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## MOOSUNG LEE, PHILIP HALLINGER and ALLAN WALKER

Over the last four decades, International Baccalaureate (IB) schools have become increasingly important in the global market of international education. This is especially evident in Asia Pacific, which has evidenced the fastest growth in IB schools, as well as international schools more generally, across the world over the last decade. Despite this dramatic growth of international education in Asia Pacific, empirical research examining leadership in this context is scarce. This paper addresses this gap through the analysis of case study data collected in five International Baccalaureate Schools in East Asia. The purposes of the report are to explore key challenges facing IB school leaders in the region, and identify implications for researchers and IB school leaders.

Introduction

Schools offering the International Baccalaureate (IB) programmes, or IB Schools, have been key players in the global market of international education for several decades. IB Schools have developed a strong reputation for encouraging students to become active learners, well-rounded individuals and engaged world citizens (Hayden 2006). Over the last decade, the number of IB programmes adopted by schools around the world increased by almost 400%, from 923 programmes in 1999 to 3439 in 2010 (Interna-

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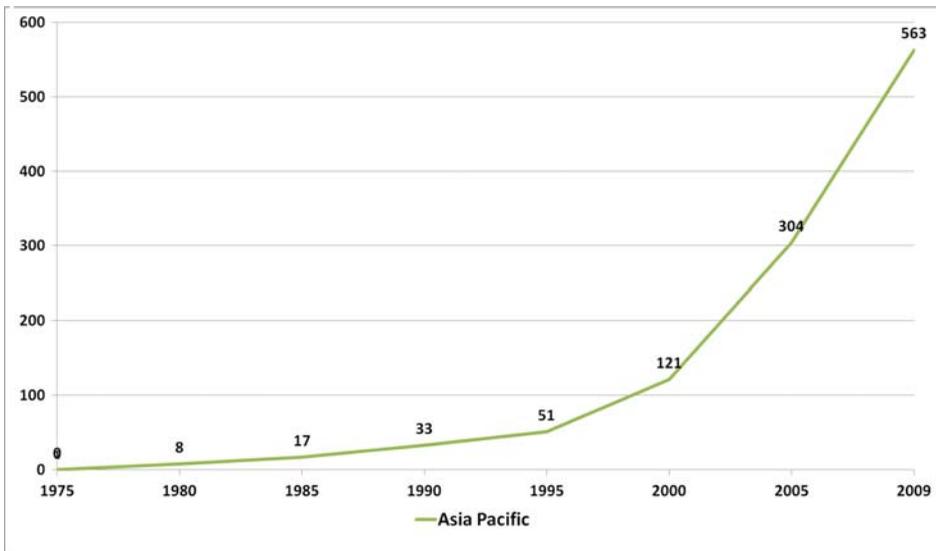
Figure 1.   The number of IB programmes in the Asia Pacific region. Source: Reconstructed from IBO (2010)

tional Baccalaureate Organization [IBO] 2009a). Moreover, the IBO projects that there will be 10,000 authorized IB schools serving more than two million students by the year 2020 (IBO 2009b). These statistics highlight not only the rapid growth of IB programmes, but also the growing influence of the IB in international education sector (Hayden 2006).

Amidst this trend of exponential growth demonstrated by IB schools globally, Asia Pacific has evidenced the most rapid gains in the number of IB schools since 2000 (IBO 2009b). As of 2010, 563 IB programmes had been adopted by 407 schools in the Asia Pacific region. As illustrated in Figure 1, over the last decade, a growing number of international schools in the Asia Pacific region have adopted one or more of the three IB programmes designed to cover the K–12 continuum: Primary Years Programme (PYP), Middle Years Programme (MYP) and Diploma Programme (DP).[1] Figure 2 further illustrates the rapid growth rate of IB schools (15.5% annual growth on average during the period from 2001 to 2009), compared to 'other international schools' (2.8% annual growth on average during the same period) or 'government schools' in the region (e.g. in both Australia and Hong Kong the number of students enroled in government schools during the same period evidenced a slight decline).

In-depth analysis of forces driving the expansion of international education in Asia Pacific is beyond the scope of this report. We do, however, note that IB programmes in this region are located almost exclusively in non-government (e.g. private or independent) schools. This contrasts with North America where IB programmes are found predominately in public (i.e. government funded) schools. We suggest that international education programmes such as the IB enable non-government schools in Asia Pacific to offer a credible, internationally validated alternative to the national
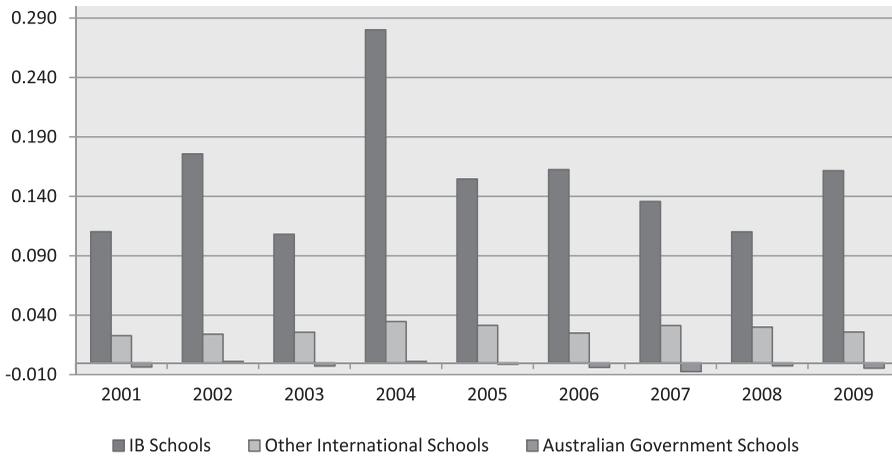
Figure 2.   The growth rate of IB programmes compared to other schools in the Asia Pacific region. Source: Reconstructed from databases of IBO (2010), ISC Research (2011), and Australian Bureau of Statistics (2011)

public education systems that also facilitates access to universities outside of the local environment.

