

The Emergence of the International Baccalaureate Diploma in Ontario: Diffusion, Pilot Study and Prospective Research

Paul Tarc

University of Western Ontario

Luke Beatty

University of Western Ontario

Abstract

The International Baccalaureate Diploma Program (IBDP), created in the field of international schools in the late 1960s, has made considerable in-roads into publicly-funded schooling in many educational jurisdictions of the Anglo-West. Although the IBDP did not enter into the Ontario public system until 1991, there are now forty-four (and growing) publicly-funded schools offering the IBDP in Ontario. With the growth of IBDP schools and the increasing transnational policy presence of IB, academic research on the International Baccalaureate (IB) is emerging, albeit the Ontario context has not yet appeared in the research literature. This paper outlines how the phenomenon of IB is beginning to be used as an object of academic research and describes the geographic diffusion of IB. It then reports on a pilot study aimed to understand students' perceptions on the impacts of the IBDP at one Catholic secondary school in Ontario, particularly around how well the IBDP supports academic development and 'international mindedness.' As with previous studies, most students are quite positive about the IBDP experience, particularly in terms of academic preparation for university. How well the IBDP supported students' 'international mindedness' remains uncertain. This paper concludes with some recommendations for future research.

Keywords: International Baccalaureate Diploma Program, IBDP, secondary education, higher education, international mindedness, academic achievement, student perceptions, international education, Ontario, Canada

Précis/Résumé

Le programme de baccalauréat international (POPB), créé dans le domaine des écoles internationales dans les années 1960, a fait des progrès considérables dans des chemins jusque dans l'enseignement financé par l'État dans de nombreuses

juridictions scolaires de l'anglo-Ouest. Bien que le POPB ne sont pas entrés dans le système public de l'Ontario jusqu'en 1991, il ya maintenant quarante-quatre (et croissante) des écoles publiques financées par les fonds offrant le POPB en Ontario. Avec la multiplication des écoles POPB et la présence politique transnationale croissante de l'IB, la recherche académique sur le Baccalauréat International (IB) se dessine, même si le contexte de l'Ontario n'a pas encore fait son apparition dans la littérature scientifique. Ce document décrit la façon dont le phénomène de l'IB commence à être utilisé comme un objet de recherche universitaire et décrit la diffusion géographique de l'IB. Il rend compte ensuite sur une étude pilote visant à comprendre les perceptions des étudiants sur les impacts de la POPB moins une école secondaire catholique de l'Ontario, en particulier autour de la façon dont le POPB soutient le développement académique et «esprit international». Comme dans les études précédentes, la plupart des étudiants sont très positif sur l'expérience du POPB, en particulier en termes de préparation académique à l'université. Comment bien «esprit international» les étudiants du POPB pris en charge »reste incertain. Cet article se termine par quelques recommandations pour la recherche future.

Introduction

The International Baccalaureate Diploma (IBD) has had an increasingly large presence in state schooling beyond its initial development and expansion (in the field of private international schools). This paper charts the growth and diffusion of the IBD in Ontario, and more globally, and also reports on a two-year pilot study on how students from one Catholic secondary school in Ontario perceive their IBD Programme (IBDP) experience and its impacts. In our analysis, we pay particular attention to how well the IBDP supports students' academic development and 'international mindedness.' The broader objective of this paper is to introduce to a Canadian audience the phenomenon of the IBDP as a potentially worthwhile object of academic research. In this light, our small case study can be read as an initial intervention to inform how researchers may want to develop larger-scale studies in Ontario and across educational jurisdictions.

Growth in publicly-funded IB schooling in the United States, Canada, the UK, and Australia far outpaces its respective growth in the private sector of these countries. As of 2011, Canada has 140 schools offering the IBD, of which 121 are public schools and 19 are private (International Baccalaureate Organization, 2012). Ontario, the geographic focus of this paper, is one of the highest regions of growth of the IBD, with 18 schools adopting the IBD since 2005 (35% growth). Presently, there are 44 public and 7 private schools offering the IBD in Ontario.

For individuals unfamiliar with the IBD, it is governed by the International Baccalaureate Organization (IBO), a non-profit foundation, whose stated mission is as follows:

The International Baccalaureate Organization aims to develop inquiring, knowledgeable and caring young people who help to create a better and

more peaceful world through intercultural understanding and respect. To this end the IBO works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. (IBO, 2011)

According to the IBO, the IBDP is:

designed as an academically challenging and balanced programme of education with final examinations that prepares students, normally aged 16 to 19, for success at university and life beyond. The programme is normally taught over two years and has gained recognition and respect from the world's leading universities. (<http://ibo.org/diploma>, accessed January 14, 2012)

In curricular terms, students must choose one course from each of the five areas (language and literature, individuals and societies, mathematics and computer science, experimental sciences and language acquisition). They can choose their sixth course in the arts or double up in one of the five areas. In each of these courses students are required to write externally assessed examinations. There are three additional and more distinctive components of the IBDP:

- The extended essay is a requirement for students to engage in independent research through an in-depth study of a question relating to one of the subjects they are studying.

- Theory of knowledge (TOK) is a course designed to encourage each student to reflect on the nature of knowledge by critically examining different ways of knowing (perception, emotion, language and reason) and different kinds of knowledge (scientific, artistic, mathematical and historical).
- Creativity, action, service (CAS) requires that students actively learn from the experience of doing real tasks beyond the classroom. Students can combine all three components or do activities related to each one of them separately (<http://ibo.org/diploma>, accessed January 14, 2011).

