

**CHALLENGES AND STRATEGIES OF EDUCATIONAL LEADERSHIP TO SUSTAIN THE
INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME (IBDP) IN A
MALAYSIAN PREMIER PUBLIC SCHOOL**

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ABSTRACT

The IBDP is known worldwide as a high-standard diploma programme that aims to cultivate students with the attitudes, knowledge, and skills of the 21st-century education. In the education management aspect, this programme requires extensive planning, organising, sound leadership, and monitoring of the schools' systems to meet the standards set up by the International Baccalaureate Organisation (IBO). Due to the challenges that persist in each of the management functions, sustainability of the IBDP requires the exploration of both challenges and strategies from the perspective of leadership in relation to the context. Therefore, the purpose of this study is to explore and explain how educational leadership is practised to sustain the IBDP in a Malaysian premier public school. An in-depth qualitative approach was carried out to explore two major areas that consist of strategies and challenges, while semi-structured interviews were conducted with 20 participants comprising of top-level leaders and experienced teachers in the public IB school. These interviewees were chosen due to their instrumental roles as pioneers and leaders since the establishment of the programme in the school. Data analysis through open-coding, axial coding, and selective coding revealed that top-level leaders and experienced teachers of various subjects face various internal and external challenges in maintaining the sustainability of IBDP, such as student-related challenges, teacher-related challenges, teaching and learning processes, external assessments, school facilities, financial problems, and human resource management. Findings also listed various strategies taken by the principal to sustain the IBDP in the Malaysian premier public school. For the purpose of transferability and implication to the context of IB in a Malaysian premier public school, future leaders who are taking over the helm of leadership in the organisation would need to learn from both failures and successes of strategies in relation to their internal and external challenges to continually sustain and thrive in the future.

Keywords: Challenges, Leadership Strategies, IBDP, Malaysian Premier Public School.

INTRODUCTION

Leadership practices are contributors to the success or failure of an organisation. In maintaining the IBDP in a Malaysian premier public school, leadership practices are seen as one of the main determinants. Lai, Shum, and Zhang (2014) in their study on challenges of the IBDP in Hong Kong, reported that there are two types of challenges in the IBDP, namely internal and external. These challenges are viewed from the issues of teaching staff, IB curriculum, and teaching context. The findings demonstrated that internal challenges faced by the school include teaching experience in the programme, pedagogy, and interpretation of inquisitive minds, while external challenges include curriculum features in IBDP, subjects in the programme, and parental expectations of thoughts based on international thinking.

Besides that, the authors noted that the internal issue that determines whether the IBDP can survive or not is leadership strategies.

Background of Study

This research focuses on the leadership challenges and strategies in sustaining IBDP in premier public school in Malaysia. Past research identified leadership challenges and strategies as the major focus in understanding sustainability (Crew, 2010). Lee, Hallinger, and Walker (2012a) mentioned that long-term planning is important in order to maintain programme coherence and continuity. Furthermore, this study is potentially important for policymakers in planning future education programmes in Malaysia.

Jones et al. (2015) stated that school leaders in Malaysia faced many challenges arising from the transformation agenda in education. In this context, a Malaysian premier public school with a unique history in conducting the IBDP strives to maintain the programme through transformation and continual improvements. Lai et al. (2014) revealed that various strategies ought to be used to improve the compatibility and relevant international thinking towards the IBDP curriculum in facing the internal and external challenges. It is evident that leadership strategies are the main factor in overcoming the challenges of sustaining the IBDP (Garcia-Huidobro, 2018). As a justification, leadership strategy needs to be examined in order to provide a larger picture for the strategy to be adopted in addressing the internal challenges.

Similar to other regional findings, Bryant, Walker, and Lee (2016) found that full support for IB school leaders in Hong Kong schools is vital to identify suitable teaching techniques and strategies. However, both support and strategy in leadership practices to address external challenges differ based on different context and situation (Sun & Leithwood, 2015) as well as culture and place (Ahmad & Ghavifekr, 2017). Lee, Hallinger, and Walker (2012b) stated that full support to leaders is needed in managing the internal and external challenges of implementing the IBDP. Realising the importance of leadership, there is a need for the researcher to uncover the elements of strategies used, and how they address the contextual issues and challenges in the public IB school in Malaysia.

Context of the Researched Organisation

The Malaysian premier public school was established in 1992 with a total of 71 IBDP students. Located in Selangor, the school is an established government school that runs the IBDP in Malaysia. It is also a successful model of IBDP in Malaysia. To date, the Malaysian premier public school is one of the largest IB World Schools in Malaysia. The school has 91 teachers including the IB Coordinator, 41 administrative staff, and 2 counsellors. Although the school is under the responsibility of the principal, assistant principal, heads of departments, and other subordinates, as a government school, all financial matters including the budget are decided by the top management and policymakers in the headquarters.

