school is achieving desired interdisciplinary links across the curriculum. Most recognised that such links are occurring to some degree, especially with project work and in the Gifted Programme, yet they still felt that the curriculum is fragmented overall. Also, very few felt that the curriculum at CHS is highly individualistic, with most believing there is a reasonable balance between individualist and collective orientations. There was a large variation of opinion on whether the curriculum is

student-centred or teacher centred, although the indications were that change is towards more student-centred approaches.

A large majority identified heavy use of IT methods, although several felt there is a balance with traditional methods and several felt that traditional methods still prevail. Also, almost all respondents reported strong trends towards increasing IT. Finally, the majority of respondents maintained there is a reasonable balance between standardisation and diversity of curriculum provision in the school. Again, a large majority noted that even with strong pressure towards standardisation in preparation for O level exams, CHS is moving towards greater diversity of curriculum offerings.

Teacher workload and stress

There was a clear consensus amongst respondents that teacher workload has increased significantly. They noted a changing role of the teacher from transmitter of knowledge to a facilitator of learning. However, this transition is far from complete and far from unproblematic, even for those staff convinced of the need for change. One regularly-cited example of ongoing tension is pressure to maintain traditional content and pedagogy for student success in the O levels examinations (and hence the school's success in the national league tables), balanced against the need to develop the enrichment curriculum for a global orientation. While most of the staff seemed committed to diversifying the curriculum beyond academic activities and national borders, the school's performance on the Singapore league tables has dropped slightly in the previous year, thus renewing pressure from students and their parents for top academic results.

A cohort of respondents argued that the rapid rate of curriculum change represented challenges and not pressures. They explained that as a great deal of the curriculum change has been self-initiated by teachers working proactively, they are in control of their own work and thus any pressures are self-imposed. Although they acknowledged tensions, they were feeling good about the changes and very positive about the direction of curriculum policy at the school. As one respondent said: "It's an exciting time in education across the world. I work hard and I like the changes". Another respondent epitomised the most common reaction of CHS teachers to the changes as: "almost overwhelming ... but my head is still above water. It is stressful, challenging, exciting. Breathless is one word to describe it".

All agreed that lack of time is a major limitation on the development of curriculum change. Some felt there were too many changes in a short period and that such requirements as the need to meet a certain minimum quota of IT-infused lessons as part of a commitment to continually redesign lessons, is adding to teacher stress. Senior managers, on the other hand, believe that the change is not rapid enough and that more could be done, but they are also very aware of the need to manage the stresses on teachers.

The teacher as a professional.

Closely related to the degree of teacher involvement in curriculum development is the issue of the professional status of teachers. A number of respondents noted that at CHS teaching is being redefined from a routine vocation to a profession, where education is seen as an experiment. The feeling was that, in many ways the MOE is using CHS as its 'experimental laboratory' for innovative approaches which it might, or might not, introduce system-wide in Singapore. There was, however, a sense from respondents that they are taking a 'professional risk' because if the 'experiments' do not work, both they and the school will be seen as failures. On the whole, though, most respondents believe that the approach to curriculum policy development at CHS is enabling teachers to become more professional

because it provides them with the opportunity to do the things they believe in, and hence they are gaining a greater sense of professional achievement.

Changing boundaries between government and non-government schools

It was the official mission of schools given 'independent' status in Singapore in the late 1980s to provide models for national educational change. Initially there was a clear distinction between independent schools and others in Singapore, but respondents noted that the gap between CHS and others has been closing in recent times. The Government has been improving buildings and facilities at autonomous and neighbourhood schools, in line with its policy of heavy investment in education to drive national development. Also CHS staff felt that these other schools are able to catch up quickly to CHS as they do not need to 'waste time' experimenting with innovations because schools like CHS are doing all the 'hard work' to provide ready-made models for other schools to follow. However, respondents also believed it would be impossible for other schools to emulate the degree and nature of curriculum development at CHS, given the selection of both staff and students. As one respondent expressed it: "even if other schools were allocated the same level of [financial and physical] resources, the people may not be ready". Therefore there was recognition of the highly selective nature of human 'capital' at CHS. CHS is about to take the next steps in again widening the gap with other schools in Singapore as it proposes to by-pass O level exams, and further, to fully privatise the school. The autonomy of CHS, and hence the agency it enjoys in curriculum policy development, is growing.