For example, as of 2010, international education programmes located in Thailand were serving more than 100,000 students, and all were located in non-government schools (Khaopa and Kaewmukda 2010). Thus, we surmise that within the Asia Pacific context, international schools in general, and IB Schools in particular, have succeeded in creating a 'brand' or widely recognized identity associated with their educational service. This brand is associated with an international curriculum, multi-cultural student body, global portability of the degree and high-quality preparation for university entrance (see Tarc 2009 for details).[2]

In fact, IB brand recognition in Asia Pacific has been built on earlier penetration in the international education market in North America and Europe (Tarc 2009). Indeed, a decade ago Gehring (2001) referred to the IB's Diploma Programme as the 'Cadillac of College-Prep Programs' offered in the US. Here, we refer to IB adoption data to suggest that the IB brand is increasingly accepted by stakeholders in Asia Pacific as a credible, internationally validated alternative to national public education systems (see also Doherty 2009). In many Asia Pacific countries parents may find relatively few programmes offered in the government schools sector that offer prerequisites for university entrance in other countries (Lee *et al.* forthcoming). While traditionally this objective described the concerns of expatriate parents, in recent years, parents in Asian nations have sought similar opportunities for their children. Within this context, the IB's Diploma Programme has emerged as a key alternative for students in the international college entrance market, further boosting the IB brand (Lowe 1999).

Despite these growth trends, we observe that the literature on leadership in IB schools is very thin. In particular, empirical research exploring leadership in international schools in Asia Pacific is rarely found. With this

in mind, our study centred on the following question: what are key challenges facing IB school leaders in the Asia Pacific region? In seeking answers, we focused particularly on challenges embedded in IB programme implementation. This research focus not only serves to broaden our understanding of leadership in international schools, but also to deepen existing empirical descriptions of school leadership in the Asia Pacific region.

Leadership research in international school settings

As noted above, we assert that research on leadership in international schools is an underdeveloped field of inquiry (Bunnell 2006, Hayden 2006, Lee *et al.* forthcoming, Walker and Cheng 2009). This limitation is further accentuated if we limit the scope of inquiry to 'empirical' studies. Given the growing importance of this education sector, we were surprised that a thorough search of the literature uncovered only a relatively small number of published empirical studies (i.e. Hawley 1994, 1995, Gilliam 1997, Blandford and Shaw 2001, Biro 2003, McGhee 2003, Melton 2003, Keher 2004, Hayden 2006, Jabal 2006, Bunnell 2008, Halicioglu 2008, Hartman 2008, Hayden and Thompson 2008, Siskin and Weinstein 2008, Riesbeck 2008, Hall *et al.* 2009, Walker and Cheng 2009, Hallinger *et al.* 2010, Lee *et al.* forthcoming).

Despite this paucity of published empirical research, we note a growing consensus about the importance of leadership in International Schools. For example, using random sampling of 20 IB schools across the US, Gilliam (1997) found that strong leadership from principals and IB programme coordinators played a key role in successful DP implementation. More recently, Hall and colleagues (Hall *et al.* 2009) examined the implementation of PYP in 16 schools in the US. They gathered survey data from teachers and administrators in all of the schools, and conducted case studies in 3 of the 16 schools. Findings from the survey suggested that strong leadership was a key factor that facilitated successful PYP implementation in the schools. More specifically, Hartman (2008) found that personal characteristics of principals such as emotional intelligence influenced trust levels between teachers and principals. Trust levels between the two groups were also associated with successful PYP implementation.

Riesbeck (2008) identified factors contributing to the success of IB Diploma programmes (IBDP) in 30 American secondary schools by comparing 'top decile' and 'bottom decile' schools as defined by pass rates in the Diploma Programme. According to the study, four leadership characteristics differentiated principals in the top decile IB schools: modelling professional behaviour, promoting IB programmes to the public, enthusiasm or passion about their IB programmes and exhibiting good public relations skills. In addition, teachers reported that middle-level leaders (i.e. IB Coordinators) in successful DP programmes were more responsive to teachers' needs, supported the IB philosophy, promoted the IB programme to the public and were enthusiastic about their IB programme.

Hallinger and colleagues (2010) provided a more comprehensive view of leadership practices in East Asian IB schools. According to their study

of IB schools implementing the full continuum of the IB programmes (i.e. PYP, MYP and DP programmes), the complexity of formal organization triggered a demand for more comprehensive instructional leadership. In these full-continuum schools, instructional leadership provided connective tissue binding the three IB programmes through cross-programme activities, curriculum articulation and a strategic approach towards staffing. These leadership practices were evidenced through a widely distributed network of formal and informal instructional leaders.

Previous empirical research has also documented leadership and management 'challenges' facing IB programme implementation. For example, Biro (2003) reported that the complex web of teacher interactions involved in IB PYP implementation contributed significantly to a culture of shared responsibility for student learning. Biro further suggested that school management played an important supporting role through securing scheduled joint planning time that enabled regular teacher interaction around teaching and learning. In her study of Turkish national schools employing the IBDP, Halicioglu (2008) found that a lack of consensus of the definition of international education in general and IB programmes represented a potential obstacle at the management level. Gilliam's study (1997), noted above, identified the need for educating relevant stakeholders and providing professional development opportunities centred on IB programme implementation for teachers. McGhee (2003) further noted the importance of timetabling, recruitment and the deployment and training of staff in fostering philosophical commitment as well as skills in IB programmes. Hall and colleagues (2009) highlighted potential problems aligning the philosophy and content of IB programmes with 'local' or national government standards.