Based on past records, the performance of the Malaysian premier public school students is indeed excellent. Globally, in 2003, fewer than 5% of diploma candidates gained 40 points or more, whereas for the Malaysian premier public school, the figure was 41.2%. Conversely, about three quarters of all diploma candidates gained

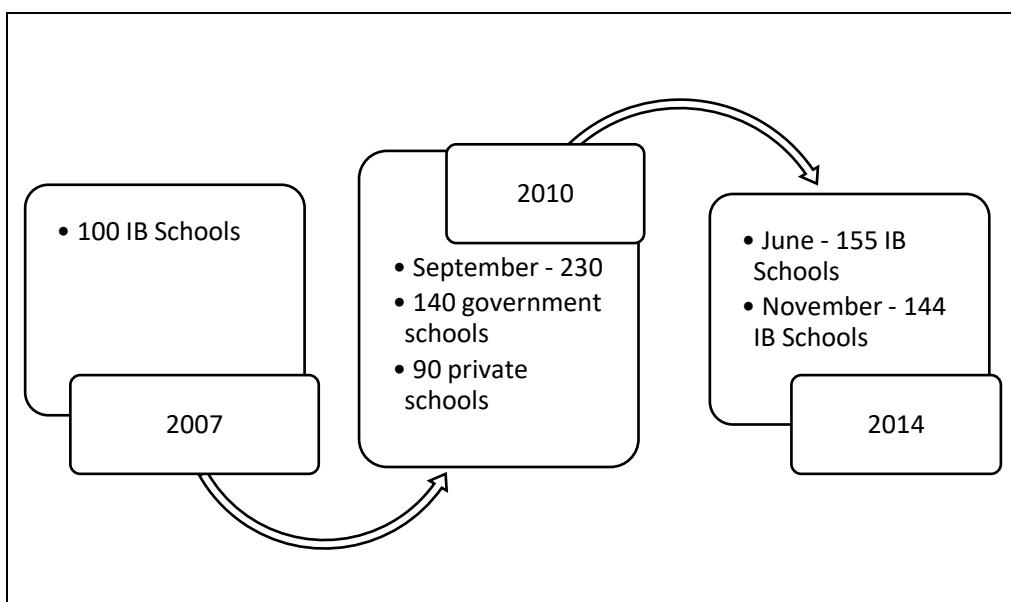
34 points or fewer, whilst for the Malaysian premier public school, the figure was less than 10%.

Despite successful student achievements, maintaining the IBDP in the Malaysian premier public school remains a challenge. Hence, the focus on leaders is important as they need to solve tomorrow's problems instead of today's.

Significance of Study

Internationally, the issues and challenges of adapting the IBDP vary from country to country due to contextual differences. Lee, Hallinger, and Walker (2012a) highlighted the issue and challenges in the leadership practices conducted in the United States, United Kingdom, Australia, and Canada. In the United Kingdom, running the IBDP is costly and there is a need for teachers to attend training workshops every five years because of the new syllabus reviews (Bunnell, 2008).

Statistically, there was a drop in the number of schools running the IBDP in the United Kingdom between September 2010 and November 2014. The most significant decrease in schools running the IBDP in the United Kingdom was in 2013 where there was a drastic drop of student enrolment. Figure 1 shows a decrease in IBDP schools in 2014 compared to 2010. Contradictorily, in a different study, the authors observed that the number of IBDP schools around the world increased by almost 400%, from 923 programmes in 1999 to 3439 in 2010 (Lee, Hallinger, and Walker (2012a)).



Source: Bunnell (2015).

Figure 1. IBDP schools in the United Kingdom.

Bunnell (2008) identified four interconnected issues contributing to this drop. The first issue is finance, followed by the IBDP. The cost for teachers to attend workshops conducted by the IBO is expensive. Even though the IBDP is a tough programme, the top scorers are undervalued and unfairly treated at admission level by the UK universities compared to the Advanced Level (A Level) candidates. The third issue is the IBDP grade assessments vary with internal assessments compared to A Level. It is easier to pass and achieve good grades in A Level compared to the

IBDP. The last issue pointed out by Bunnell (2008) is the IBDP has been joined by a number of deliberate ‘imitations’ from other programmes. However, the different findings obtained in the IBDP implementation have opened the eyes of most schools and countries to run this programme because the IBDP provides genuine world-class education. This is also explained in the study by Bryant, Walker, and Lee (2016) that mentioned the IBDP as a key player in international education.

Problem Statement

Lee, Hallinger, and Walker (2012a) reported that there were only three studies which explored leadership issues targeting leadership at international schools in Asia, namely Jabal (2006), Bunnell (2008), and Lee, Hallinger, and Walker (2012a). Lee, Hallinger, and Walker (2012a) in their study noted that the match between the IBDP philosophy and social norms of the East Asian community is one of the challenges.

The norms of the East Asian community are more concerned with the examination results and the learning content of a subject. As such, the findings clearly indicated that more studies on leadership strategy in international schools in other parts of Asia are necessary to fill the gap between the challenges of adapting the IBDP, especially in Malaysia. In another study by Gardner-McTaggart (2017), the strategies in conducting future education highlighted that leaders must follow the development of knowledge on effective globalisation in the 21st-century era and the top leadership in IBDP is the main catalyst of change in the programme (Bryant et al., 2016). Furthermore, teacher leaders arise from diverse backgrounds, and with broad variety of skills (Adams, A. Samat, & Abu Samah, 2018).

Due to the lack of contextual empirical studies on leadership challenges and strategies taken towards sustaining the IBDP in the Malaysian premier public school, the strategies among teachers and leaders at the top levels of management ought to be carried out (Lee, Hallinger, and Walker, 2012a) by an in-depth analysis at a strategic level. The following objectives are designed to address the leadership challenges and strategies in sustaining the IBDP in the Malaysian premier public school.

Objectives of the Study

1. To explore leadership challenges in sustaining the IBDP in the Malaysian premier public school.
2. To examine leadership strategies implemented to sustain the IBDP in the Malaysian premier public school.

In corresponding to the research objectives above, the following research questions are drafted for this study:

1. What are the leadership challenges in sustaining the IBDP in the Malaysian premier public school?
2. How are leadership strategies implemented to sustain the IBDP in the Malaysian premier public school?

