Localisation of Educational Innovations:

The Case of the International Baccalaureate Diploma Programme

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Abstract

This paper explores how localisation of educational innovations occurs by examining the adoption and implementation of the International Baccalaureate Diploma Programme (IBDP) in local school contexts. The literature on the delivery of the three IB programmes (the Primary Years Programme, the Middle Years Programme and the Diploma Programme) suggests that school leaders would modify them in terms of educational content and curriculum delivery even though the IB organisation (IBO) provides schools with the same curriculum frameworks of international education. The findings of the research on the IBDP schools in New Zealand conducted by the author corroborated the literature. The study indicates that there were significant organisational variations among IBDP schools with regards to the modification of curriculum delivery structures. Four types of IBDP schools identified in the research were dual-pathway, modified dual-pathway, add-on and IB-only schools. These distinctions in school types seem to be linked closely to how school leaders value, re-define and/or recontextualise the programme in terms of purpose and student selection, which may be illuminating the culture of each school community.

Keywords

International Baccalaureate, Diploma Programme, Diffusion of educational innovations, Localisation, 国際バカロレア, ディプロマプログラム, 教育イノベーションの普及, ローカライゼーション

1. Introduction

Rogers (2003) observed that 're-invention' (p. 180) of innovations often occurred in many organisations, where innovations were changed or modified by users in the process of their adoption and implementation. He found that many adopters were not just passive acceptors but also active modifiers of new ideas and practices (Rogers, 2003). In education, for example, Wollons (2000) demonstrated how differently the German concept of 'Kindergarten' was adopted and transformed in countries such as the USA, Japan and

Turkey during the nineteenth and early twentieth centuries. Her study illustrated how new educational practices adopted from elsewhere were influenced by the culture to which the adopters belonged in the process of localisation, or what she called 'recontextualisation' (Wollons, 2000, p. 3).

In the context of the adoption of the International Baccalaureate (IB) programmes, the IB organisation (IBO) provides all IB affiliated schools with the same curriculum frameworks and asks schools to go through the same authorisation requirements so that it can ensure that the schools maintain the same standard of international education (Cambridge, 2002). However, it is not assumed automatically that all schools run the programmes in the way that the IBO originally intended. This is because the IBO allows schools flexibility in customising educational content within the provided frameworks, and in developing their own organisational structure to deliver the programmes. Previous studies suggest that each IB school indeed has a unique educational content and organisational structure to deliver the programmes (e.g., Kauffman, 2005). As the IB website states, while the organisation forms a worldwide community of IB schools that shares the same philosophy of internationalism, 'there is no such thing as a "typical" IB World School' (IBO, 2008a, para. 7).

2. Variation in curriculum content

In terms of content, educational changes often occur around decisions about what subjects are to be taught, what learning materials are to be used, what order the content should be presented in, and what teaching approaches are to be used (Fullan & Pomfret, 1977). In the case of the IB programmes, these issues are discussed and decided by individual schools and teachers within the frameworks of international education. For example, it is each school's decision as to what specific IB diploma courses to offer students as long as they maintain the breadth and the balance stipulated by the IBO. This situation generates individual differences between IBDP schools. The IBO also allows individual schools and teachers to choose their preferred teaching methodologies, which provides additional diversity between IBDP schools. In the effort to categorise the range of schools that offer international education, including various IB schools, Hill (2006b) pointed out that the quality of the international education programme, or students' exposure to intercultural understanding, may be influenced by the type of school (e.g., national or international), how diverse the student body is (e.g., culturally homogeneous or culturally diverse), and the commitment towards international education.

3. Variation in curriculum delivery structures

3.1 Inclusive or selective?

Educational changes in organisational structure in schools revolve mainly around alterations in formal arrangements of curriculum delivery, such as the ways of grouping students, scheduling arrangements, and creating new management positions (Fullan & Pomfret, 1977). One of the issues that has been debated in the IB literature is how the IB programmes should be delivered in terms of whether the programmes should be offered to a limited number of students (selective school-within-a-school model) or to all students in a school (inclusive whole-school model) (IBO, 2008b). This distinction is important because how schools locate the IB programmes in the school organisation seems to be linked closely to the purpose of the implementations and to whom the programmes are taught.