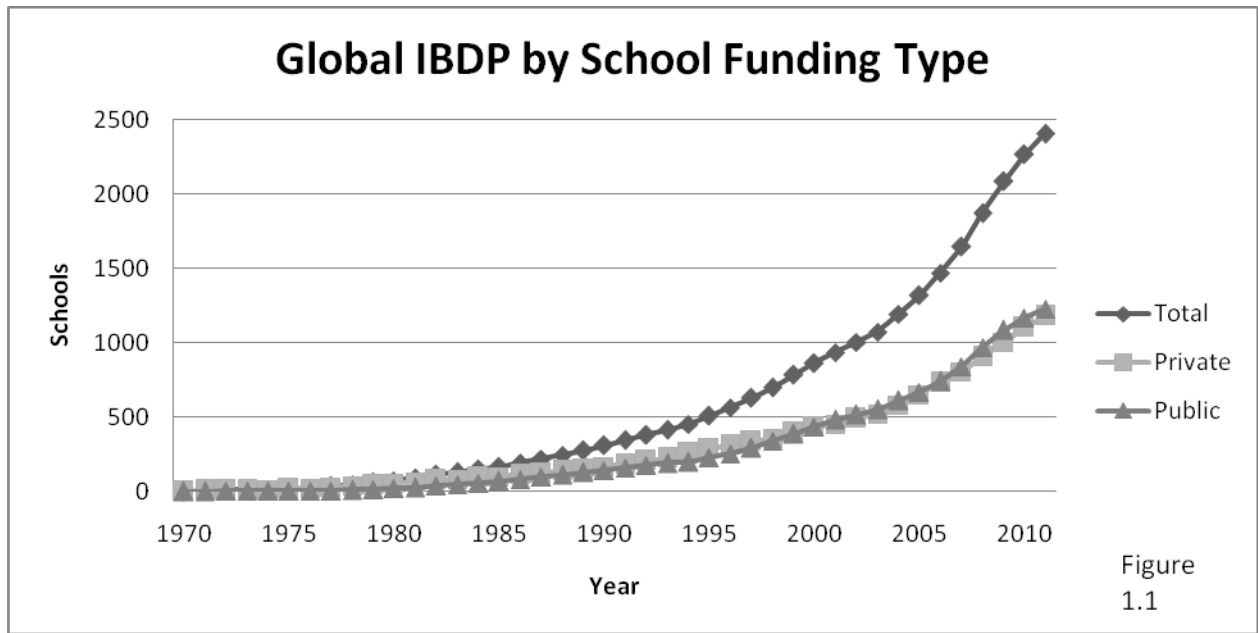
For further details on the IBDP's curriculum and assessment, readers can refer to the IBO's comprehensive website: <http://www.ibo.org/>

It should be noted that the IB has programs for the earlier grades as well. Both the Primary Years Program (PYP; for pre-K to grade 5) and the Middle Years Program (MYP; for grades 6-10) were created in the 1990s and are also growing. This paper focuses on the IBD, but the PYP and MYP have also entered into Ontario schools. As of 2011, there are 21 MYP schools and 14 PYP schools in Ontario (International Baccalaureate Organization, 2012). Overall, the IBO estimates that there are over 972,000 students enrolled in one of the IB programs, in 3,295 IB schools, in 141 countries (International Baccalaureate Organization, 2011).

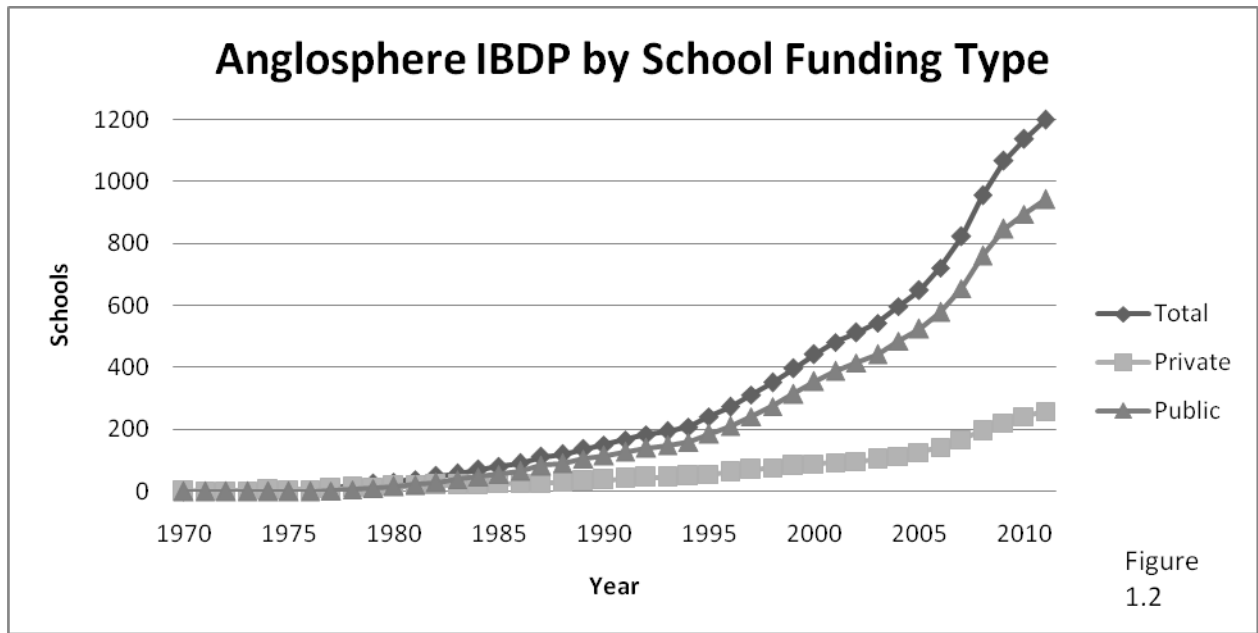
Beyond the still relatively-small numbers of IB schools and students, the IB has an increasing presence in national and transnational educational policy spheres. National-level policies in the UK, Australia and the U.S. have each explicitly named the IBDP as a desirable alternative to state diplomas (Tarc, 2009). In relation to our own

interests in the phenomenon of IB, we encounter more and more individuals with some relation to IB — teachers and students who know which schools offer it, adults who have a relative enrolled in an IB program, neighbours who are familiar with IB as an affordable ‘private school education,’ etc. Generally speaking, publicly-funded secondary schools have adopted IB in a larger context of neoliberal school reform that presses secondary schools to distinguish themselves from other schools so as to maintain numbers and attract academically-able students. Many parents and students who choose the IBDP view it as a more challenging program that may provide an advantage in accessing the more competitive university programs. However, the IBDP has different meanings and uses across geographic contexts that may or may not align well with the official visions of the IBO’s central or regional headquarters (Bunnell, 2011; Tarc, 2009). To get a sense of IB’s differentiated growth and diffusion, we present a set of graphs generated from IBO data (2012).