Although their research did not focus specifically on leadership issues, Millikan's (2001) and Stobie's (2005, 2007) studies identified challenges in IB programme implementation. Using case study methodology, Milikan, found that teachers, 'perceived structural differences both within and between programmes' (p. 4). This emerged from the fact that various IB programmes employ different terminology to describe key features of the learning process and outputs.

Stobie's (2005, 2007) studies found that differences between MYP and DP programmes created structural barriers to achieving coherence and consistency as students moved through schools that were implementing multiple IB programmes. MYP was regarded as needing more teacher input and interpretation in curriculum design because MYP is offered as a programme rather than as a curriculum per se. This suggested a greater need for middle-level programme leadership and teacher coordination in curriculum planning and implementation in MYP than in the content-oriented, examination-driven Diploma Programme (Stobie 2005, 2007).

Along with these empirical studies, several experts on IB education have offered insightful arguments regarding leadership challenges in International Schools (e.g. Blandford and Shaw 2001, Hayden 2006, Hayden and Thompson 2008). For example, Hayden (2006) pointed out that it requires leadership to transform the multi-cultural and multi-ethnic composition of international schools from a challenge into an educational

asset (see also Dimmock and Walker 2005, Walker and Dimmock 2005). Another persistent leadership challenge lies in the high turnover rate of both teachers and administrators in international schools. This can impede long-term planning and necessitates more frequent cycles of teacher training and development in order to maintain programme coherence and continuity and fidelity to the IB's core principles (see also Hawley 1994, 1995, Blandford and Shaw 2001, Hayden 2006).

International schools as a 'context' for leadership

Blandford and Shaw (2001) offer a comprehensive list of features that shape the context for leadership in international schools. These include:

1. High but diverse parental expectations;
2. High rate of staff turnover and student mobility;
3. Politics surrounding the position of the school head;
4. Unclear roles or inappropriate involvement of school owners and Board members in school operations;
5. Conflicting pressures emerging from the need for compliance with host country education laws and policies and the educational goals and processes guiding international education;
6. Fluid participation of members of the school board of governors;
7. Cultural diversity of staff, students and board members;
8. Conflicts between local and global curriculum standards and expectations;
9. Competitive pressures for student intake (pp. 24–25).

Drawing from our review of the literature, we note that leaders in international school settings find themselves facing a number of challenges. While some of these have been identified in the broader educational leadership and management literature, others appear to be embedded in contextual differences that describe these particular school settings. When considering the importance of locating leadership in the context where it is enacted (e.g. Bossert *et al*. 1982, Hallinger and Murphy 1986, Goldring *et al*. 2008), we further note that most of the empirical research cited in this paper was conducted in Western societies (e.g. US, UK, Australia, Canada). Indeed, we were only able to locate three studies that explored leadership issues targeting leadership in international schools in Asia (i.e. Jabal 2006, Bunnell 2008, Hallinger *et al*. 2010). This supports our contention that more studies are needed that explore leadership in international schools in this high-growth region[3] of the world.

Figure 3 presents a conceptual framework for understanding the context of leadership challenges based on our review of relevant literature. Prior reviews of research in educational leadership have yielded a consensus that school leaders are influenced by both external (i.e. environmental) and internal (organizational) contexts (e.g. Bossert *et al*. 1982, Yukl 1989, Leithwood *et al*. 1996, Hoy and Miskel 2001). Coupled with this perspective, we adopt Dimmock's (1996) framework, capturing school
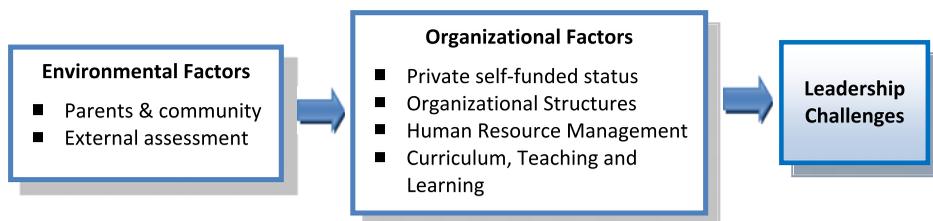
Figure 3.   The context of leadership challenge. Adapted from Dimmock (1996), Walker and Dimmock (2000)

leadership dilemmas, in order to illuminate the range of challenges facing IB school leaders in the Asia Pacific region. Various challenges relevant to both external and internal factors will be discussed later in this paper.

Methodology

This report focuses on qualitative data collected as part of a larger, multi-method global study of IB programme implementation (Hallinger *et al*. 2010). The study employed a sequential explanatory, mixed methods research design (Creswell 2008). Qualitative case study data were collected following the analysis of quantitative survey data collected from 175 IB schools throughout the world. The purpose behind this research design was to gain more specific insight into how global trends concerning programme implementation played out in IB Schools in East Asia (Hallinger *et al*. 2010). Qualitative data were collected in case studies (Yin 1994) of five full-continuum IB schools located in Thailand, Vietnam, Hong Kong and mainland China.

School selection

The five case study schools were identified collaboratively with staff from the IBO (see Table 1).[4] Several selection criteria were employed. First, consistent with the primary purpose of the study, we selected schools that were offering the full continuum of IB programmes. Second, we sought diversity in terms of country, school size and type of student populations (see Table 1). Third, once these criteria were met, we then selected schools that showed relatively better school performance in the DP-level average subject grade than other IB schools (see Table 1).