For instance, the inclusive whole-school model is seen often in many international schools and some national schools where all students study together under the IB curriculum frameworks. United World Colleges, for example, offer the IBDP to all of their students. There are no prerequisites for studying the DP because the purpose of using the programme is to unite a diverse cross-section of students from different cultural and social backgrounds through the education they offer (United World Colleges, 2010). Anecdotal evidence suggests that this model is also seen in many schools that adopted the IB Primary Years Programme and/or the Middle Years Programme. This is because the IBO does not consider these programmes to be a selective programme for a limited number of students, and they actively encourage schools to offer the programmes to all students (IBO, 2007a, 2007b).

In contrast, a selective school-within-a-school model is often used in schools subsidised by a government. For example, many of those schools (both public and private) use the IBDP as a 'university preparation course'; only university-bound students who meet certain criteria are allowed to enter the programme. In the context of the UK, Joslin (2006) reported that many IB schools required students to gain a grade of 'C' and above in the GCSE¹ as a prerequisite for entry to the IBDP, with higher grades of GCSE being needed for the higher-level IB courses. A student's interest in the IBDP and their organisational skills may be seen as further factors in the decision to accept the student into the programme. This view seems to corroborate the IB policy-makers' claim that 'the IB diploma is not restricted to an academic elite; there is an intellectual level below which it would be difficult to obtain the full diploma, but determined, average students with perseverance and good organisational skills can succeed' (Hill, 2006a, p. 15).

In the context of the USA, Magee (2005) noted that some IB schools asked students to take prerequisite courses before entering into the IBDP, in addition to asking students to take an achievement and/or a placement test. These pre-IB courses were used to raise students' academic levels as well as 'to facilitate integration of African American students'

(p. 22) into the IBDP. Some studies (Kyburg, 2006; Kyburg, Hertberg-Davis, & Callahan, 2007; Mayer, 2006, 2008) have shown that with additional academic and social support mechanisms, deeply-held beliefs on the part of teachers about students' abilities and scaffolding, minority students from disadvantaged families could meet the numerous challenges of the IBDP and succeed without losing the academic rigour of the programme.

Another example of the selective school-within-a-school model is the use of an IB programmes as a 'gifted and talented programme' where a school allows only a small number of academically-able students who meet certain criteria to participate. In fact, it is said that the IBDP has been linked closely with gifted and talented programmes since its introduction to schools in the USA (Magee, 2005). Some advocates of gifted and talented programmes have claimed that there were commonalities between them and the IB programmes in terms of the content, teaching methodology, educational philosophy, and teaching practice (e.g., Carber & Reis, 2004; Connell, 2010; Hutchinson, 2004; Nugent & Karnes, 2002; Poelzer & Feldhusen, 1997). In the UK context, Joslin (2006) revealed in her research that some private schools viewed the IBDP as a screening mechanism to select high-achieving students. As one participant of her research put it, 'the IB Diploma does discriminate the able from [the] very able' (p. 97). This view seems to contrast with that of the IB policy-makers described above. Tookey (1999/2000) explained the benefit of implementing the IBDP for a small number of gifted students as follows:

IB students can experience the camaraderie of being challenged both academically and affectively with equally bright age-peers. While, for some students, early enrolment at a university can be a positive experience, the excitement of learning with an intellectual and social/emotional peer group is something that early college² admission may not supply. On the other hand, if the student earns sufficiently high scores on his or her IB examinations at the end of secondary school, many highly selective U.S. universities will award the student sophomore standing and give the student advanced placement in upper level courses. Or the student can gain admission to major universities in other parts of the world as if he or she had attended the top secondary schools in that country. (Tookey, 1999/2000, 'Conclusion: Practically Speaking', para. 2)

The use of the IB programmes in the context of the school-within-a-school option is seen as a desirable feature by people who appreciate differentiated educational programmes for various reasons. Typically in the USA, a well-run school-within-a-school programme is considered to alleviate the problem of secondary schools becoming too large and not facilitating student learning (Good, 2004). At the same time, however, it is criticised by people who see such a programme 'as being a proxy for the introduction of elitist selective education' (IBO, 2008b, p. 6). Burris, Welner, Wiley, and Murphy (2007) questioned why 'typical' IB schools in the USA do not encourage all students to take the

IBDP. They argued that encouraging more students to take the programme would not force teachers to lower their standards if students have the right preparation and support. In fact, Kugler and Albright (2005) have reported on a successful educational experiment in Virginia, in which the school decided to offer the IBDP to as many minority students as possible, rejecting the school-within-a-school model that was used previously in the school in 1990s. They stated:

In the late 1990s, the school had already achieved greater minority enrolment in high-level classes because of a change in policy-switching from the "gifted and talented" model that admitted students mainly on the basis of their performance on standardized tests to an "honours" approach that focused on students' motivation and performance in class. In 1995, the Gifted and Talented English 9 class of 18 students included only one African American student; no Latino students had even applied. Today, more than 100 students, proportionately representing the diverse student population, participate in the English 9 Honors program. (Kugler & Albright, 2005, pp. 43–44)

However, it is not clear whether other schools agree with Burris et al.'s (2007) proposal because the appeal of the IBDP to the schools that have adopted it may lie in its selective nature. Doherty (2009, p. 86) aptly observed the following in the context of the IBDP in Australia:

[The IB] is produced as both attractive and repellent: attractive in the ambitious sights it sets, and the promise of advantages to reap beyond graduation; repellent in the way it discourages certain types of students from choosing it, which in turn makes it a more attractive enclave to those it fits. It is clearly portrayed as an alternative for a particular type of student, so not everybody gets this choice. The students do not just choose the curriculum-the curriculum chooses the students.

3.2 With or without a national curriculum?

Another related issue concerning curriculum delivery structure that has been discussed often among leaders of IB schools is how the IB programmes should be linked to the national (or state) curriculum. Four different relationships were identified in the literature:

- (1) Offering the IB as a replacement to a national curriculum
 - (All students study only the IB.)
- (2) Offering the IB alongside a national curriculum
 - (Students choose the IB or a national curriculum.)
- (3) Offering the IB in addition to a national curriculum
- (4) Offering the IB such that the curriculum is integrated completely with a national

(Students study both the IB and a national curriculum at the same time.)

curriculum

(All students study an integrated curriculum.)

In the context of Australian state schools, Hawkes (1992) compared students studying both the IBDP and a state curriculum with those studying only the IBDP. According to Hawkes, studying the IBDP and the state curriculum at the same time provides students with a safety net for changing their pathway in case they do not do well in the IBDP course. It also allows IBDP students to maintain a close association with their peers who do not study the IBDP in the school. Additionally, this method may, under certain circumstances, be cheaper for schools to run. In contrast, students studying the IBDP without a state curriculum would mean that the students can concentrate on the one course and 'avoid what is sometimes seen as the excessive workload on those who have to study both courses' (p. 33). An additional benefit to the school is that it may be seen as more philosophically committed to international education.

Overall, the literature indicated that there are notable variations among IB schools in terms of educational content and curriculum delivery structures. Each IB school offered a unique form of the programme based on their respective contexts and capacities to implement it (e.g., Kauffman, 2005). The literature suggested that school leaders localised the IB programmes by redefining (or re-inventing) the meaning of them in line with their school policy, and modified curriculum delivery structures so that they could accommodate the needs of their students and school community.

4. A New Zealand case study

In this section, the author reports the results of the research on how the IBDP was adopted into New Zealand (NZ) schools as an example of localisation of educational innovations.³ The emphasis is placed on how the IBDP fits within the NZ national curriculum framework, the National Certificate of Educational Achievement (NCEA).

4.1 Method

In order to explore how NZ schools localised IB Diploma programme, the author contacted all nine IBDP schools and collected data with regards to how they delivered the programme in each school. This includes three schools that still had candidate status toward IB authorisation at the time of the data collection. The documents collected included school websites, promotional materials such as school prospectus and newsletters, handouts to parents, and curriculum documents written by teachers. These documents helped the author understand how each IBDP school tried to meet the various expectations set by the IBO. All information on the websites of all authorised and candidate IBDP schools was checked from time to time so that the author could deepen his understanding of how they run their schools in each local context. In addition, the documents published

by the NZ authorities that oversee each IBDP school, such as the NZ Ministry of Education and the Education Review Office (ERO)⁴ were also used. These included *The New Zealand Curriculum* (New Zealand Ministry of Education, 2007), teacher's guides, and inspection reports. These were necessary for the author to understand how authorised IBDP schools operated their organisations under the NZ education policies. Qualitative interviews with school leaders and teachers were also used in order to validate documents collected.