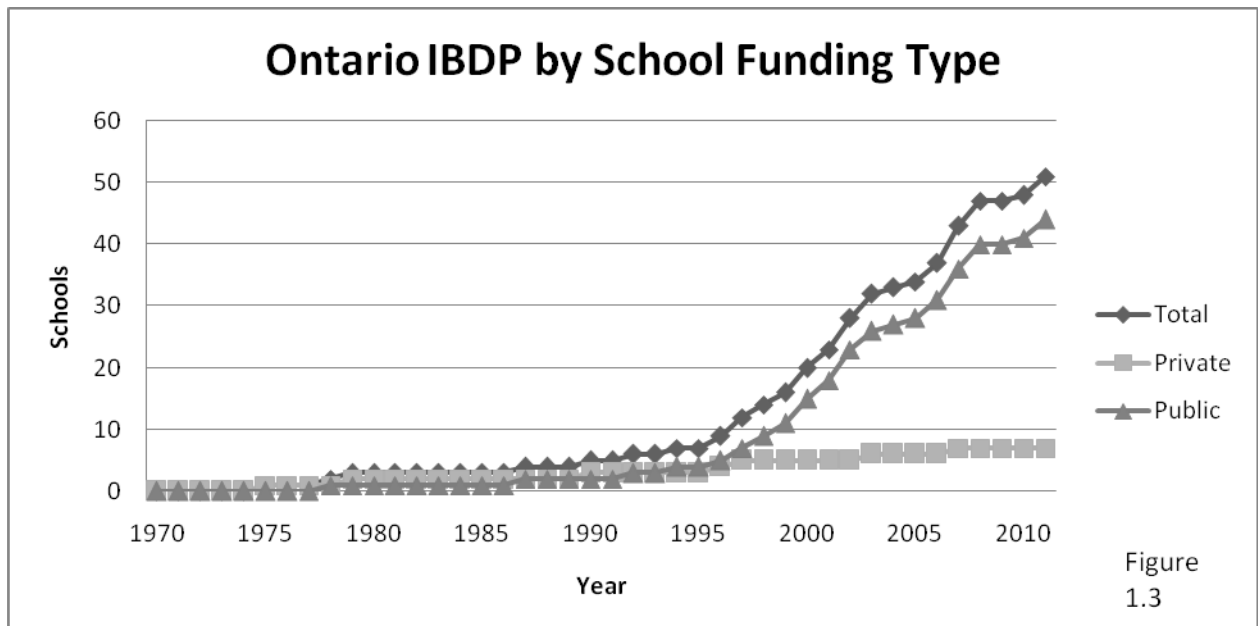
Mapping IBDP Growth



In the global context, the IBDP has grown comparably across the private and publicly-funded sectors. Though the 1970s and 1980s saw only modest program growth, the 1990s saw a rapid expansion, with publicly-funded schools accounting for a slim majority of this growth. As of 2011, public and private uptake of the IBDP is comparable, though the majority of public growth has come from the Anglosphere (countries with an Anglo-Saxon, English language heritage, including the United States, Canada, the United Kingdom, the Republic of Ireland, Australia, and New Zealand), while Asia and Latin America account for the majority of private growth.



IBDP growth in the Anglosphere shows considerable difference from the undifferentiated global context. Save for the program's formative days, public growth has consistently outstripped private growth, and from the late 1990s until the late 2000s, did so at a staggering rate (nearly 10 publicly-funded schools for every 1 private school). Since 2008, however, both public and private IBDP growth has cooled.



Ontario is Canada’s most populous province, and is home to over 1/3 of Canada’s IBDP schools. Though the Ontario Ministry of Education forbade public funding of IB programs in 1982, the Victoria Park Secondary School — a publicly-funded school in Don Mills — secured alternate funding to pursue the IBDP in the mid-1980s (Tarc, 2009). By the early 1990s, legislation came into effect which allowed for the provincial funding of IBDP programs in Ontario’s publicly-funded schools. As with the larger Anglosphere, a majority of Ontario’s growth has come from the publicly-funded sector. In the post-millennial context, growth in publicly-funded schools has been slightly more pronounced than in the Anglosphere, while private growth has been slightly more sluggish. This may be reflective of the fact that the private school sector is comparatively larger in the United States, the UK, and Australia.

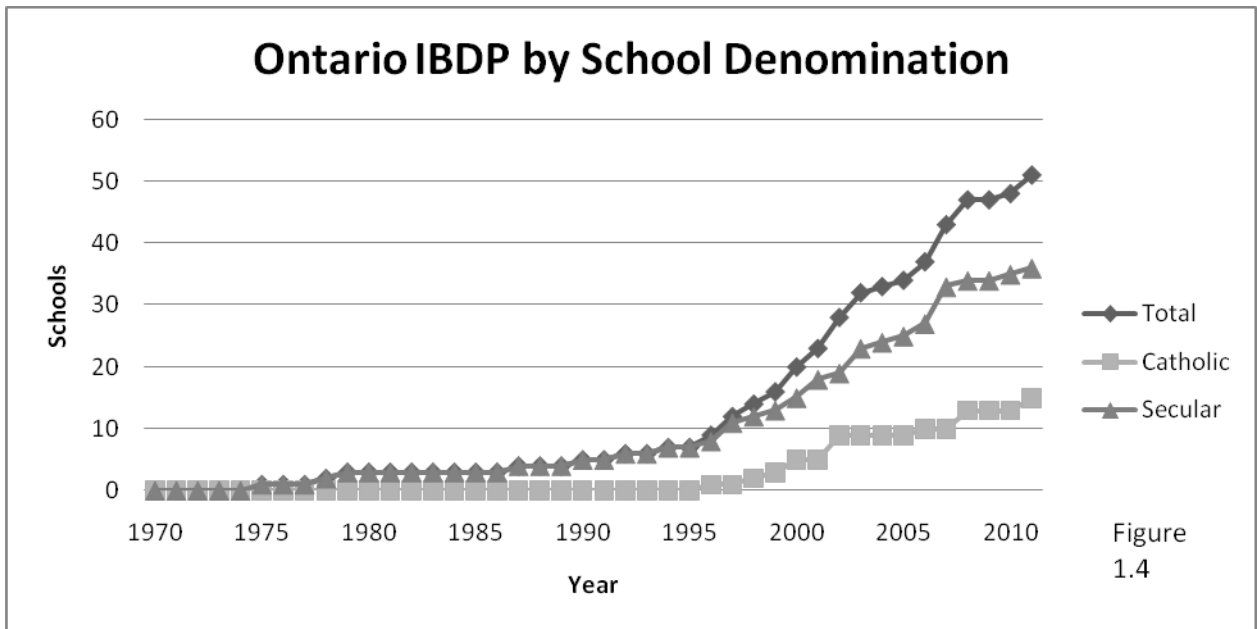


Figure 1.4

Supported chiefly through public funding, Catholic education is a prominent feature of Ontario schooling. The first Catholic IBDP school was established in 1996, and subsequent growth has averaged a new school per year. While net growth has been

modest, Catholic and non-denominational IBDP publicly-funded schools have experienced similar post-millennial percentage growth. There is scant academic research with specific focus on IBDP in Ontario (for one study that includes IBDP Ontario schools, see Bagnall, 1984); however, in the last few years a number of academics have begun to turn their attention to the phenomena of IB.

Emerging Research Trajectories on IB

With the growing presence of IB and globalizing trends in education, research on IB is expanding. The IBO itself has commissioned or supported some of this research. Obviously, the IBO and researchers who are affiliated with the IB are very interested in research for its practical implications for IB governance, policy, assessment, curriculum and professional development. However, academic researchers have also begun to study the IB to better understand educational aspects that have significant relevance beyond the IB community and the more institutionally-focused aims of understanding, improving or expanding IB programs.