Data collection

As noted above, this report focuses solely upon qualitative data collected during the course of case studies conducted at five IB schools. The data were collected data through interviews conducted with teachers, administrators and students. In total, we interviewed 68 teachers and administrators, as well as 25 students. Most of the administrators were individually interviewed for half an hour to one hour while teachers and students were generally interviewed in group settings for about

Table 1.   General information of the case schools[a]

Name of school	School size	Year founded	Faculty–student ratio	Number of student nationalities	Average DP subject grade[b]
School 1	1410	1990s	1:7.5	50	5.38
School 2	475	1990s	1:7.0	35	5.59
School 3	892	1980s	1:4.9	51	5.33
School 4	1748	2000s	1:16.3	40	5.12
School 5	1450	1990s	1:7.3	54	5.36

[a] All information based on the year of 2009. For the anonymity of interview participants, some school information such as location, country and mission statement is not presented in the table. For the same purpose, the exact year each school was founded is not provided.
[b] The average subject grade in IB schools around the world in 2009 was 4.69.

one hour (see Appendix 1 for details about our interview data collection scheme). At least two interviewers were involved in most of the interviews. The semi-structured interview protocol focused on key staff members' and students' perceptions of challenges in association with the IB programme implementation. By employing similar interview procedures with the same basic protocol, the iterative process of data collection functioned as a variant of the constant comparative method (Corbin and Strauss 1998).

Data analysis

In order to reduce the approximately 150 hours of interview data, into a smaller number of analytical units, we conducted pattern coding based on similar themes (Miles and Huberman 1994). We contextualized the data by first integrating each theme into an individual school profile and then aggregating and comparing thematic coding across schools.

Several efforts were made to address validity and reliability of the data analysis. First, we checked possible factual errors in our interview data by cross-checking with each principal of the selected schools and relevant archival data. Second, we used analytic memos in triangulating the interview data. Third, the two data analysts coded the data independently and then checked data coding with a partner. To ensure coding reliability, inter-rater reliability was checked with 10 randomly selected interview files. Fourth, we also sought feedback from other members of the multicultural interviewing team (i.e. American, Australian, Chinese, Korean). This feedback-solicitation process enabled us to surface alternative interpretations of the same transcript and contributed to a better understanding of seemingly discrepant statements. Finally, all data were organized using NVivo 8 software in order to organize the information for thematic analysis and cross-school comparisons.

Results

The results are presented in a manner consistent with our conceptual framework (see Figure 3). We first examine challenges that emerge from

sources outside the school. Then we consider how the organizational context of international schools in general and IB schools in particular shape leadership challenges.

Leadership challenges from external influences

Features of the school's environment shape the structure and culture of schools in general, as well as the work activities of school leaders (Dwyer *et al.* 1983, Peterson 1984, Hallinger and Murphy 1986, Peterson *et al.* 1987, Hoy and Miskel 2001). Broad external factors include social culture, economic development level and national education system, to name a few (Garton 2002, Hallinger *et al.* 2005, Silins and Mulford 2010, Lee and Hallinger forthcoming).[5] Nested within these broad factors are a host of more specific factors (e.g. district policies and practices, parental expectations and involvements, neighbourhood socioeconomic status) that influence the activities of school leaders (Bossert *et al.* 1982, Peterson 1984, Peterson *et al.* 1987, Goldring *et al.* 2008). Principals are sensitive to these external factors which create both constraints and opportunities for leadership (e.g. Bridges 1977, Dwyer *et al.* 1983, Leithwood *et al.* 1990, Opdenakker and Van Damme 2007). Based on our data, we wish to highlight two factors in the environment of international schools that shape the role and challenges for leaders: parent and community context, and external assessments.

Parents and community. Parental interpretation and expectations of IB programmes in East Asia are rooted in a social culture that places a strong value on education and learning. Research shows that high parent expectations for education success (or 'education fever' described by Seth 2002) permeates many countries in East Asia. This social norm is reflected in recent demographic data which indicate that the traditional global consumers of international education, highly mobile expatriate professional parents, have increasingly been joined by parents from local communities in Asia. According to ISC Research Limited (2008), approximately 80% of students in international schools now come from the wealthiest 5% of local populations (Walker and Cheng 2009). These 'segments' of the broader education market are often seeking high-quality education alternatives offered in English that are unavailable in the local or national school system.

For example, the number of officially registered international schools operating in Thailand grew from less than 20 in 1997 to 136 in 2010. This exponential growth was driven primarily by increasing demand from 'local' Thai parents. As such, in 2010, the children of expatriate parents represent only 30% of the students attending international schools in Thailand (Khaopa and Kaewmukda 2010). A similar trend is evident in Hong Kong. For example, 51% of the students enroled in our case study school were local Hong Kong Chinese students.[6]

In the Asia Pacific region, international education has come to be viewed as an alternative that is capable of preparing children with a wider

range of options for overseas university entrance as well as for future career choices in a global society (Doherty 2009). This is reflected in the marketing and public communication materials of international schools which frequently highlight the number of students admitted into reputable universities outside of the host country (e.g. see Khaopa and Kaewmukda 2010, ISB Thailand 2011, Regent's Schools Thailand 2011).

IB school administrators highlighted the challenge they face in achieving and sustaining congruence between IB programme philosophy and the social norms of East Asian societies. More specifically, the educational philosophies of East Asian parents (e.g. orientation towards exam results, teacher-directed instruction and focus on learning subject content) often conflict with the student-directed, process-oriented, 'deep learning' approach embraced by the IB programmes, especially the PYP and MYP. Although this conflict was somewhat less apparent with respect to the DP programme which is more exam and content-oriented, however this tension impacted school leaders and teachers as they sought to implement IB programmes in these 'full continuum' schools. Resolving this tension required school leaders to devote significant resources towards 'educating' parents about the rationale and process of IB programmes.

> A lot of Asian populations come from countries that are very exam-oriented. And so the inquiry-based learning process and project-based learning is something initially frankly unsettling to some of those populations, especially in the PYP … I think, their [parents] stress and strain is more of 'oh, there is no exam so how can we know that the kids are learning?' that kind of thing or 'oh, there is no exam so how can we know that it is rigorous?' 'My kid should be stressed out for exams' or 'if they don't have that type of academic experience, they must not be working hard or something.' So there's a lot of education that goes along with that. (Secondary School Principal, School 2)

Furthermore, while a majority of students in each of the five case schools came from the host country, a substantial proportion of students in the schools were from other Asian countries (e.g. Korea, Japan, Singapore, Taiwan, India) in which high-stakes exams are dominant.