4.2 The findings and discussions

The findings corroborated Rogers' (2003) claim that 're-invention' of innovations often occurs in many organisations, where new innovations are changed or modified by their users in the process of adoption and implementation. The findings are categorised into the themes that emerged from the data analysis, and related issues associated with the IBDP are discussed in each section.

Characteristics of the IBDP schools in New Zealand

The findings confirmed that in New Zealand the IBDP was taught to students in their last two years of secondary education (Years 12 and 13) as intended by the IBO (2002a). No alteration in terms of the length of the programme was observed. Although the programme has been used traditionally for international schools in other parts of the world, it is now used by nationally-located private schools in New Zealand, which includes independent schools and state-integrated schools. The author found that at the time of the research all except one school offered the IBDP alongside NCEA. The school-inspection reports written by the NZ Education Review Office (ERO) indicated that a large majority of the students whose schools offered the IBDP alongside NCEA were domestic Pakeha⁵ students; the numbers of Māori students, Pasifika students, immigrant students, and international students were very small. In other words, the student body of the IBDP schools was generally 'culturally homogeneous' (Hill, 2006b, p.8). In addition, the interviews with school leaders revealed that most of their students were likely to stay in New Zealand for most of their lives. There was only one school that offered the IBDP without offering NCEA. This school was identified as an 'IB-only school' to be described later. This particular school attracted a large number of international students from Asian countries, as well as domestic students. A significant number of the domestic students had parents who were immigrants from Asian countries. All IBDP schools in New Zealand have high decile ratings⁶ of either 9 or 10, which suggests that majority of IBDP students came from families with affluent socio-economic backgrounds.

Structural alterations that occurred in the IBDP schools

The research findings indicated that all IBDP schools followed the same IBO guidelines and went through the same authorisation process to become 'IB world schools',

as researchers in other countries have suggested (e.g., Spahn, 2001). Nevertheless, the author found significant variations in the way NZ schools deliver the IBDP in each school context. Based on the variations found in the study, four types of IBDP school were identified: dual-pathway, modified dual-pathway, add-on, and IB-only schools.

In the dual-pathway schools, students chose one of the two pathways, the IBDP or NCEA (Levels 2 and 3), when they entered Year 12 after studying NCEA Level 1 in Year 11 together. In these schools, the system was often visualised as a 'Y-diagram': students study together in Year 11 (the bottom part of the 'Y' shape) and branched into different directions in Years 12 and 13 (the upper parts of the 'Y' shape). The system was also called a 'dual-pathway programme' by some IBDP schools. The research findings revealed that the school leaders of this type of school often emphasised that the IBDP and NCEA pathways had equal value to their schools, and tried to avoid creating the impression that they thought the IBDP was better than NCEA. The main purpose of offering the IBDP was to provide students with the choice of alternative curriculum pathways.

In the modified dual-pathway schools, students chose the IBDP or NCEA, but studied together in mixed classes for some subjects, covering the curriculum requirements of both the IBDP and NCEA. Some of the foreign language courses, such as French, were taught in this way because school leaders and teachers perceived that there were many overlaps between the IBDP and NCEA French course in terms of the learning content (vocabulary, grammar, etc.), teaching methods (communicative approaches, etc.), and so on. This option was used mainly to reduce the school's staffing cost, especially in schools with small rolls. In this type of school, the qualification pathway may be called 'dual-pathway', but actual subjects may not always be separated. Most dual-pathway schools seemed to have used this option when they first introduced the IBDP in their schools while the number of IBDP students as well as teaching staff was still small.

In the add-on school, all students took NCEA courses, but some studied the IBDP curriculum in addition to the NCEA, using after-school hours, break times, and/or holiday periods in order to cover the areas that they had not covered in the NCEA courses. This option was used to provide an academic challenge for motivated high-achieving students, especially for the very top students, the crème de la crème, in the school. Because the IBDP was offered as an extension programme for academically-able students, it was sometimes perceived within the school community as a programme for elite students. Because the burden that these students bore was very heavy, not many of them aimed at gaining the IBDP; most aimed only at gaining the certificate. This option was used mainly to provide an extra academic challenge for top students who want to enter elite overseas universities.

Lastly, in the IB-only school, all students study the IBDP as the only academic course of study. Although there are many schools in other areas of the world that offer IBDP without offering the national curriculum, only one school that takes such an option was identified in New Zealand. Obviously, this option was not wide-spread in New

Zealand.