THEORETICAL FRAMEWORK

Although this study uses the qualitative methodology, some references on theories are important to form the foundation for understanding the two major aspects, namely challenges and strategies. For the first aspect, Dimmock (1996) and Dimmock and Walker (2000) mentioned the leadership challenges in sustaining the IBDP in their framework. As indicated in Figure 2, the adapted leadership challenge comprises two categories of environmental issues, which are parents and community, and external assessments. In addition, organisational factors consist of private self-funded status, organisational structures, human resource management, as well as curriculum, teaching, and learning (Lee, Hallinger, & Walker, 2012b).

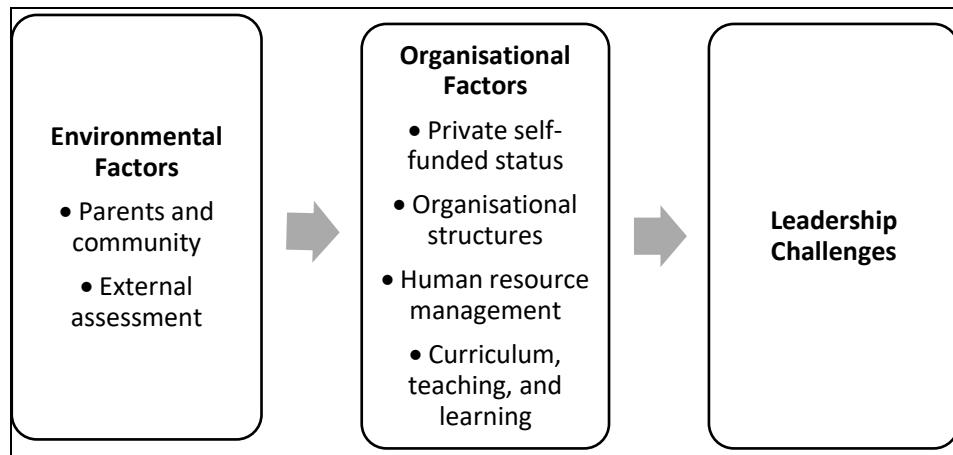


Figure 2. The context of leadership challenges. Adapted from Dimmock (1996), Walker and Dimmock (2000), Lee, Hallinger, and Walker (2012b).

Based on Dimmock's (1996) framework, there is the range of environmental and organisational challenges faced by leaders. In relation to this theory, various challenges that are relevant to the IBDP in the Malaysian premier public school are coded as both *a-priori* codes, while emerging themes are conceptualised in this research during the process of data analysis.

In the second aspect, Holman, Pascal, Bostan, Hojbota, and Constantin (2015) listed 10 educational strategies for schools to improve on their academic persistence. These are a) applicability of knowledge, b) clear framework, c) independent work style, d) teachers' involvement, e) focusing on students, f) intense collaboration and partnership with the teachers, g) class size, h) updated curricula, i) comprehensive curricula, and j) curricula focus on students' real practical needs.

It is important to highlight that while theories are foundations of this research, they will only be used to form a general understanding and identify deductive codes (Cheah, 2019). It is crucial for a qualitative researcher to not impose theory on the data, but instead allow the data to emerge naturally through inductive coding so that the context and reality of the organisation can be described. Qualitative data analyses are based on the inductive approach (Cohen, Manion, & Morrison, 2000).

METHODOLOGY

As mentioned earlier, this investigation aimed to outline the challenges and strategies in sustaining the IBDP in a Malaysian premier public school. The qualitative method of enquiry was adopted for this study in relation to Miles and Huberman's (1994) guide on qualitative research that aims to explicate the ways people react towards their daily life responsibilities. Moreover, Lincoln and Guba

(1985) suggested that qualitative research is the most suitable method to understand and reconstruct the constructions that past researcher hold, aiming for new interpretations. In this case study, it is to explore the challenges and strategies of leadership in managing changes. According to Cheah (2019), a case study is useful to explain the reality in action and not for predicting hypotheses.

Prior to the actual data collection, a pilot study was conducted based on the interview protocol. Only a few changes were made such as indirect questions were changed into direct questions in order to focus on the accuracy of the interview protocol. Apart from that, during the pilot study, the researcher identified the participants' understanding of the items in the interview questions (Van Teijlingen & Hundley, 2001). According to Yin (2017), there are three categories of case study: exploratory, descriptive, and explanatory. For this research, the exploratory case study was chosen in order to explore the phenomenon in the data which serves as a point of interest to the researcher (Yin, 2017) because it is meant to outline further examination of the phenomenon observed.

DATA COLLECTION

In this case study, the primary source of data collection was the use of a semi-structured interview. For triangulation, additional data were collected from secondary data that were related to the research such as yearly organisational reports from the Malaysian premier public school and past research worldwide. Data collection and analysis were carried out simultaneously (Glaser, 1978; Strauss, 1987) in an iterative manner as the researcher began to understand the data in relation to reality.

DATA ANALYSIS

In terms of data analysis, the researcher employed a systematic method of data collection and analysis with the aim of constructing an in-depth understanding of the social and psychological phenomena (Chenitz & Swanson, 1986). To achieve this aim, data were analysed by using three types of coding: open coding, axial coding, and selective coding. The open coding of the interview data led to the identification of seven main categories and several subcategories.

Intercoder and Kappa Value

In order to calculate Kappa value for the coding scheme, the code names are simplified to a maximum of four letters for an easy reference to the evaluator. For the next step, the evaluator can use the Statistical Package for the Social Science (SPSS) to calculate intercoder reliability (Chua, 2013). In this research, 50 codes were chosen for the reliability test. Table 1 shows the intercoder and Kappa value.