From our own review of recent research on IB, we wish to highlight a few trajectories of research that study the IB or IBD to illuminate *wider* educational trends, objectives, and models of schooling. We group these trajectories along the following dimensions: (1) the IBD as a choice option in secondary schooling — invoking an array of analytic registers such as neoliberal school reform, educational markets, symbolic capital, social (class) streaming, equity, and access (DiGiorgio, 2010; Doherty, 2012; Doherty, 2009; Doherty *et al.*, 2009; Doherty & Li, 2010; Doherty & Shield, 2012; Whitehead, 2005); (2) development of IB as an exemplar of the shifting uses of international education under globalization (Poonosamy, 2010; Resnik, 2009; Resnik, 2012; Tarc, 2009); (3) IB as an exemplar of international or global citizenship education

(Cambridge, 2011; Doherty & Mu, 2011; Tarc, 2011); (4) IBDP as an exemplar of gifted education (Shaunessy *et al.*, 2006; Taylor & Porath, 2006); and (5) IBDP as a challenging program to engender improved teaching/learning in 'low performing' secondary schools (Mayer, 2008; Sisken, 2010; Sisken, 2008).

Studies relating to equity and access comprise a dominant strand of research on IB. Much of this research has studied the IBDP in Australia. In particular, Catherine Doherty (Doherty, 2009; Doherty *et al.*, 2009; Doherty, 2012) has made significant contributions in illustrating the ways in which particular stakeholders mobilize the IBDP according to their agendas. These agendas often involve using the IBDP to gain advantage in the increasingly competitive schooling-career nexus. Tarc (2009) has emphasized that neoliberal school reform, with its instrumentalizing effects (McNeil, 2000; Ravitch, 2010), has been a fertile ground for the growth of IB and its takeup for high 'academic standards.' As multiple researchers have shown (Ball *et al.*, 1997; Tomlinson, 1994; Whitty *et al.*, 1998), "choice" becomes a way of streaming because not all families have sufficient (access to) resources to make or follow through on choices.

Some research pertaining to access and equity also attempts to illuminate the inclusion/exclusion dynamics that emerge (DiGiorgio, 2010; Doherty & Shield, 2012) where the IBDP is brought into the school for a subset of students, as it typically is in publicly funded schools. For example, does the IBDP have positive effects that also benefit the mainstream program, teachers and students? Alternatively, does the IB use more than its 'share' of resources, or does it produce a clique of IBDP students who interact little with the larger student body? These questions are now being taken up within this emerging strand.

'Equity' and 'access' are not just concerns for academics; the IBO is also

concerned with questions of access. One of the founding visions of IB in its period of creation in the 1960s was that international education was not only for elites. Indeed, one of the enduring operational tensions for IBO has been responding to the challenge to open up access to IB beyond its relatively elite users (Tarc, 2009). Widening access to the IBD has been elevated to a strategic priority for the IBO (2006) in recent years. To attempt to hold onto its mission, the IBO has been active in promoting IB in inner-city schools and in beginning initiatives, apart from elite private schools, in ‘developing’ countries (Tarc, 2009). In this light, Sisken’s (2010, 2008) research has indicated that the IB seems to be supporting more progressive approaches to teaching and learning in ‘Title I’ schools where it has been adopted. [Note that Title I schools are so named if a minimum of 40% of students are from low-income families.]

Prior Research Findings Relevant to our Pilot Study

Before presenting our pilot study research, we now turn to focus on a small set of research studies that are directly relevant. Here we differentiate three streams of IBDP research: (1) studies that examine students’ perceptions of the positive and negative aspects of the IBDP, (2) studies that examine the impact of the IBDP on academic development and readiness and (3) studies that explore the impact of the IBDP on supporting students’ international mindedness.

General Student Perceptions of the IB

Though longitudinal studies are scarce, there is some literature on students’ perception of the IB. The bulk of this literature addresses the experience(s) of current IB students, while a lesser portion deals with IB graduates. Of current IB students, two strands of opinion are typical: those citing perceived advantages of the program and those citing perceived failing(s) and/or stressful aspects of the program. Current IB students

frequently cite time management skills, critical thinking, conducive learning environments, ownership over their studies, and more challenging work as positive aspects of the program (Culross & Tarver, 2007; Culross & Tarver, 2011; Foust *et. al.*, 2009a; Foust *et. al.*, 2009b; Hertberg-Davis & Callahan, 2008). They also cite disruptive workloads, fatigue, homogenous peer groupings, and stereotyping from their regular-stream peers as less favourable aspects of the program.

With regard to IB graduates, Taylor and Porath (2006) conducted a study somewhat similar to our own. In it, the authors surveyed two IB cohorts, from 1996 and 2000, who graduated from public high schools in British Columbia, Canada. While the graduates had nominally different opinions from current IB students, many of their observations were similar. A majority of graduates valued the program's rich curriculum, but a significant minority found the workload excessive and the overall experience to be 'very stressful'. All told, 87% of graduates felt the IBD had left them better prepared for post-secondary education than their regular-stream peers.

Academic Success & Postsecondary Education Admission

While the research base is modest, there are studies examining the relationship between the IBDP and success in higher education.¹ Caspary (2011) examined the post-secondary enrollment patterns of IB certificate and diploma holders who graduated from U.S. high-schools in 2000-2001. Using the National Student Clearinghouse (NSC) data, he found that IB graduates typically enjoyed higher post-secondary graduation rates than their non-IB peers. As well, a proportionately higher number of IBD holders went on to

¹ It is important to note that research correlating the IBD with future success could reflect the effects of doing the IBDP or it could reflect the characteristics of students who choose to take IB (or some combination of the two). Multiple studies have noted this methodological obstacle.

attend selective, 4-year postsecondary institutions than non-IB holders.

Similarly, Geiser and Santelices (2004) examined the role of advanced placement (AP) and IB courses as a criterion for admission into the University of California (UC) Berkeley. Examining a sample of 81,445 freshmen entering UC Berkeley between 1998-2001, they concluded that while *performance* on AP and IB examinations was a strong indicator of future GPA, the mere taking of AP or IB *courses*, without the subsequent taking of IB *examinations*, was not a strong predictor of future academic success. The IB Global Policy and Research Department (2010) also conducted a study at UC Berkeley, and reported on 1,547 IB program participants who had attended U.S. high schools, and who enrolled at UC Berkeley between 2000-2002. Even controlling for socioeconomic factors, the study found a positive relationship between participation in the IB program and future GPA/graduation rates in post-secondary education.