The author argues that the curriculum-delivery differences found in this research are important because how schools (re-)structure their curriculum pathways has different implications with regard to the meanings people in the school communities attached to the IBDP. The implications derived from these differences are discussed in the next subsections.

Criticism of the IBDP

Hill (2006a) reported that the IBDP was perceived by some people as 'a highly academic course for a small, elite group of university-bound global nomads in expensive, private international schools' (p. 15). Some scholars have criticised the IBDP, arguing that 'the idealism that initially motivated the IB is being overtaken by the economic and social class interests' (Lauder, 2007, p. 441), and that the IBO 'has become a provider of global cultural capital' (Bagnall, 1994, p. II), reproducing social advantage of certain types of students rather than promoting social justice (Whitehead, 2005). Although there are no international schools in New Zealand, the research findings of this study indeed confirmed that the IBDP has been offered in NZ only in a limited number of high-decile private schools with high academic performance. The findings suggested that only a limited number of parents were able to send their sons and daughters to one of the NZ schools that offered the IBDP. At present time, it is unlikely that the IBDP is having any significant impact on reducing the systemic underachievement of minority students, disabled students, or those from low socio-economic communities in NZ context.

However, the research findings also suggested that within the community of IB schools the IBDP was not necessarily considered an elite programme. In the UK context, Joslin (2006) revealed that some schools used the IBDP as a screening mechanism to select academically-able students. In New Zealand, however, what Joslin found may be valid only in the case of a small number of add-on schools, where schools asked students to take the IBDP in addition to NCEA courses. As stated previously, this option was used to provide an academic challenge for a limited number of high-achieving students. Therefore, within that school community the IBDP was perceived as a programme for elite students, giving those who have completed the course 'a badge of honour'. In this sense, it seems appropriate to say that the IBDP was offered only to elite students in this curriculum-delivery structure.

In general, the dual-pathway schools allowed 'average to above-average students' to choose the IBDP pathway if they had achieved the minimum academic requirements. This corroborates the IB policy-makers' claim that 'the IB diploma is not restricted to an academic elite; there is an intellectual level below which it would be difficult to obtain the full diploma, but determined, average students with perseverance and good organizational skills can succeed' (Hill, 2006a, p. 15). The main reason why these NZ schools used prerequisites and checked students' suitability for the IBDP before they took the pathway

was because they wanted to make sure that all students passed the IB examinations at the end of the two-year course, because failure could prevent them from entering university. This was not necessarily because they wanted to create an exclusive elite programme to benefit an 'economic and social class' nor because they wanted to provide 'global cultural capital' as suggested by scholars in other countries (e.g., Bagnall, 1994; Lauder, 2007; Whitehead, 2005).

Limitations of the IBDP on subject selection

In principle, the IBDP requires students to take six subjects (or courses) from each of the six subject groups (First language, Second language, Social science, Natural science, Mathematics, and Arts). The IBO's intention is to ensure that students are exposed to a 'broad range' of academic knowledge based on the philosophy of providing an all-round education. The literature claimed this characteristic as one of the salient features of the IBDP (e.g., IBO, 2002b; Pound, 2006). Comparing the IBDP with NCEA, however, the author found that the range of subjects available to IBDP students in New Zealand was reasonably broad, but rather limited in terms of the course options that students could choose from within each subject area. In fact, all dual-pathway schools offered a larger number of (and a wider range of) course options for students in the NCEA pathway. This included vocational courses for less-academic students such as Accounting, Tourism Studies and Agriculture, whereas only a limited combination of university preparation courses was available in the IBDP pathway. Furthermore, with its emphasis on the merits of providing an all-round education, the IBDP discouraged students from specialising in their studies. Some students needed to do so however in order to get into their preferred academic field such as medicine or the arts when they entered university. The findings from this study revealed that many school leaders considered this a limitation of the IBDP and used NCEA concurrently so as to offer their students more appropriate curriculum pathway that suits their abilities, interests, and career planning.