Table 1: *Intercoder and Kappa Value*

Evaluator	Kappa Value
1 & 3	0.881
1 & 2	0.878
2 & 3	0.860

Acceptable intercoder value $K > 0.70$

Based on the SPSS analysis, the Kappa value between evaluator 1 and evaluator 3 is satisfactory ($\text{Kappa} = 0.881$), the Kappa value between evaluator 1 and evaluator 2 is also satisfactory ($\text{Kappa} = 0.878$), and subsequently the Kappa value between evaluator 2 and 3 is 0.860. According to Chua (2013), all three readings yielded satisfactory intercoder values that are more than 0.70 ($K > 0.70$).

Sampling

Purposive sampling was used to select the interviewees in this research. The researcher initially sought for more participants: 26 people were top-level leaders comprising of a) principal, b) heads of department, c) heads of unit, and d) senior teachers teaching different subjects. However, only 20 participants agreed to participate in the exploratory case study and were willing to complete all the phases of questioning and follow-ups.

The participants were also recommended by the senior heads of department. In this study, triangulation involves relying on multiple sources of data such as different personnel from various departments and units. Table 2 summarises the participants' profiles.

Table 2: Participants' Profiles

Characteristics	Number	%
A. Gender		
1. Male	5	25
2. Female	15	75
Total	20	100
B. Age		
1. 31-40	1	35
2. 41-50	11	40
3. 51-60	8	15
Total	20	100
C. Position		
1. Principal (Principal & Senior Assistants)	3	11
2. Others	17	89
Total	20	100
D. Higher academic qualification		
1. Bachelor's degree	6	20
2. Master's degree	14	80
Total	20	100
E. Years of experience managing the Malaysian premier public school		
1. 5-10 years	1	33
2. 10-15 years	2	67
Total	3	100

Note: Total number of participants = 20.

Table 3 lists the participants' codes and positions in the Malaysian premier public school. Leader levels are categorised into four different types according to their responsibilities in the school.

Table 3: Participants' Profiles and Positions in the Malaysian Premier Public School

Participants' code	Leaders' level	Participants' position	Age range	Year of teaching experience
R1-R3	a	Principal and assistants	43-54	18-30
R4-R7	b	Head of department	45-52	15-25
R8-R14	c	Head of unit	42-50	10-25
R15-R20	d	Senior teacher	35-50	10-25

Notes: a) principal, b) heads of department, c) heads of unit, and d) senior teachers teaching different subjects.

Findings of Leadership Challenges in Sustaining the IBDP in the Malaysian Premier Public-School Themes

From the data analysis, the researcher managed to classify the codes into two major categories: environmental and organisational challenges. Figure 4 illustrates how the codes are classified.

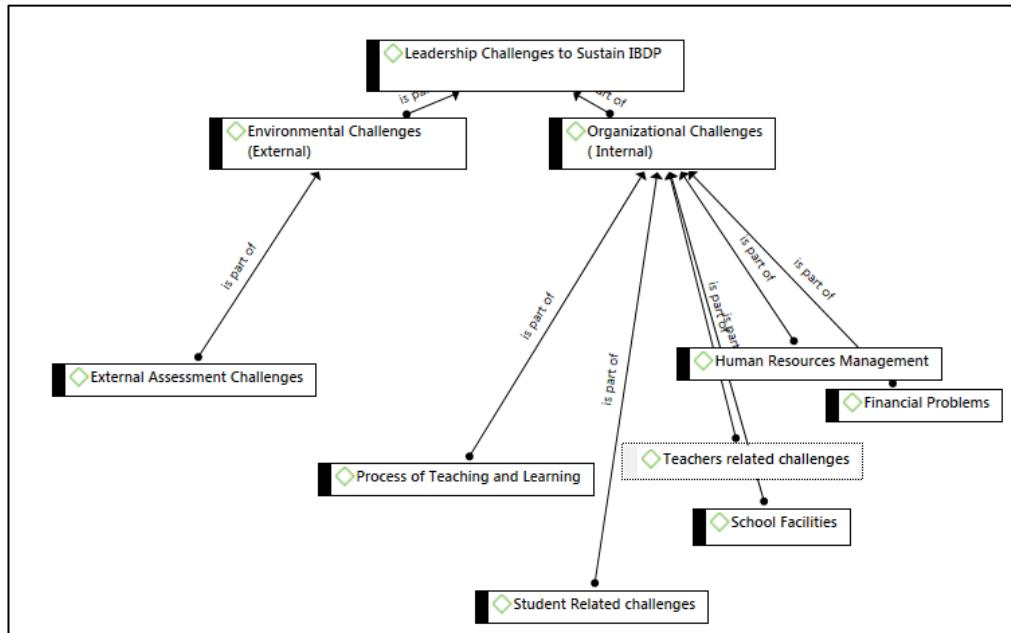


Figure 3. Challenges in the leadership practices for the sustainability of IBDP.

As displayed in Figure 3, one subtheme emerged for environmental challenge, which is external assessment challenges. What is interesting is that six broad subthemes emerged from the organisational or internal challenges. These are 1) student-related changes, 2) educator-related challenges, 3) teaching and learning process, 4) school facilities, 5) financial, and 6) human resource management challenges. The themes of environmental factors and organisational factors recurred throughout the data set tabulated in Tables 4, 5, 6, 7, 8, 9, and 10.

Table 4 shows the types of challenges based on environmental factors. The two subthemes uncovered concern the external assessment-related challenges.

Table 4: Challenges Regarding External Assessment in the Environmental Factor Theme

Subtheme	Type of challenges	Source of participants	Frequency
External Assessment	1. English proficiency is a high barrier to students from rural areas.	R3, R4, R5, R6, R7, R9, R10.	11
	2. E-assessments for all subjects require high-speed Internet connection.	R4, R5, R7, R9, R12, R15, R18.	8

One of the challenges is the medium of instruction for this programme is English, which makes it difficult for students who came from rural areas because their mother tongue is the Malay language.