DP Coordinator, School 1:	We have a lot of students who choose, for example, Physics or Chemistry [in DP] … It is partly from parental pressure because most of the parents want Math, Physics and Chemistry. They are very traditional. They want their children to be engineers or doctors.
Interviewer 1:	Is that true across nationalities or is that mostly the Thai parents?
DP Coordinator, School 1:	It's Thai and Indian….
MYP coordinator, School 1:	Actually it is true of all of the Asian groups.
DP Coordinator, School 1:	Yes. It is not the Europeans or North Americans at all. So the Asian students are pushed to study the subjects that they find most difficult and may or may not wish to study themselves.

This suggests that Asian parents hold culturally-influenced motivations and expectations for sending their children to international schools. These expectations can lead to somewhat different interpretations of IB programmes and result in a variety of pressures that school leaders must address. Thus, school leaders in the IB case schools talked extensively about the need to address, balance, reconcile and subtly attempt to realign the expectations of Asian parents while maintaining the fidelity of the IB mission and programme philosophies.

External assessment.   Another external factor was represented by the IB Diploma exam which impacts directly on university entrance. The DP assessments functioned as a key external constraint by shaping the learning culture of the DP programme. At times, this appeared to make transition from the MYP programme more difficult for students, and impacted the efforts of school leaders to develop a coherent school-wide philosophy and consistency in approach across programmes. This was exemplified in the following interview.

> It is what the university wants... So, the MYP is far more oriented towards [learning] processes and skills, whereas the DP is very much content driven. It [DP] is 240 hours.[7] We are just bombarding 240 hours of teaching time for [IB DP 2010] the May exams. There is very little time to create [inquiry-based] learning because you've got only half an hour to teach one batch, and you've got to go directly to the content. (DP Coordinator, School 3)

This suggests that the IB programmes are strongly influenced by the DP examinations that are required for university entrance. In this regard, IB schools are no exceptions to the trend in which the secondary school curriculum in many countries is shaped by university entrance examinations (Dimmock 1996). Nonetheless, we suggest that the magnitude of this challenge in IB schools may be accentuated by the distinctiveness of the individual IB programmes (i.e. DP, MYP, PYP) and their private, self-funded status. Thus we wish to highlight the leadership challenge in IB programme implementation that emerges from the distinctiveness of the programmes even as they operate under a common IB framework at a more general level.

Leadership challenges emerging from the organizational context

The internal organization of international schools also acts as a 'context for leadership' (Bossert *et al.* 1982, Hallinger 1986). In this report, we focus on four specific features of the international school context. These are their private self-funded status, structural organization, human resource systems, and curriculum, teaching and learning structures and processes.

Private, self-funded status.   All five of the participating schools reflect the private, self-funded status that predominates among IB Schools in the Asia Pacific region. This feature is so obvious as to be easily overlooked, like a 'blind spot' in our field of vision (Hallinger and Heck 1996). Nonetheless, its importance in understanding the leadership challenges facing school heads and principals cannot be overstated.

These schools operate in highly competitive local environments. Competition is fierce for quality students, administrators and teachers. These schools target parents who are highly sensitive to differences in price and quality. We note, for example, the density of international schools (136) in Thailand, where most of the schools operate in and around Bangkok. Gaining entry into more established international schools in Bangkok may not be easy from the student and parent

perspective. However, the nature of this competitive market means that the administrators at international schools must work hard to gain and keep a full complement of applicants who are likely to succeed in their challenging programmes.

Moreover, news travels fast in these densely networked East Asian communities, none more so than the success rates of students gaining entry into good colleges. As suggested above, many parents in East Asia choose international schools based on a perception that they represent a reliable 'safe haven' from the public school system. In East Asia, smaller classes, a predominance of foreign instructors, better facilities, instruction in English and other 'foreign' languages, and an international curriculum are key factors in parental decision-making. Any failure to meet parental expectations results in a loss of students and revenue.

Thus, we wish to highlight the ongoing public communication and public relations challenge faced by the school head, as well as the principals of the composite school programmes. The school head is expected to act as a CEO with primary responsibility for managing relations with various external stakeholders, such as parents, community groups and the Ministry of Education. The pressure that these forces exert on the School Head and Principals is reflected in the high turnover rates evidenced in these positions (Hawley 1994, 1995). Thus, this contextual feature of international schools in East Asia inevitably shapes approaches to leadership as well as the allocation of roles, time and duties.

Organizational structures.   We begin by reemphasizing the point that each of the schools in our multi-site case study offered a full continuum of K–12 educational services. Each school was organized into three separate schools-within-a-school organized around a specific IB programme (i.e. PYP, MYP, DP). Each of the five IB schools had a headmaster who acted as a CEO, as well as principals responsible for each of the composite schools, vice principals, IB coordinators and subject department heads. Leadership responsibilities were, therefore, widely distributed both formally and informally. While the schools were well-staffed and hosted elaborate leadership teams, these positive features of the school organizations represented a coordination challenge at the overall school administrative level and within the composite schools. Problems evidenced in programme transition suggested that a major challenge for leaders in these well-resourced schools lie in making the total add up to more than the sum of their parts.

Another important challenge emerged from the compositional structure of these schools. While both teachers and principals were unequivocal in their belief that cultural diversity represented a strength in their schools, diversity brought challenges as well. The five case schools served diverse student populations, ranging from 35 to 54 different ethnicities and this diversity generated a variety of practical management issues. For example, even though most of the case schools pursued bilingualism (i.e. both English and host country language), parents also expected schools to meet student needs for learning additional languages in accordance with their ethnicities. It could be a daunting task to meet the diversity of those needs.