5. Conclusion

This paper explored localisation of innovations by examining how school leaders of IB schools modified the IBDP to fit their local contexts in the process of its adoption and implementation. The literature on the delivery of the IB programmes suggested that there were significant variations among the IB schools in terms of educational content and curriculum delivery structures. School leaders in IB schools seem to redefine (or recontextualise) the programme to meet the needs and desires of school communities. The findings of the research on the IBDP schools in New Zealand corroborated the literature and suggested that there were four types of IBDP schools reflecting their curriculum

delivery structures: They were *dual-pathway*, *modified dual-pathway*, *add-on* and *IB-only* schools. These distinctions in school types are important because they seem to be linked closely to how school leaders value, re-define and/or recontextualise the IBDP programme in terms of purpose and student selection, which may be illuminating the culture of each school community.

Notes

- (1) GCSE stands for the General Certificate of Secondary Education.
- (2) The term 'college' refers to a post-secondary institution of higher learning in the US context.
- (3) Please see my thesis (Hara, 2011) for more details of the research study.
- (4) The ERO is a government department. It reviews schools and early childhood education services, and publishes national reports on current education practice (Education Review Office, 2010).
- (5) The Māori word for a non-indigenous New Zealander, specifically an English-speaking white person.
- (6) The decile rating is the indicator used to measure the extent to which schools draw pupils from low socio-economic communities. It is a 10% grouping with the scale of 1 (lowest) to 10 (highest). For example, Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities. Decile 10 schools are the 10% of schools with the lowest proportion of these students (New Zealand Ministry of Education, 2010).

References

- Bagnall, N. (1994). The International Baccalaureate in Australia and Canada: 1980-1993 (PhD thesis). The University of Melbourne, Australia. Retrieved from http://ses.library.usvd.edu.au/handle/2123/817
- Burris, C. C., Welner, K. G., Wiley, E. W., & Murphy, J. (2007). A world-class curriculum for all. *The Prepared Graduate*, 64(7), 53-56.
- Cambridge, J. (2002). Global product branding and international education. *Journal of Research in International Education*, 1(2), 227-243. doi:10.1177/147524002764248158
- Carber, S., & Reis, S. (2004). Commonalities in IB practice and the schoolwide enrichment. *Journal of Research in International Education*, 3(3), 339-359. doi:10.1177/1475240904047359
- Connell, J. (2010). Expanding our horizons: An exploration of the implementation of the International Baccalaureate programme in Prince Edward Island (MEd thesis).

- University of Prince Edward Island, Canada. Retrieved from ProQuest Dissertations & Theses database (MR64467).
- Doherty, C. A. (2009). The appeal of the International Baccalaureate in Australia's educational market: A curriculum of choice for mobile futures. *Discourse: Studies in the Cultural Politics of Education*, 30(1), 73-89. doi: 10.1080/01596300802643108
- Education Review Office. (2010). Education Review Office homepage. Retrieved September 1, 2010, from http://www.ero.govt.nz/
- Fullan, M., & Pomfret, A. (1977). Research on curriculum and instruction implementation. *Review of Educational Research*, 47(1), 335–397. doi:10.3102/00346543047002335
- Good, G. A. (2004). Two International Baccalaureate programs in the southwestern United States: Hispanic student perceptions and participation in a suburban and a border school (EdD thesis). Arizona State University, AZ. Retrieved from ProQuest Dissertations & Theses database (UMI 3152403).
- Hara, K. (2011). Educational change beyond borders: International Baccalaureate in New Zealand (PhD Thesis). Auckland University of Technology.
- Hawkes, T. F. (1992). *The International Baccalaureate in Australasia*. Melbourne, Australia: Association of Australasian International Baccalaureate Schools.
- Hill, I. (2006a). International Baccalaureate programmes and educational reform. In P. Hughes (Ed.), Secondary education at the crossroads: International perspectives relevant to the Asia-Pacific region (pp. 15-68). Dordrecht, Netherlands: Springer.
- Hill, I. (2006b). Student types, school types and their combined influence on the development of intercultural understanding. *Journal of Research in International Education*, 5(1), 5-33. doi:10.1177/1475240906061857
- Hutchinson, L. P. (2004). Recommended practices for effective teaching in the International Baccalaureate programme: An examination of instructional skills, assessment practices, and teacher-efficacy beliefs of IB teachers (EdD thesis). The College of William and Mary, VA. Retrieved from ProQuest Dissertations & Theses database (UMI 3122330).
- IBO. (2002a). A basis for practice: The Diploma Programme. Geneva, Switzerland: International Baccalaureate Organization.
- IBO. (2002b). Schools' guide to the Diploma Programme. Geneva, Switzerland: International Baccalaureate Organization.
- IBO. (2007a). MYP Coordinator's handbook 2007-2008. Geneva, Switzerland: International Baccalaureate Organization.
- IBO. (2007b). *PYP coordinator's handbook 2007-2008*. Geneva, Switzerland: International Baccalaureate Organization.
- IBO. (2008a). The IB at the glance: What makes the IB unique? Retrieved July 18, 2008, from http://www.ibo.org/who/slidec.cfm
- IBO. (2008b). A review of research relating to the IB Diploma Programme. Cardiff, Wales: International Baccalaureate Organization.