“The use of English is quite high, meaning that the students must be above-average high school kids who can take IB instead of mediocre kids who can take IB”.

(Transcript of participant R3, line 103-112)

A head of department (R7) commented on the external challenges that need teachers to help students closely.

“Sometimes we found our rural students are weak in English. We sit with them during remedial”.

(Transcript of participant R7, line 274-278)

From the data in Table 5, it is apparent that student-related challenges as a subtheme consist of nine challenges. Malaysia is a country that employs education system based on three stages: 1) preschool, 2) primary school, and 3) secondary school, while the IB system has two levels before the diploma programme, namely the primary year programme (PYP) and middle year programme (MYP).

Table 5: Challenges Regarding Students in Organisational Factor Theme

Subtheme	Type of challenges	Source of participants	Frequency
Student-related challenges	1. Students need to adapt to a different education system.	R5, R6, R7, R8, R12, R15.	6
	2. High expectations from teachers and parents for good achievements and continuing education abroad.	R4, R6, R7, R12, R13, R15, R17.	7
	3. The IB curriculum is more challenging to students than A Level.	R3, R4, R6, R9, R15.	5
	4. Students need to be independent learners by exploring beyond the written assignments.	R4, R5, R7, R12, R15.	5
	5. Students need to do more reading for internal assessments.	R3, R4, R7, R17.	4

6.	Students need to do an exploration for written assignments in six subjects and additional essay for theory of knowledge (TOK) and extended essay (EE).	R3, R4, R7, R11, R17.	5
7.	Students misused technology for games instead of information management.	R4, R5, R7.	3
8.	Students with poor time management having stress.	R4, R5, R6, R7.	4
9.	Students experienced English language barrier throughout the programme.	R4, R5, R7, R12, R15.	5

As seen in Table 5, the student-related challenges are attributed to different education system, stress, language and high expectations. As the IBDP is an international programme, students need to adapt to new curriculum, which is time consuming. The IBDP that comprises of six subjects, theory of knowledge (TOK), and extended essay (EE) is a deliberately challenging programme (Bunnell, 2008). The IBDP is different from the local foundation programme. Therefore, adjustments and adaptions to the curriculum need to be taken to ensure higher achievements in the IBDP examination. Among the plausible explanations for these findings is mentioned by participant 12.

“Students are not familiar with IB programme. Malaysia has their own curriculum system from Kindergarten to Malaysia Certification of Education (SPM)”.

(Transcript of participant R12, line 073-081)

Table 6 lists the challenges concerning organisational factor that consist of teacher as a subtheme. There are seven challenges. In this case, the participants highlighted that the IBDP is not a regular programme because the curriculum is vividly different from the national curriculum.

Table 6: Challenges Regarding Teacher-Related Challenges in Organisational Factor Theme.

Subtheme	Type of challenges	Source of participants	Frequency
Teacher-related challenges	1. Attending workshop is important as major information related to teaching and learning is discussed in the IB workshops.	R4, R5, R7, R9.	4
	2. Different education system compared to the national programme so teachers need to update their knowledge.	R5, R6, R7, R11, R15.	5
	3. Excellent students in SPM need to be moulded to meet the IBDP requirements.	R6, R7, R9, R15, R16.	5
	4. Five-year syllabus review urges teachers to learn continuously in their subject teaching.	R3, R4, R5, R6, R10, R12.	6

5.	21st-century education needs and requirements require teachers to explore more in teaching and learning.	R2, R4, R7, R8.	4
6.	Teachers need to be creative to find suitable fieldwork for group four project in order to meet the IBDP requirements.	R3, R4, R7, R9, R12, R13, R14.	7
7.	E-assignments for all subjects require teachers to be alert with the timeline.	R12, R13, R14, R17.	4

Most of the challenges in terms of the teaching and learning process in Table 6 involved the acceptance of teachers to the IBDP. For example, the distance of IBO centre is one of the challenges but with the availability of high-speed Internet facilities, a lot of information can be disseminated quickly. This view is supported by Bunnell (2008) who wrote that challenges include the breadth of IBDP with six subjects.

In other aspect, a head of unit (R10) shared her experienced in facing the dynamic IBDP and challenges that she went through teaching the IBDP.

"The programme is very comprehensive, intellectual, and expecting higher achievements. I can see this programme is different from the previous education system I've been through".

(Transcript of participant R10, line 027-034)

Although teaching and learning are part of regular tasks for the teachers, challenges in teaching and learning cannot be avoided. Table 7 details the challenges concerning the teaching and learning process.

Table 7: Challenges Regarding Teaching and Learning Process in Organisational Factor Theme

Subtheme	Type of challenges	Source of participants	Frequency
Teaching and learning-related challenges	1. IBO is far away from the school.	R3, R4, R6, R9, R11, R15, R17.	7
	2. Workshop is important as major information related to teaching and learning is discussed in the IB workshops.	R4, R5, R7, R9, R12.	5
	3. 21st-century education needs educator awareness.	R2, R7, R8, R14, R15, R17, R18.	7
	4. The drop in IBDP students' results in decreased opportunities for students to pursue their studies abroad.	R4, R5, R7, R12, R15, R16, R19.	7
	5. Teaching and learning rely heavily on student-centred approach.	R4, R7, R8, R9, R11, R13, R15	7
	6. The IBDP syllabus content is too heavy for students.	R4, R5, R7, R9, R10, R11, R15.	8
	7. Additional extracurricular elements	R2, R4, R5, R12,	7

	in creativity, activity, and service (CAS) for balanced education.	R13, R17, R19.	
8	Gap in education before the IBDP for transformation into IB education.	R1, R4, R5, R8, R12, R14, R15, R16.	8
9.	Expensive for the school to send teachers to attend the IBDP workshops.	R3, R4, R5, R7, R8.	5

In an in-depth interview with the principal of the Malaysian premier public school, she asserted,

"We as a leader in this IB organisation need to promote this programme even though teaching and learning process differences with national curriculum".