Historically we started with Korean, Japanese, Mandarin and Hindi and Thai, of course. So these five languages went from a simple language to the DP languages … because of the staffing issue … we combined class timetables, Years 3 and 4 together, Years 5 and 6 together …. In the Japanese class, there might not be any student in Year 7, but in Year 8 there might be two students. In the past, we combined Years 7, 8, 9, and 10. And I kept Year 11 separated … because I wanted Year 11 to be a pre-IB course. (Head of Language Department, School 1)

Another structural issue was associated with unique features of the specific IB programmes. As noted above, the case schools had developed complex formal organizational structures. The formal administrative and curriculum leadership roles were supplemented by special committees (e.g. articulation committees) and teams (e.g. pastoral support teams, project teams). Although there were obviously 'stories of success' in IB programme implementation identified in the case schools, it was not an easy task for IB school leaders to establish the necessary 'connective tissue' in such multilayered organizational structures (Firestone and Wilson 1985). This challenge was singled out especially in the larger case schools (e.g. over 1400 students).

We are a large school so we are not going to sit down and have teachers together for the time. We need to be able to see what's happening…to provide more concrete guidelines for curriculum consistency [within and between IB programmes]. I am actually working with two sets of staff [middle and high schools] …. The biggest challenge is actually having conversations across both. But to be honest given the size of our school, you'd have those challenges anyway. Do you know what I mean? You would actually have challenges, even if…we didn't have that break between middle and high school, you'd still have to have those issues of how you would get such a large staff together to have collaborative planning together. (MYP Coordinator, School 5)

Human resource management.   With respect to human resource management, previous research identified staffing as a particular challenge in international schools (Blandford and Shaw 2001, Hayden 2006). For example, Hayden (2006) highlighted the challenge related to the recruitment of administrators as well as teachers in international schools. Hawley's research (1994, 1995) has been frequently cited as evidence of high turnover rates and lack of job security among administrators in international school.

While we noted a latent concern about the consequences of staff turnover in some of the case schools, a more focused problem that emerged from our data concerned the recruitment and staff deployment.[8] Because of the complexity of formal organization and quality demands in these schools, administrators were especially concerned with hiring the 'right' persons and allocating them to the 'right' positions.

… there is no more important role of a principal than hiring … Jim Collins [the author of *Good to Great: Why Some Companies Make the Leap … And Others Don't*] has this great metaphor about not just getting people, the right people on the bus, but finding the right seat for them … (Head, School 4)

Most leaders in the case schools preferred to hire teachers with previous IB teaching experience, though this was not a prerequisite. Hiring teachers with IB experience enabled a smoother transition. The new staff would be more familiar with the substantial IB jargon and also

possess requisite knowledge of the IB philosophy and related learning and teaching practices. The case schools employed multiple positioning as a way of staff deployment—i.e. one person takes charge of more than one position. Cross-programme teaching was a typical example of multiple positioning. Cross-programme involvement such as MYP teachers' mentor role for PYP students' exhibition was another usual case of multiple positioning. Furthermore, staff with administrative positions (e.g. Programme Coordinators in School 3 and Principals in School 4) were sometimes involved in other administrative positions or teaching certain subjects as a teacher. Additionally, intentional position switching—e.g. some teachers taught MYP last year but they teach DP this year—was frequently identified.

Multiple positioning was a practical means of dealing with timetabling issues and staff deployment in response to the complexity of formal organization. It also contributed to IB programme coherence and consistency by promoting cross-programme fertilization. We note, however, that implementing multiple positioning required school staff's 'extra-work' and deliberate management planning. In addition, it meant allocating resources to train the teacher for multiple tasks. However, providing the necessary professional development opportunities was often constrained by various school conditions.

> To move the teacher from program to program is quite expensive for a school ... [that is] we train some PYP teachers to be MYP teachers because we have a gap in the programs ... [however] financially as well, there is a constraint. (DP Coordinator, School 2)

As such, using the strategy of multiple positioning seems to be feasible, depending on school staff's proactive and voluntary involvements. A leadership challenge, therefore, occurs here—how to facilitate school staff's voluntary involvement beyond their core responsibility.

PYP Teacher 3, School 1:	...we are privileged to involve in personal projects [i.e. a culminating event for MYP students to demonstrate their skills and knowledge] and realize how hard it is.
Interviewer 1:	Let me just clarify. So you are in the PYP section and are now involved in...
PYP Teacher 3, School 1:	... personal projects.
PYP Teacher 2, School 1:	... as mentor for the children who are doing the personal projects.
Interviewer 1:	Why?
PYP Teacher 3, School 1:	Because it widens our involvement in this school, we see how everybody is interested and so I think seven of us just took it on.
Interviewer 1:	Why was it offered and why did you take it on?
PYP Teacher 3, School 1:	I think ... there is a collegiality...
PYP Teacher 2, School 1:	... to bring the school together
PYP Teacher 3, School 1:	... and to give the staff an opportunity to grow not just in one area of expertise. They [school leaders] try to build a professional learning community and that is one of the key ways that they can do that.

Curriculum, teaching and learning. Curriculum is a central part of IB programme implementation. Notably, although the three IB programmes are intended to represent a 'K-12 continuum', they are, in fact, distinct

programmes with different curricular approaches. Indeed, the three programmes have evolved organically rather than strategically. The IBO undertook expansion from its flagship DP in the late 1960s, first to the MYP in 1994, and later to the PYP in 1997 (IBO 2008, 2009a). In 1994 when the IBO initiated the MYP, it included eight disciplines coupled with a personal project. However, the MYP did not include an IB-designed exam and does not actually even designate a 'curriculum' per se (Stobie 2007). As Renaud (1989) pointed out, unlike the DP, the MYP is not viewed as a school-leaving certificate (cited in Stobie 2007). Teachers and administrators from the case schools indicated that this inherent difference between DP and MYP was an obstacle to achieving cross-programme coherence.