Outside of the U.S., the UK Higher Education Statistics Agency (2011) studied the performance of IB graduates and students with A-Level qualifications who were enrolled in UK higher education institutions between 2007-2009. The study found that IB students were more likely than A-Level students to enroll in the country's 20 top-ranked universities. They also found that IB students, in a majority of subject areas, were more likely to obtain a top-class degree than their A-Level counterparts.

In line with these findings, many post-secondary institutions have a high opinion of the IB. In the UK, Jenkins (2003) surveyed 71 higher education institutions, and found that "core" elements of the IB program — TOK, CAS, and the extended essay — were viewed positively by a majority of these institutions. A majority of respondents also felt the IB conferred advantages to their students which the A-Level system did not. Coates *et al.* (2007) investigated perceptions of the IB by Australian and New Zealand higher

education institutions. Polling senior academics and administrative staff, he found widespread agreement that the IB enhanced student competence, though in contrast to Jenkins' study, the TOK, CAS, and extended essay were comparatively devalued.

International Mindedness

An under-studied aspect of the IB is the development of, “[the] knowledge, attitudes, and skills of ‘international-mindedness’ and ‘world-mindedness’” (James, 2005). Conceptual writings on international mindedness dominate over empirical research (Cause; 2011; Haywood, 2008), and these writings tend to emphasize the ‘slipperiness’ of the term (Cause, 2011). In the context of the IBDP, research on the development and teaching of international-mindedness is scant. A few studies are worth noting. Hinrichs (2002; 2003) measured the impact of the IB program on students’ international understanding. Through a survey and written exercise, she assessed levels of international understanding across a group of AP and IB high school students in the U.S. She concluded that the IB students had a more fulsome appreciation of international understanding than their AP counterparts; she also claimed that the difference was, at least in part, a result of the IB program. In a more conceptual piece, Van Oord (2007) theorized on the IB’s philosophy of education, and concluded that while the IB had become more international ‘on the content level,’ it retained a profoundly Eurocentric curriculum.

Pilot Case Study on IBDP in Ontario

Setting the Context

To maintain anonymity of the school, only some contextual details are provided. International Baccalaureate Catholic Secondary School (IBCSS) is a Catholic secondary school in a suburb of an urban center in Ontario. The program began in 2002 and has

been fairly successful in attracting students into the program since its inception. The school selects grade 8 students (beyond the school zone) through testing and teacher recommendations to enter a pre-IB program in grades 9 and 10. A proportion of the students specifically coming into the school for the IBD do not actually take the IBDP in grade 11. A smaller group who take the first year of the IBDP in grade 11 switch to the academic stream for their final year of schooling. The parents of the IBDP students surveyed are generally very well educated; roughly 65% of students' mothers and 80% of students' fathers were reported to have at least a Bachelor's-level degree. Although we did not have access to families' incomes, based on the location of the school we can surmise that students attending the school have above average socio-economic-status. Many of the students are fluent in more than one language; Cantonese and English are the two most common first languages. The school is known for academic excellence irrespective of the IBDP. The IB teachers we spoke with seemed very invested in the program and the IBDP as a whole seems to be running relatively well. The school was partnering up with (and mentoring) another Catholic school in the area that had just adopted the IBDP program.

This study was initiated by the principal of IBCSS, who, upon hearing about some of the research studies conducted in the United States on the impacts of the IBDP, contacted a local university about the possibility of a research partnership. In particular, he wanted to know how well his school's IBDP was faring in preparing students academically for their undergraduate degrees. Ideally, he envisioned tracking the academic achievement of IBDP graduates in their undergraduate studies in comparison to graduates of the regular academic program. The principal was also interested in garnering more systematic feedback on how students were experiencing their IBDP and

how the program could be made more effective.

In responding to the request, we agreed to conduct a pilot study that would be more qualitative and exploratory in nature. Beyond attempting to track academic progress, our study intended to examine academic engagement more generally. We also wanted to explore the IBDP's official, more idealist aims of educating the whole person and particularly that of fostering international mindedness, an aim of increasing import in a globalizing world. The longitudinal aspects of the study have been a challenge in terms of securing funding and in terms of maintaining contact and participation of IB graduates.

In the end, our data collection centered upon understanding the perceptions of IBDP students, graduates and teachers at IBCSS along three dimensions: (1) students' perceptions on the benefits and drawbacks of the IBDP; (2) how well the IBDP prepares students for future academics; and (3) the degree to which the IBDP fosters international-mindedness.

Key Findings of our Pilot Study

In this paper, we focus primarily on the grade 12 students we surveyed in 2010, upon the completion of their IBD, and then surveyed again in 2011, after they completed their first year of university. We choose to focus on this data set in order to get a sense of how students perceived the IB across their transition from secondary school to undergraduate studies. As an exploratory and small-scale project we do not offer statistical analysis. Rather, we summarize IB students' perceptions on their experience with the IBDP and its impacts. These results, then, are suggestive rather than numerically significant. It should be noted that students were invited to participate in both the survey and interviews. 26 Students (13 male, 13 female) out of the 49 grade 12 IBD students participated in the first survey. The first part of this section presents a

straightforward summary of the 2010 survey results of 26 participating grade 12 IBD students. Analysis of the follow-up focus group interviews is then discussed in relation to the survey results. Finally, the results of the 2011 e-survey (12 of the original 26 participants) are presented and discussed. Both the hard-copy survey and the e-survey consisted of multiple choice questions (5-point scale), a few fill-in-the-blank questions, and a few short answer questions where students could fill in a text box.

2010 Survey (26 grade 12 IB students)

When prompted to recall their motivations for choosing IB, students' most common responses were: its academic challenge (11), family and friends' recommendations (9), and for enhancing access to university (5). Family or, more precisely, parents continued to play a role in students' participation in IB, given that almost all the students indicated that their parents were supportive of IB to 'a major extent' (20) or to 'some extent' (5). The main reservation or worry that students reported in terms of choosing to enroll in the IBDP were the perceptions of the increased workload over the standard academic program (17).

Generally, students reported positively on their experience with IB. Students rated their overall experience in the IBDP as follows: excellent (4), very good (7), good (8), fair (6), poor (1), very poor (0). The most common responses to the '3 best features' of the IBDP were the: learning environment (16), well rounded curriculum (9), teachers (8), small classes (8), community of friends (7) and TOK (6). When prompted to list the '3 worst features,' common responses were: workload/stress (11), limited number of courses (11), translated marks² (7) and high exam weighting (7).

² In this context, 'translated marks' is referring to these students' perceptions that their IB scores may not be fairly translated or well understood by university admissions offices.