- Joslin, P. (2006). Motivation of HMC schools in England to introduce or reject the IB Diploma Programme (EdD thesis). University of Bath, England. Retrieved from British Library Electoronic Theses Online Service (uk.bl.ethos.428430)
- Kauffman, N. (2005). Variations on a theme: Implementation of the International Baccalaureate Primary Years Programme Journal of Research in International Education, 4(3), 243-261. doi:10.1177/1475240905057798
- Kugler, E. G., & Albright, E. M. (2005). Increasing diversity in challenging classes. Educational Leadership, 62(5), 42-45.
- Kyburg, R. M. (2006). *Minority adolescents in Advanced placement and International Baccalaureate programmes* (PhD thesis). University of Vrrginia, VA. Retrieved from ProQuest Dissertations & Theses database (UMI3220487).
- Kyburg, R. M., Hertberg-Davis, H., & Callahan, C. M. (2007). Advanced Placement and International Baccalaureate Programs: Optimal learning environments for talented minorities? *Journal of Advanced Academics*, 18(2), 172-215.
- Lauder, H. (2007). International schools, education and globalization: Towards a research agenda. In M. Hayden, J. J. Thompson, & J. Levy (Eds.), *The SAGE handbook of research in international education* (pp. 441-449). London, England: Sage.
- Magee, D. H. (2005). *International Baccalaureate Middle Years Program: An empirical study* (PhD thesis). Colorado State University, CO. Retrieved from ProQuest Dissertations & Theses database (MUI 3173075).
- Mayer, A. P. (2006). Interrupting social reproduction: The implementation of an International Baccalaureate Diploma Programme in an urban high school (PhD thesis). University of California, Davis, CA. Retrieved from ProQuest Dissertations & Theses database (UMI 3230661).
- Mayer, A. P. (2008). Expanding opportunities for high academic achievement: An International Baccalaureate Diploma programme in an urban high school. *Journal of Advanced Academics*, 19(2), 202-235.
- New Zealand Ministry of Education. (2007). *The New Zealand Curriculum*. Wellington, New Zealand: Learning Media.
- New Zealand Ministry of Education. (2010). *Ministry of Education homepage*. Retrieved September 1, 2010, from http://www.minedu.govt.nz/
- Nugent, S. A., & Karnes, F. A. (2002). The Advanced Placement Program and the International Baccalaureate programme: A history and update. *Gifted Child Today*, 25(1), 30-39.
- Poelzer, G., & Feldhusen, J. (1997). The International Program: A program for gifted secondary education. *Roeper Review, 19*, 168–171.
- Pound, T. (Ed.). (2006). The International Baccalaureate Diploma Programme: An introduction for teachers and managers. London, England: Routledge.
- Rogers, E. (2003). Diffusion of innovations (5th ed.). New York, NY: The Free Press.
- Spahn, B. A. (2001). America and the International Baccalaureate: Implementing the

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International Baccalaureate in the United States. Suffolk, England: John Catt Educational.

- Tookey, M. E. (1999/2000). The International Baccalaureate: A program conducive to the continued growth of the gifted adolescent. *Journal of Secondary Gifted Education*, 11(2), 52-66.
- United World Colleges. (2010). *United World Colleges homepage*. Retrieved September 6, 2010, from http://www.uwc.org/
- Whitehead, K. (2005). Advertising advantage: The International Baccalaureate, social justice and the marketisation of schooling. Paper presented at the annual conference of the Australian Association for Research in Education, Parramatta, Australia, November 27- December 1, 2005. Retrieved from http://www.aare.edu.au/05pap/whi05426.pdf
- Wollons, R. L. (Ed.). (2000). Kindergartens and cultures: The global diffusion of an idea.
 New Haven, CT: Yale University Press.

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