> ... well obviously at the upper end of the DP, we are constrained by university requirements and maybe I think, and many of us if we had a magic wand we would transform the DP to more like an MYP, and less like the A levels .... But we know that the reality is that universities aren't on that same page as us, yet. So part of that's historical and there's no denying that in preparation for the DP and in preparation for higher learning, students have to become more compartmentalized in their subject areas to a certain degree .... We need to start appointing subject specialists. (Secondary School Principal, School 4)

Another intertwined issue is consistency among IB programmes in terms of curriculum implementation. While coherence concerns the connections between IB programmes, consistency refers to the uniformity of the messages that are communicated across the IB programmes. Inconsistency between MYP and DP in terms of pedagogical and curricular approaches was clearly perceived by teachers and administrators in the case schools.

> Content is different. DP is a lot more academic. It is a lot more jump on the seat and ride in. It is a lot more analytical. It is about theory. The MYP is a lot more practical, it's hands-on and a more holistic program. It's got a broader range of skills that it's focusing on. (MYP-DP Teacher, School 1)

> I'm not sure that the inquiry model drives Diploma as much as the PYP or MYP. (Middle School Principal, School 5)

A majority of administrators and teachers viewed tensions as embedded between MYP and DP in particular as they interpreted key characteristics of MYP and DP differently. Again, these dissimilar interpretations of different IB programmes were originated from external factors such as IB diploma exams or university requirements.[9]

> You know, nothing can change at the diploma [DP] until the university change. That's the big issue. You can't *change* things because these kids have to go to university and university wants something. (DP Teacher, School 3)

With respect to teaching, the fundamental part of IB programme implementation, the issue of coherence and consistency among IB programmes described above seemed to make teachers and administrators adopt different teaching methods and assessments, pedagogical approaches between MYP and DP in particular.

DP Coordinator, School 3: I'm only teaching DP at this moment but I taught MYP but there is a big difference.
Interviewer 1:   What is the difference besides the curriculum?
DP Coordinator, School 3: I think it is the approach ... basically for the diploma subject ... this is here your syllabus and you work out with your own teaching and pile up into units .... I suppose the DP is, I would say, it is top-down. It is what the university wants...

Our interview data with students also suggested that there are certain differences in their learning style between MYP and DP.

... this year [DP] everything is based on the syllabus .... In IB [DP], everything is according to the syllabus and you know what is going to come out and it has. And you know what to study before, but in MYP, sometimes there are three teachers in the Science classes, then some teachers might teach some topic more than the other teacher and some teachers teach more depth than other, or other areas where the other one does not teach. So we were in the gray area of what we exactly have to know for the MYP. While in the IB [DP], everything just follows the syllabus. (DP Student 4, School 1)

We wish to note, however, that drawing a sharp line between MYP and DP by inquiry-based learning in MYP and traditional methods of teaching in DP may not necessarily offer an accurate picture. The interview data from students also indicated that inquiry-based learning was accomplished in DP through independent work focused on deep subject content (e.g. Extended Essay). Conversely, inquiry-based learning may not always achieve their desired goals in MYP. For example, at times it was suggested that MYP touches on broad topics at a basic level and in the form of group work where some students may not take serious ownership in their inquiry-based learning.[10]

This suggests that the occurrence of inquiry-based learning may depend more on the nature of subjects and the manner by which teachers interpret subject content. This suggests that the interpretative actions of individual teachers (e.g. providing a more structured and in-depth way of learning what DP students want to study) can enhance coherence and consistency between MYP and DP, even in the face of basic structural disconnections. In this regard, one school principal suggested that, 'even though DP is more prescriptive, it doesn't eliminate inquiry-based learning, [and] it doesn't eliminate creative teaching and engaging classes' (High School Principal, School 5). Therefore, we suggest that a particularly important leadership responsibility of IB school leaders is to provide for a context through which teachers can understand and interpret the three IB programmes from coherent philosophical and pedagogical perspectives.

To implement a more coherent and consistent curriculum implementation, what kinds of 'resources' do IB school teachers and coordinators need from school leaders? Our data suggest that many of teachers and programme coordinators needed clear documentary guidelines that articulate curriculum consistency and assessment policies.

There is no articulation and there must be articulation because school should not be accredited if there is no articulation between programs .... You know, I am concerned that teachers have been spending too much time creating curriculum, all the time. They should not. Curriculum should be set and every five years to be reviewed. (DP Teacher, School 5)

In response to such needs, while school leaders in the case schools utilized various approaches to 'articulation' among IB programmes (e.g. documentation, establishing articulation committee, backwards mapping of curriculum),[11] interestingly, school leaders were also seeking the same kinds of resources from the IBO.

> ... we need a standard-based articulated curriculum, we don't have it. Unfortunately nothing is done to help us. We want whatever IB can provide for us in terms of its continuum. (Head, School 3)

> Give the schools at least a starting framework in which they can tweak and make their own ... I would propose, maybe, not every school, maybe three programs schools in the future would have to ... articulate the IB programs. (Principal 2, School 3)

These excerpts suggest that even though the IBO provides guiding documents on the IB continuum (e.g. IBO 2002, 2007), school leaders express a need for additional relevant resources for achieving and sustaining IB programme coherence and consistency in full-continuum schools.

Conclusion

We have identified and discussed a variety of challenges facing IB school leaders in the Asia Pacific region. Some appear to emerge from the environment of the schools, while others are related to internal organizational features of these international schools. Although these points of challenge are described under separate paragraphs, in reality, they are demonstrably intertwined with the others.