When asked to estimate how well the IB had prepared them for university, students reported very positively. Although 5 students selected the ‘cannot say yet’ option, most students selected the highest two options, estimating that IB had prepared them ‘very well’ (9) or fairly well (8). Beyond the aim of supporting students’ academic competencies, the other key aim of IB of fostering international mindedness was more variable for students. When asked ‘how well does the curriculum of the IB Diploma program at the [school] achieve [the] goal of international mindedness?’ students responded as follows: very well (3), fairly well (14), not very well (6), not at all (1). That almost a third of these students didn’t view the aim of international mindedness as being realized through the IBDP is an important result to highlight for further discussion. The particular components of the IBDP that some students listed as most contributing to international mindedness were: TOK (10), History (5), French (3) and English/World Literature (3).

4 Focus group interviews (17 - grade 11 and 12 IB students – 9 male; 8 female):

The focus group interviews provided thicker and more nuanced conceptions of the students’ perceptions of the IBD. In groups of 4 or 5, students took turns sharing their experiences of IB and its impact on their academic progress, readiness for university, and their international mindedness. First, a number of students acknowledged that there are multiple perceptions of IB; as one student emphasized one ‘gets out of IB, what one puts into it.’ Still, the majority of the students spoke of their experience in positive terms, particularly around the academic challenge and how it teaches them time management and study skills. On the negative side, some students emphasized the increased workload and stress at certain intense times of the year. One grade 11 student, who was the only one we interviewed and who was exiting the program for his grade 12 year, commented

on how the IB was too demanding and had damaged his academic standing in year 11.

One key finding emerging in the interview data was the importance of building and sustaining informal peer support groups. Students who struggled with the demands of IB also reported that these struggles were managed or overcome through supportive peers who were also 'in the same boat.' Although a few students noted competitive dynamics within the IB cohorts, most emphasized working collaboratively with at least a small number of peers and in face-to-face and online study groups.

For some students, the IBDP seemed to achieve its aim of offering a *more well-rounded* education. One student, for example, discussed how he developed a passion for English literature even though his identified strengths were in maths. This student was also on an elite sports team at a local university. In contrast, other students explained how the academic demands of the IBDP had *narrowed* their focus in school and participation in extra-curricular activities. This discrepancy might suggest that the IBDP promotes a more well-rounded education with the more conceptually able/ready students who can engage its programmatic breadth and still maintain other extra-curricular interests. This conjecture would align with the IBD's use in gifted education.

Students' motivations to take and continue to participate in IB aligned closely with the survey results. Some spoke about their desire for the academic challenge, some commented on their and their parents' hopes that IBDP might provide an academic advantage, and a few students, who indicated that their parents had strongly influenced their decision to enter (pre)IB, emphasized that continuing in the program had been their own choice. A few students who had immigrated to Canada from Asia commented on how the IB had higher academic standards, which better aligned with their previous home-country schooling. These students, who also happened to be in the same focus

group, were also more aware of the ‘international cachet’ of the IBD. Some had relatives doing the IBDP in private schools in other countries.

Even in the interview setting, probing students on international mindedness produced diverse responses and was methodologically tricky. In the first place, students had varied and sometimes fuzzy notions of this more idealistic aim of the IBD. A few grade 11 students seemed unaware that this was, in fact, an aim of the program. For a couple of students, the ‘international’ was simply a matter of the diploma’s international reach. Other students were more aware of the aim of international mindedness, but were ambivalent about how well the IBDP was fostering it in their school. When pressed to give examples of how international mindedness was fostered in the school, the TOK course was most often cited. These students described TOK as pressing them to evaluate assumptions, think critically, and attempt to see from multiple perspectives. A number of students also spoke about their French course (their second language requirement), as providing a chance to learn not just the language but about French culture. Non-traditional, more participatory activities in French class were also cited as vehicles for fostering international mindedness.

In summary, the interviews added some depth to the survey findings. Most students interviewed felt that the IBDP was worth taking. In terms of academic learning, the majority of students emphasized good work habits and time management skills; a good number also thought that the IB had offered a more challenging curriculum and promoted critical thinking. These results align with the previously cited studies by Taylor and Porath (2006) and Hertberg-Davis and Callahan (2008). Also aligning with Foust *et al.* (2009a), many students emphasized the workload and stress brought about by the academic demands; however, the social and academic support found and sustained

with IB peers stood out as one key finding of this pilot that could benefit from further study. Cohort cultural dynamics, which likely vary across IBD schools, might be one factor impacting the success of IBDPs. Finally, the interviews shed little light on the degree to which the IBDP is fostering ‘international mindedness,’ although some students recognized certain elements being fostered in particular courses, especially in TOK.

Follow-up e-survey 2011 with IB grads:

Between May and July of 2011, 12 of the original 26 grade 12 students surveyed (7 female; 5 male) completed an e-survey. Having completed their first year of varied undergraduate programs, these students could retrospectively consider the impacts of their IBDP experience. This section describes the main findings and any significant shifts in the students’ perceptions of their IBDP experience. Although it could be useful to untangle the summary of results to each individual’s program and comments, we do not provide this individuated analysis so as to protect the anonymity of the students.

To the question: ‘How well did the IB prepare you for your first year of university studies?’ students responded as follows: outstandingly (2), very well (7), satisfactorily (1), poorly (2) and very poorly (0). In terms of the ‘best features’ of the IBD, the “community of friends” was most highly ranked and seems to have gained in importance retrospectively. Again, this finding highlights the significance the students place on peer groupings for academic and emotional support. Most of these IB grads report maintaining contact with their IB peers from IBCSS: very much (3) or somewhat (7). However, only three of them report collaborating on academic tasks very much (1) or somewhat (2).

The next ranked ‘best feature’ was the IBDP teachers, which perhaps also represents a shift from the previous year. Perhaps engaging in the new undergraduate

context has made some students appreciate the quality of their former community of friends and teachers in the IBDP context. In a related question about the specific component of the IBDP that best prepared students for 'university life' students ranked the top three as: (1) the extended essay; (2) English; and (3) Chemistry and World History. It is significant, although perhaps not surprising, that students place a high value on the usefulness of the extended essay. Also significant for these authors is the fact that the TOK does not rank higher, even though it was invoked as being most important to the goal of fostering 'international mindedness' and 'critical thinking.'

The 'weakest feature,' retrospectively, was no longer the workload or 'stress,' but the 'limited number of courses' offered within IBCSS's configuration of the IBD. For a significant minority, the IB program supported their area of undergraduate specialization only satisfactorily (2), poorly (2) or not at all (1). Unsurprisingly, students taking science related fields were more positive about their preparation given that Chemistry and Biology were both offered at the 'higher level' at IBCSS. As for courses that students felt less prepared for by their IBDP at IBCSS, the following were cited by two students: mathematics, economics and accounting. One student listed 'physics,' and one student listed 'laboratory components,' among a number of other courses mentioned only once. Clearly, limited course offerings will be an ongoing and common challenge for most schools in the public sector, where only a small subset of grade 11 and 12 students take the IBDP.