Overall, the distinguishing features of the curriculum at CHS are initiatives to bridge theoretical (academic) and practical (vocational) orientations in terms of international connections to the 'real world', and the encouragement given to teachers to draw from international sources as they experiment with new content and pedagogy. These characteristics are significantly facilitated by the selective nature of the school population - both students and staff - and the availability of diverse sources of financial support from the government, student fees, business/industry and alumni.

CONCLUDING DISCUSSION: EMERGING ISSUES

Curriculum policy at CHS appears to be closely aligned with its globally-oriented mission, although there are national and local level constraints to be 'navigated'. There has been accelerated diversification of stakeholder input to curriculum policy processes at the school in the last decade from dominance by national government bureaucracy to increasing inputs from industries and universities operating in the global arena. Parents and students still have a limited influence on curriculum policy at CHS, but they do appear to act as a 'brake' on moving too far from the academic orientation which brings individual student success in examinations and school success in national league tables.

Currently in the academic literature there are arguments for collaborative relationships or partnerships in curriculum policy making (Macpherson, 2000). These refer to partnerships between teachers, parents and students. However, at CHS the collaborative partnerships are focused much more strongly on industries and universities. In many cases these partnerships are formalised in business-style documents such as a Memorandum of Understanding. This research suggests that CHS teachers and school managers may find parents too 'conservative' to be curriculum partners in developing the school's global mission. That is, parents may be too firmly embedded in a local orientation, especially short

term success in exams and league tables, to foster progress on the global stage. Supporters of league tables argue that they are an effective form of market accountability, forcing schools to engage more with external stakeholders, rather than continuing to operate on the basis of 'provider capture' where insider 'expert' perspectives are considered sufficient in the construction of curriculum. However, evidence from CHS suggests that national league tables can seriously impede a school's ability to actively engage with a wider range of stakeholders, and to diversify the curriculum beyond an academic orientation.

Empowerment of teachers in curriculum policy processes at the case study school is equivocal. On one level, the findings from CHS confirm the centrality of teachers in curriculum policy making as asserted by Macpherson (2000). However on another level, teacher empowerment in curriculum policy processes at CHS is still set within the limits defined by others - both externally (especially the MOE) and internally (senior management of the school). On this Kirk and MacDonald (2001) provide an interesting application of Bernstein's 'theory of social construction of pedagogic discourse' in suggesting that any authoritative voice of teachers is located within the context of implementation - meaning that it is the teachers' knowledge of localised context in the form of their students, colleagues, school resources and school structures that accounts for the invaluable contributions teachers make to curriculum development. Kirk and MacDonald go on to argue that as teachers make only a limited contribution to the construction of curriculum discourses, their ownership of curriculum change is limited.

The findings at CHS point to a variation on the theme developed by Kirk and MacDonald as CHS teachers appear to be empowered in curriculum change more on the basis of global knowledge than local knowledge. In other words, teacher influence in curriculum development is not restricted to knowledge of localised context. Rather, it also depends on 'global' knowledge of content and pedagogy gained through avenues such as overseas conferences and visits, and studying through overseas universities. Those teachers who perform well on the global stage are rewarded with more overseas trips which further consolidates their power, and their empowerment to develop curriculum, within the school. The distinction made by Townsend (1991) between 'cosmopolitan professionals' who lead comprehensive reform and 'local officials' who lead incremental reform and avoid controversy may be useful to further explore the global-local knowledge of teachers, and the associated power differentials, at schools like CHS.

While respondents believe that curriculum developments at the school have enhanced their professional status, following Sachs (2001) the question remains whether it is a 'managerial professionalism' associated with "an entrepreneurial identity in which the market and issues of accountability, economy, efficiency and effectiveness shape how teachers individually and collectively construct their professional identities" (p. 159), or a 'democratic professionalism' associated with activist professional identity in which collaborative cultures and communities of practice are integral to teachers' work. It would be useful to utilise these constructs in further investigating the nature of teacher professionalism in schools such as CHS, although some combination of these different forms is more likely to be evident than either 'pure' type.