When comparing our study's findings with those of previous research (e.g. Hawley 1994, 1995, Gilliam 1997, Blandford and Shaw 2001, Biro 2003, McGhee 2003, Melton 2003, Bunnell 2008, Halicioglu 2008, Hayden and Thompson 2008, Riesbeck 2008, Hall *et al.* 2009), several leadership challenges facing Asia Pacific IB school leaders seem similar. These include: (1) achieving coherence and consistency across the three IB programmes; (2) managing the complexity of the formal organization; (3) recruitment, selection, and deployment of staff; (4) ongoing professional development of teachers and (5) managing parental expectations. Other more unique challenges may be related to the private, self-funded context of international schools operating in the Asia Pacific context.

This study represented a preliminary foray into developing an empirical picture of IB school leadership in Asia Pacific. Given the increasing importance of IB schools and international education more generally, we hope that others will build upon this through both additional qualitative and quantitative studies. We wish to suggest that the importance of research on leadership in this context is based on several factors.

First, as noted earlier, international schools are serving a growing number of students both globally as well as in Asia Pacific. Thus, research that illuminates contextual challenges and successful practices within this sector of schooling will be of value for practicing and prospective international school leaders alike.

Second, from a more theoretical perspective, scholars increasingly recognize that 'context' represents a critical feature which requires illumination in the process of conducting research into educational leadership (Bossert *et al.* 1982, Hallinger 1995, Hallinger *et al.* 2005, Goldring *et al.* 2008). Within the scope of the current study, we sought to explore how several contextual features shape the role of leaders in international schools (i.e. international orientation, private self-funded status, socio-cultural norms of Asia Pacific societies). Thus, as this literature on leadership in international schools expands in scope and depth, we suggest that it will need to 'fill out' a broader picture of successful educational leadership across schools in different societies. The International Successful School Principalship study (Leithwood and Day 2007) and the Globe study of leadership across different societies (House *et al.* 2004) offer relevant designs for large-scale cross-national comparative studies.

Third, we note that international schools in Asia Pacific represent a rather unique subset of schools in another way. For example, when compared with counterpart schools in many of the local education systems in the region (e.g. in Thailand, China, Vietnam), the case study schools tended to have more learning and IT resources, more up-to-date facilities, and lower teacher to student ratios. While higher resourcing does not automatically translate into higher rates of success, we suggest that international schools represent a type of 'best case scenario' for exploring educational potential in the region. For example, they can be viewed as a testing ground in the region for the implementation of many 'globally disseminated practices' (e.g. inquiry learning, student-centred learning, assessment for learning, teacher empowerment) broadly advocated for twenty-first century education. Gaining evidence of success for these practices in international schools will not guarantee successful transfer to local public school settings. However, empirical exploration could begin to define some of the conditions under which successful implementation of these practices can be achieved in this region. Thus, we suggest that the study of leadership in international schools in Asia Pacific can serve several useful purposes as part of a broader, long-term global agenda for research on leadership and school improvement.

Acknowledgements

Notes

1. Primary Years Programme (PYP) is offered for pupils aged 3–12 which focuses on the development of the whole child, Middle Years Programme (MYP) is designed for students aged 11–16 which emphasizes academic challenge and life skills, and Diploma Programme (DP) is offered for students aged 16–19 which leads to an IB diploma recognized by universities around the world.
2. Gehring (2001) discusses the branding and meaning of the IB brand as it evolved in the USA with respect to the DP.
3. In this context, high growth refers both to growth in school-age population as well as economic development.
4. Notably, the number of the case studies (i.e. the unit of case is each school) is regarded as sufficient for multi-site sample cases, as long as our findings from the subsequent case studies 'provide compelling support for the initial set of propositions' that emerged from the survey analysis and the initial case study (Yin 1994: 46).
5. See Garton's study (2002) for discussions about wider contextual factors influencing international schools.
6. The percentage presented here is based on archival data from the school in Hong Kong. We note that studies conducted in Hong Kong (e.g. AmCham 2007, Jabal 2010) showed even higher percentages of local student populations enrolled in some international schools in Hong Kong. For example, according to a survey of English Schools Foundation (ESF) conducted in Hong Kong, 70% of ESF students' parents are permanent residents as of 2005 (cited in Jabal 2010). We also note that the percentage of local students vs. children of expatriate professionals varied widely among the schools and was based upon a variety of local factors such as relevant policies, age of the school and the school's ability to attract non-local students.
7. DP students are required to take three subjects at a higher level (HL) and another three subjects at standard level (SL). In general, 240 hours and 150 hours are required for three HL and three SL courses, respectively. In addition to these six courses, DP candidates have to take one trans-disciplinary subject, Extended Essay, Community, Action, Service and Theory of Knowledge (IBO 2006).
8. See Cambridge (2002) for more information about the issues of recruitment and staff deployment in international school settings.
9. Another more technical reason for school staff's perceptions of the lack of linkages among the three programmes was because of different terminologies embedded in different programmes.
10. At the same time, however, we wish to note that the Personal Project is designed to encourage MYP students to take serious ownership in their inquiry-based learning.
11. The main principle of backwards mapping emphasized by the schools was that it should be based on 'skills and knowledge' that students are expected to obtain when they reach the final stage of the IB programme.

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Appendix 1. A scheme of interview data collection

School	Principal/ head director	VP deputy head	PYP co-ordinators	MYP co-ordinators	DP co-ordinators	PYP teachers	MYP teachers	DP teachers	MYP students	DP students
School 1		1		1	1	4	5	5	4	7
School 2	1	3	1	1	1	1	2	1		5
School 3	1	2	1	1	1		3	3		
School 4	1	3	1	1	1	1	4	4		4
School 5	1	4	1	1	1	3	1	1		5

Note: The differently shaded cells indicate different types of interviews (i.e. individual or group interviews). The numbers in each cell indicate the number of people interviewed. The vice-principal of School 1 is the same person as the MYP coordinator of School 1.

Focus group interview
Individual interview
Focus group and individual interviews
Not interviewed