As to how well the IBDP 'achieved the goal of international mindedness for you,' there was a similar normal distribution from 'not at all' to 'very well.' We also asked these students the same question in regard to their first year of undergraduate study. On average, students were more positive about their undergraduate program than the IBDP.

We were not surprised in looking at either one of these results by themselves, but we were quite surprised by this difference (5 of 12 in the ‘very’ or ‘fairly well’ category for IBCSS, but 9 of 12 in these categories for the undergrad program); however, without gathering more information, it remains difficult to understand what factors are involved. One possibility is that students are more engaged in extra-curricular activities in university that relate to international mindedness. For example, many of these IBDP grads indicated their involvement in cultural clubs, human rights clubs, service work, etc. Perhaps the student body in the university environment is also seen as more ‘international’ than at IBCSS. It may also be that these IB grads don’t see the IBDP as doing a particular good job around supporting ‘international mindedness.’

Near the end of the survey we asked the question: “After one year of university, have any of your conceptions of the IB changed? If so, what is the main thing that's changed with regards to your view of the IB?” To complete this section, we will discuss some significant parts of their responses. First, only one student suggested that no conceptions had changed. Six of the twelve students commented that they realized just how beneficial the IBDP was. Half of these, and an additional respondent, specifically mentioned that the workload and stress wasn’t as bad as it had seemed at the time. Only two students were critical. One suggested that all the hype about the benefits of IB had not materialized for him. If the IB did help a bit with his study skills, he notes that the content of the courses haven’t aligned too well with his current program. The other student now views IB as just another curriculum, in the sense that the benefits of IB are mostly about how the student him or herself engages with the program.

Discussion

The previous section presented our methods and findings of our small pilot at

IBCSS. The discussion in this section is informed by these findings and discusses more broadly how future research might shed light on the (differential) impacts of IB in Ontario (and other jurisdictions) and the limitations and methodological tensions involved.

Academic Preparation

As reported, a growing number of studies report positively on the relation between IBDP and future academic success in university. Our research was not designed to add conclusive findings to these past more systematic studies, but to pilot a study in the uncharted Ontario context. Nevertheless, our surveys and interviews do corroborate these studies and the perception by the principal and teachers at IBCSS, in that most students do perceive the IBD as offering enhanced academic preparation. One notable caveat, which surfaced in hearing back from the IB grads after their first year of university, is that while the IBDP does foster time management and study skills, the limitations on course selection mean that, for certain university programs, IB students may not have access to the introductory courses that mainstream students have in the regular academic programs.

International Mindedness

The 'global perspective' we're supposed to be having in our classes was often regarded as BS and taken as a joke. While I myself have personal interests in global affairs and politics, it's still possible to graduate IB being completely ignorant about world events and different cultures, as many of my classmates are. (IB grad after first year undergrad)

Given our own lack of determining how well international mindedness is realized through the IBDP at IBCSS, this quote from an IB grad on the 2011 e-survey is a

provocative entry point. First, one of us has heard anecdotal comments like this one from both IBDP students and teachers in the past. Indeed, the IBO has been persistently engaging the challenge of how to promote the “International” of the IB, given the flexibility of its implementation since the 1980s (Tarc, 2009). The earlier student comment cited about how ‘one gets out of the IB, what one puts into it’ fits well in this light. Admittedly, it is important to acknowledge, as one reviewer reminded us, that students’ experiences will vary across contexts, due to differences in course options, teachers, and resources available. As our summary of findings above suggests, some students in our study could point to ways that their IBDP supported their international mindedness.

Still, our pilot was limited in its capacity to engage this research question. Indeed, we did not ask this question in any comparative sense as a few studies have (Hinrichs, 2002; 2003). Nevertheless, as the literature review suggested, other researchers have also struggled to answer this question of how well the IBDP realizes its aim of fostering international mindedness. There remain both conceptual and methodological challenges in this regard. Both *defining* international mindedness and *measuring* its development remain challenging, particularly for short-term (survey-based) research.

Qualitatively, our findings reveal that at IBCSS, the TOK and French language courses are more fertile components for pressing students to learn more about the world and about perspective taking. One IB French teacher interviewed explained how the French program had grown and prospered since the addition of the IBDP. This development was one substantive example of how the IBDP positively influenced the school as a whole. Both the IB Chemistry and Mathematics teachers interviewed understood the international mindedness aim of IB as being fostered in *other* subjects or

parts of IB, rather than in their own subject areas. Although the IBO conceives of international mindedness as integrated across all subjects, our pilot suggests that it is still compartmentalized by subjects. Finally the Creativity, Action, Service program was mentioned very little by students, which was a bit surprising given its potential alignment with fostering international mindedness.

Our pilot was exploratory in nature and produced out of the negotiated agendas of the principal and ourselves as university researchers. Some of the specific results will be useful for the IB programs at IBCSS. Some of the more conceptual and tentative results open up prospective lines of inquiry; a few of these are listed below. A comparative, multi-sited research study could productively and comparatively examine how the IBDP is adopted and enacted across different local contexts in Ontario, in Canada, and beyond. As for researching the aim of ‘international mindedness’ a much more in-depth classroom ethnography may be necessary. Disassembling particular components of international mindedness and then researching their enactment in the classroom might produce more robust understandings of teaching for, and learning, international mindedness. With a goal of ‘deparochializing’ the IBDP English A1 curriculum toward operationalizing a ‘cosmopolitan literature curriculum,’ Chin Ee Loh presents one relevant case study. However, her data largely centers on the selection of texts, rather than on the conditions of learning in the classroom. Given our tentative findings where the TOK course was most cited by students as an element that supported international mindedness, it could be particularly productive to focus in on the intended and actual implementation of TOK to better understand how ‘perspective taking,’ for example, can or might be fostered.

Moreover, given the difficulty in defining international mindedness in the abstract, analyzing a set of inductive, ethnographic case studies might shed light on what

‘international mindedness’ is and might be, given how teacher and students relationally engage relevant elements of the curriculum. Kurusawa’s (2007) approach to conceptualizing the unwieldy ‘global justice’ departs from formalist approaches to define justice from above via political philosophy or juridical discourse. Instead he theorizes global justice as produced from a set of human practices or social labour from below (such as bearing witness). In a similar fashion, research examining international mindedness (and other progressive epistemic dispositions) would do well to empirically investigate the classroom context to see how certain elements or values linked to international-mindedness get taken up or produced in school classrooms. Such an approach would both (1) avoid starting with some abstracted ideal that is haplessly set against the life world of the classroom and (2) generate insights that can more seamlessly inform future pedagogical practices.