(Transcript of participant R1, line 193-195)

A head of department (R4) expressed other teaching and learning process challenges.

"Sometimes we just comfortable with the syllabus, suddenly syllabus change but in fact its IB philosophies to up to date with new discoveries".

(Transcript of participant R4, line 114-116)

Subsequently, the subthemes of challenges in school facilities in Table 8 focused on three types of school facility challenges. Although there are only three types of challenges there is a serious impact on the teaching and learning.

Table 8: Challenges Regarding School Facilities in Organisational Factor Theme

Subtheme	Challenges	Source of participants	Frequency
School facility-related challenges	1. Facilities insufficient to meet international school standards.	R7, R9, R10, R13, R19.	5
	2. Low Internet speed for the students to explore and acquire information online.	R4, R6, R7, R9, R10, R14, R15.	7
	3. Higher frequencies of technical breakdown for teaching and learning aid.	R3, R5, R10, R11, R18.	5

In response to the school facility challenges, a head of department (R7) observed that a lot of improvements have been taken from the commencement of the programme until now.

"We are government school, if we expect the sophisticated facilities like other international school we are very far different from them. For example, when I came in 1993, our Internet is very slow, the Internet connection are between life and death".

(Transcript of participant R7, line 092-099)

Tables 9 and 10 show the challenges concerning two subthemes, namely financial problems and human resource management. One of the challenges is similar to other countries such as it is expensive to attend IB workshops, which is also noted by Lai, Shum, and Zhang (2014) in their research.

Table 9: Challenges Regarding Financial Problems in Organisational Factor Theme

Subtheme	Challenges	Source of participants	Frequency
Financial problem-related challenges	1. Low investment to keep up with the changes in a Malaysian premier public school.	R2, R4, R7, R14, R15, R18.	6
	2. Economic downturn decreases the enrolment of students for the IBDP.	R5, R8, R10, R11.	4
	3. Most workshops are held abroad and more budget is needed.	R1, R2, R3, R4, R5, R7, R8, R12, R14.	9
	4. Low participation of parents to support the programme, especially in CAS activities.	R1, R2, R3, R4, R9.	5

In identifying financial challenges, a head of department (R5) believed that the leader in the Malaysian premier public school need to convince the top management at the headquarters by showing higher students' achievements.

"I think there are two hindrances, first results, the student's performance must be good and second is financial situation".

(Transcript of participant R5, line 044-046)

Table 10: Challenges Regarding Human Resources Management in Organisational Factor Theme

Subtheme	Challenges	Source of participants	Frequency
Human resource management challenges	1. Lack of proficient librarians to assist students to find articles and journals.	R1, R5, R7.	3
	2. Principal in the headquarters are not familiar with the IBDP curriculum and extracurricular requirements.	R3, R5, R6.	3

For the human resource management challenges, the principal (R1) pointed out that continuous improvement needs to focus on the library staff in order to assist students with their assessments.

"We have focusing on suggestions for improvement for the staff in the library. They must be trained staff to support student engagement in terms of research".

(Transcript of participant R1, line 081-085)

Another challenge is leadership. As explained by a senior teacher (R15),

"From my experience leadership indeed played an important role because only the leader who understands IB can highlight this IB programme to the top management in headquarters."

(Transcript of participant R15, line 031-035)

Tables 11 to 15 list the strategies in facing the environmental and organisational challenges.

In general, strategies were taken to address key challenges such as external assessment, student, teacher, school facilities, teaching and learning, financial problem, and human resource management. Table 11 demonstrates strategies to address external assessment challenges in the environmental factor theme.

Table 11: Strategies to Address External Assessment Challenges in Environmental Factor Theme

Subtheme	Strategies	Suggested by	Frequency
Strategies for external assessment	1. Principal encourages teachers and students to familiarise themselves with external assessments.	R1, R5, R7, R12, R13.	5
	2. Principal support teachers' practice in the mentoring system to guide students with their external assessment.	R2, R3, R4, R5, R7, R10, R15.	8

Admittedly, in the strategies to face external assessment challenges, the principal gave impetus to teachers and students to be involved in the activities or programme. As explicated by a head of department (R5),

"In creativity, activity, and services (CAS), our students contribute to society. When doing activities, principal encouraged and give support to the teachers and students".

(Transcript of participant R5, line 050-055)

In the analysis of the strategies to address student-related challenges, the findings suggested that among the important strategies is to enhance academic performance of the students as presented in Table 12.

Table 12: Strategies to Address Student-Related Challenges Regarding Organisational Factor Theme

Subtheme	Strategies	Suggested by	Frequency
Strategies related to students	1. Principal set higher goals for the IBDP results.	R3, R5, R7, R8, R12, R13, R14, R15, R17.	9
	2. Principal encourages strong academic performance among students.	R3, R5, R8, R10, R12, R15.	9
	3. Principal ensures students are selected from the best pool of talents.	R1, R7, R9, R15.	4

4.	Principal encourages students to participate in competitions among the IB schools worldwide for motivation.	R6, R7, R9.	3
5.	Principal ensures students follow the IBDP's guideline requirements.	R4, R7, R9.	3
6.	Principal monitors students' disciplines.	R1, R3, R4, R9.	4

For the principal's strategies towards teachers' challenges, suggestions from the participants are presented in Table 13. The first strategy taken by the principal was to ensure there is a budget to send teachers to the IB workshops.