The 'traditional wisdom' is that curriculum is a device which tends to reproduce social structure (Frey, 1991), but this case study suggests that CHS curriculum is used more as a vehicle for national educational change. In Singapore, CHS curriculum is both symbolic (signalling engagement with globalisation and its associated market ideology) and instrumental (serving a specific function as an experiment to identify innovations worthy of wider introduction at the system level). Within this national context, the relative power of MOE and CHS is equivocal. On the one hand, the MOE has empowered the school to develop innovative curriculum by granting it 'independent' status, and possibly 'private' status in the near future, but on the other hand MOE monitors the school's performance

through national league tables, reflecting the tensions of 'decentralised centralism' characteristic of many countries across the globe (Karlsen, 2000). The MOE appears to be in a *win-win* situation (ironically, the motto of CHS) as the school is taking the risks with curriculum 'experiments' but the MOE stands to claim benefit from any successes, yet distance itself from any failures; thus providing an example of 'exporting the crisis' (Whitty, Power and Halpin, 1998)?

There are some who, while recognising that the staff at CHS work tirelessly in the interests of their students, would also centre a critique on the market ideology which is clearly evident in the curriculum reforms at the school, exemplified by close collaboration with business/industry, and moves to assume full 'private' status. Indeed, CHS represents the 'leading edge' of a market ideology in Singapore education. Markets are based on competition and customer choices, but educational choices are not equally open to all students. CHS is selective in terms of fees and entrance scores and thus there is a potential confluence of financial and cultural capital operating to exclude some 'customers' from experiencing the enriched curriculum at schools such as CHS. As Whitty, Power and Halpin (1998) assert, choice reinforces social hierarchies. This suggests that an examination of the global-local dynamics of curriculum policy reform in Singapore should also ask questions such as 'what are the outcomes of the policy in terms of its impact on existing social inequalities?' and 'what political strategies might be adopted to address these inequalities?'

Overall, the interplay between 'the global' and 'the local' in curriculum policy processes at CHS is dynamic and there has been a constant need to negotiate the tensions between these levels. The linkages between local and global levels are relatively direct, often bypassing the national level, such that the national context provides the generalised policy climate but the 'real hybridization' (Van Zanten, 2002) is between local and global processes. This is not to imply that the state has 'rolled back' or 'hollowed out' as there remains strong steerage by the national government, albeit in a different form. The national government consistently supports its underlying assumption that education must enhance Singapore's position in the competitive global economy.

So, where to from here? This has been exploratory research. Accordingly, we need at this stage to underscore the point made by Rosenmund (2000), amongst others, that since case studies are closely connected with their specific context, the findings should not be directly transferred to other contexts. However, although there is no intention to generalise from the single case study of CHS presented in this paper, we take the position argued by Uhrmacher (1993) that case studies can constitute heuristic devices or 'good tools for thinking with', and they can provide the reader with some guidance for anticipating what may be found in other situations. Especially given the pervasiveness of globalisation - in both its technical and ideological dimensions - many of the issues raised in this single case study may well be highly pertinent to other schools in other settings.

The larger project of which this research is a part, will involve cross-case analyses to facilitate a better understanding of both similarities and differences, within and between countries - global trends and localised variations - in curriculum policy of non-government schools. Thrupp (2001, p. 207) cautions that in comparative work "it is all too easy to highlight the similarities between different policy settings just as it is all too easy to stress their differences". The larger project which encompasses this single case study highlights neither similarities nor differences but hopefully opens the spaces to expose what respondents have to say about their 'lived experience' of curriculum policy in their individual non-government schools, and then to facilitate dialogues about the themes which emerge. In this, we are at one with Ball (1998), who has argued that policy analysis should not be based on generic or local, macro or micro, constraint or agency, but on the changing relationships between them and their interpenetration. Such a concern with the dynamics of global-local

and constraint-agency relationships will continue to be foregrounded as the larger research project on curriculum policy unfolds across different contexts.

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