Table 13: Strategies to Address Teacher-Related Challenges Regarding Organisational Factor Theme

Subtheme	Strategies	Suggested by	Frequency
Strategies for teachers' professional training	1. Principal set a budget for teachers to attend the IB workshops.	R2, R3, R4, R6, R7, R9, R10, R13.	11
	2. Principal to enhance development and awareness of 21st-century education among IB teachers in the school.	R4, R12, R13.	3
	3. Principal to encourage teachers to promote students' independent learning.	R4, R7, R15.	3
	4. Principal to encourage teachers to communicate with a team of senior teachers.	R4, R5, R9, R15.	4

The assistant principal (R2) pointed out that teachers need to attend the IB workshops.

"So teachers need to be sent to workshops, they need to do in house training and knowledge sharing".

(Transcript of participant R2, line 177-179)

Table 14 lists five strategies that can be applied for the subtheme of teaching and learning. One of the strategies is to motivate student-centred learning.

Table 14: Strategies to Address Teaching and Learning Regarding Organisational Factor Theme

Subtheme	Strategies	Suggested by	Frequency
Strategies for teaching and learning	1. Principal to encourage student-centred learning.	R4, R7, R9, R10	4
	2. Principal to encourage teachers to network with other IB World Schools through IB workshops.	R1, R2, R4, R7, R8, R9, R10, R11, R12, R15, R17.	12
	3. Principal to conform to the five-year review.	R3, R5, R9, R15.	5
	4. Principal to ensure new changes fit into 21st-century education for	R3, R4, R5, R7, R9, R15, R18.	9

teachers.			
5. Principal to ensure students can adapt to the IBDP curriculum after each semester in IBDP.	R3, R4, R7, R15, R17.	5	

Table 15 shows a dominant strategy taken by the principal to improve school facilities.

Table 15: Strategy to Improve School Facilities Regarding Organisational Factor Theme

Subtheme	Strategy	Suggested by	Frequency
Strategies to improve school facilities	1. Principal to ensure school facilities such as laboratory, classroom, and student learning centre will be upgraded to international school level.	R1, R2, R3, R5, R7, R9, R13, R15.	9

In order to improve school facilities, a head of unit (R9) shared her experience about the IB workshop that she attended.

"The support that also need in the library is to provide more reference books to facilitate student learning".

(Transcript of participant R9, line 118-121)

Table 16 tabulates the strategies taken by the principal to resolve financial problems.

Table 16: Strategies to Manage Financial Problems in Organisational Factor Theme

Subtheme	Strategies	Suggested by	Frequency
Strategies to manage financial problems	1. Principal to ensure financial support will always be available for the Malaysian premier public school. 2. Principal to communicate with finance department to save budget in sending students to IB schools abroad.	R1, R2, R3. R1, R2, R3. R7.	9 6

Based on an in-depth interview, a senior teacher (R20) commented on budget for the IBDP.

"IB has its own needs. I hope Principal can sends us to IB workshop. This is an investment for the long term. At the same time to build personality and maturity in providing guidance to students".

(Transcript of participant R20, line 076-078)

Some important strategies to address the human resource management challenges are summarised in Table 17.

Table 17: Strategies to Address Human Resource Management in Organisational Factor Theme

Subtheme	Strategies	Suggested by	Frequency
Strategies for human resource management	1. Principal to ensure good support staff to run the Malaysian premier public school.	R1, R3, R5, R8, R9, R10, R12, R13.	8
	2. Principal to encourage teachers to build network with other IB schools worldwide.	R1, R2, R5, R11, R15.	5
	3. Principal to ensure job delegation is distributed strategically to staff.	R2, R3, R4, R5, R7, R8, R17.	7
	4. Principal to solve problems related to human resource management internally in order to address external challenges.	R1, R3, R9.	3

In terms of the human resource management strategies, the assistant principal (R2) shared her experience of the IB workshop that she attended.

"In the IB workshop that I attended, I found that a librarian at the IB school was the chairman of the EE, meaning that they could supervise EE for students".

(Transcript of Participant R2, line 066-068)

As a summary of the findings, the strategies that were identified to overcome the environmental and organisational challenges in the Malaysian premier public school are 1) external assessment, 2) students, 3) teachers, 4) teaching and learning, 5) school facilities, 6) financial problem, and 7) human resource management.

DISCUSSION

Principal and teachers will have to use various strategies in order to face the challenges as well as enhance the perceived compatibility and relevancy of the IB curriculum based on the data findings (Gardner-McTaggart, 2017). In the aspect of challenges, one of the findings from this research concurred with Lai, Shum, and Zhang (2014) that parental expectations of students' performance in the IBDP are very high.

Having a Malaysian premier public school in Malaysia can save a lot of money rather than sending IBDP students to study abroad.

In past studies by Leithwood, Harris, and Hopkins (2008) and Robinson (2007), they stated that goal setting is one of the key dimensions of successful leadership. Robinson (2007) added that leaders need to set realistic goals and communicate these to the subordinates in order to get their full commitment. Besides that, selection for the IBDP must be restricted to the top SPM scorers.

The interview responses also indicated that expenses to run the IBDP is high. However, this problem can be alleviated by highlighting the outcome of IBDP products with high performance and benefits of 21st-century education (Gardner-

McTaggart, 2017). In addition, Wright (2015) noted that the respondents in her study believed that the IBDP provided them with a broader view of the world. Similarly, the critical thinking in the teaching and learning helped teachers and students become more rounded persons (Wright, 2015).

The study by Leithwood, Harris, and Hopkins (2008) claimed that the most successful leaders draw on the same practices of basic leadership to accomplish goals. For example, some of the findings in this research are consistent with Turkoglu and Cannsoy (2018) that Malaysian principals can describe their responsibilities relating to teaching and learning in their schools based on instructional leadership. Effective leadership focus on the process and function of the whole school system (Ahmad, & Ghavifekr, 2017). Moreover, as highlighted by Leithwood, Harris and Hopkins (2008), there are four core sets of successful leadership practices which are “building vision and setting directions, understanding and developing people, redesigning the organisation, and managing the teaching and learning programme”. In another study, Mohamed, Abdul Razak, and Abdullah (2018) observed that support in the form of training for school leaders and teachers in leadership positions is necessary to develop good leadership practices. Malaysian principals realized their responsibilities relating to improving instructional practices (Harris et al., 2017).

The most crucial challenge was that student selection must be monitored to ensure that the higher goal setting for the IBDP results can be realised. Selected students can study independently and carry out exploration themselves for internal assessments. Student selection will result in a major effect on the performance as good students will obey the college's rules, assist, and support each other. These findings contradicted the research by Gardner-McTaggart (2016), who found that roughly 20% of students in international schools are from expatriate families and not high achievers.

In the researcher's point of view, the IBDP is still a prestigious programme and can produce versatile students. Therefore, it is an ideal programme in filtering excellent SPM students to be sponsored by the government in order to further their studies abroad.

In view of limitations of the study, it is worthwhile to reiterate that this case study shall not be used to generalise to other public IB schools in Malaysia. However, findings from the explorations and situations that persist in the researched education institution may give some indicators to how such school is progressing in Malaysia and hopefully leads to some understanding of challenges and strategies that may seem to be common or uncommon to the reader.

CONCLUSION

In this study, all types of challenges faced by a Malaysian premier public school were classified into environmental and organisational challenges. In order to maintain the IBDP in the Malaysian premier public school, the proposed model is displayed in Figure 4.

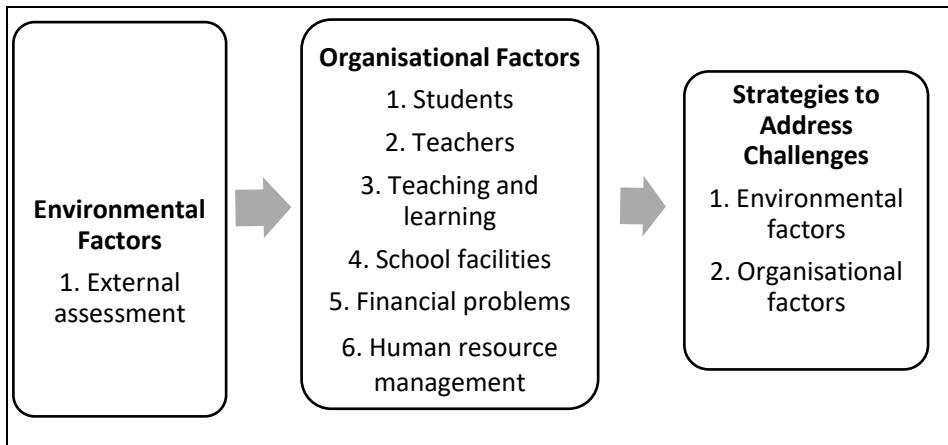


Figure 4. Model of challenges and strategies of leadership practices in the sustainability of IBDP in a Malaysian IB school.

In particular, this research has identified one subtheme for environmental challenges and six subthemes for organisational challenges in a Malaysian premier public school. By employing the qualitative modes of enquiry, the researcher established strategies needed to be taken to encounter environmental and organisational challenges in sustaining the IBDP in the Malaysian premier public school.

It is noted that different emergent inductive subtheme of both environmental and organisational factors supported the deductive model by Dimmock (1996), Dimmock and Walker (2000), and Lee, Hallinger and Walker (2012b).

In terms of the subject of study, the IBDP in a Malaysian premier public school was chosen because of its long establishment in Malaysia since 1992. Thus, this approach will enable the researcher to explore, explain, and outline the data within a specific context, content, and process so that findings can be used as organisational learning, be it for within or for other organisations if there are elements of transferability (Guba, & Lincoln, 1994). Although the samples are not large enough for generalisation as in a quantitative research, the findings of this study could serve its purpose as a reference for future researchers who are interested to conduct another study on challenges and strategies in leadership practices in other IB schools.

RECOMMENDATION FOR FUTURE RESEARCH

Future researchers can conduct a thorough examination of the leadership challenges and leadership strategies in other IB schools in Malaysia (Pandey & Patnaik, 2014). The findings of this research could have contributed to a model that can be used as a guide to the sustainability of the IBDP in a Malaysian premier public school. However, it is important for the researcher to acknowledge that the findings of this qualitative case study cannot be generalised to other Malaysian public IB schools, except for elements of transferability (Lincoln & Guba, 1985). Transferability occurs when readers could relate to the context of the study and find that the situation (issues and challenges) is similar to be applied in their own leadership strategies. For future research, the researcher suggests that:

- a) Quantitative studies are carried out so that the findings can be generalised to other IB schools in Malaysia. A comparison of the IBDP with a local

programme could be useful for the benefits of the young generation in order to develop humanistic leaders in the future.

- b) Most of the present studies on the international programmes such as the IBDP originated from international scholars including from Hong Kong, the United Kingdom, and the United States. Hence, future studies might encompass a comparative study between the international programme and local foundation programme.

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