To conclude, we list a small set of prospective research projects/approaches that emerge from our initial engagement with the phenomena of the IBDP in Ontario:

- To add Ontario, or other Canadian provinces, into the emerging set of studies on the more instrumental impacts of IB on academic preparation, quantitative comparative research would be necessary. Ideally, a study could track IBDP graduates’ academic progress across their undergraduate program and compare these students to non-IB academic stream students.
- To understand the complex uses of the IBDP in Ontario (and Canada), a multi-sited research study would be useful. Studies could follow Doherty’s (2009) approach in the Australian context to understand the meanings and effects of IBDP as a choice option in different kinds of schools and across school boards and provinces. Alternatively, one could also consider the different dynamics in

which IB makes an impact, positively and negatively, with the rest of the school and within the school board. A comparative approach could also shed more light on the opportunities and limits of IBDP to promote academic achievement, a ‘well-rounded’ education and international mindedness.

- Our pilot suggests that the TOK course, as a distinctive feature of the IBD, would be worthy of a more focused, multi-site research study to illuminate TOK pedagogies and their effects on students’ learning.

This list is not exhaustive; one can turn back to the emerging research trajectories presented earlier to use the phenomena of IB in Ontario or Canadian schooling as a way of illuminating and examining educational trends and models.

In closing, we feel that the increasing presence of the IB in Ontario and beyond represents a salient phenomenon with which Canadian educational researchers might engage. We intend that our modest intervention here, including the summary of our pilot study, is useful to researchers who are taking note of the IB’s emergence and perhaps thinking about what it might offer as a research object. For the most part the findings of our pilot, conducted in the Ontario context, align with past research conducted in the Anglo-West. Further research with additional partners is necessary to verify and extend the insights and conjectures emerging from our study.

References

- Bagnall, N. (1994). *The International Baccalaureate in Australia and Canada: 1980 - 1993* [doctoral dissertation]. Melbourne, Australia: University of Melbourne.
- Ball, S.J., Bowe, R., & Gewirtz, S. (1997). Circuits of schooling: A sociological exploration of parental choice of school in social-class contexts. In A.H. Halsey, H. Lauder, P. Brown & A.S. Wells (Eds.), *Education: Culture, economy, and society* (pp. 409-421). Oxford: Oxford University Press.
- Bunnell, T. (2011). The International Baccalaureate in the United States: From relative inactivity to imbalance. *The Educational Forum*, 75, 66-79.
- Cambridge, J. (2011). International curriculum. In R. Bates (Ed.), *Schooling internationally: globalisation, internationalisation and the future for international schools* (pp. 121-47). New York: Routledge.
- Cause, L. (2011). 'International-mindedness': A field of struggle, confusion and hope. *Global Journal of Human Social Science*, 11(7), 35-40.
- Casparly, K. (2011). *Postsecondary enrollment patterns of IB Certificate and Diploma candidates from U.S. high schools*. Menlo Park, CA: Center for Education Policy SLI International.
- Coates, H., Rosicka, C., & MacMahon-Ball, M. (2007). *Perceptions of the International Baccalaureate Diploma Programme among Australian and New Zealand universities*. Camberwell, Australia: Australian Council for Educational Research.
- Culross, R., & Tarver, E. (2011). A summary of research on the International Baccalaureate Diploma Programme: Perspectives of students, teachers, and

- university admissions offices in the USA. *Journal of Research in International Education*, 10(3), 231-243.
- Culross, R.R., & Tarver, E.T. (2007). Teacher and student perceptions of the International Baccalaureate program: A first year perspective. *Journal of School Choice*, 1(4), 53-62.
- DiGiorgio, C. (2010). Choices of students, parents, and teachers and their effects on schools and communities: A case study of a new enriched high school program. *Journal of School Choice*, 4(3), 278-292.
- Doherty, C. (2012). Optimising meritocratic advantage with the International Baccalaureate Diploma in Australian schools. *Critical Studies in Education*, 53(2), 183-196.
- Doherty, C. (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.
- Doherty, C. & Mu, L. (2011). Producing the intercultural citizen in the International Baccalaureate. In F. Dervin, A. Gajardo & A. Lavanchy (Eds.), *Politics of interculturality* (pp. 165-188). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Doherty, C., Mu, L., & Shield, P. (2009). Planning mobile futures: The border artistry of International Baccalaureate Diploma choosers'. *British Journal of Sociology of Education*, 30(6), 757-771.
- Doherty, C., & Shield, P. (2012). Teachers' work in curricular markets: Conditions of design and relations between the International Baccalaureate Diploma and the local curriculum. *Curriculum Inquiry*, 42(3), 414-441.

- Foust, R.C., Hertberg-Davis, H., & Callahan, C.M. (2009a). Students' perceptions of the non-academic advantages and disadvantages of participation in advanced placement and International Baccalaureate programs. *Adolescence*, 44(2), 289-312.
- Foust, R.C., Hertberg-Davis, H., & Callahan, C.M. (2009b). *Students' perceptions of the social/emotional implications of participation in advanced placement and International Baccalaureate programs*. Storrs, CT: The National Research Center on the Gifted and Talented.
- Geiser, S., & Santelices, V. (2004). *The role of advanced placement and honors courses in college admissions*. Berkeley, CA: Center for Studies in Higher Education, University of California.
- Haywood, T. (2007). A simple typology of international-mindedness and its implications for education. In M. Hayden, J. Levy & J. J. Thompson (Eds.), *The Sage handbook of research in international education* (pp. 79-89). London: Sage.
- Hertberg-Davis, H., & Callahan, C. (2008). A narrow escape: gifted students' perceptions of advanced placement and International Baccalaureate programs. *The Gifted Child Quarterly*, 52(3), 199-216.
- Hinrichs, J. (2003). A comparison of levels of international understanding among students of the International Baccalaureate Diploma and advanced placement programs in the USA. *Journal of Research in International Education*, 2(3), 331-348.
- Hinrichs, J. (2002). The effect of the International Baccalaureate Diploma Programme on international understanding. *IB Research Notes*, 2(1), 1-14.

- International Baccalaureate Organization. (2012). *Schools by country, legal status, and start of programme* (data set). Retrieved May 24, 2012, via private correspondence with IBO research staff.
- International Baccalaureate Organization. (2011). *Mission and strategy*. Retrieved October 31, 2011, <http://www.ibo.org/mission/>
- International Baccalaureate Organization. (2008). *A review of research relating to the IB Diploma Programme*. Cardiff: International Baccalaureate Organization.
- International Baccalaureate Organization. (2006). *From growth to access: Developing an IBO access strategy*. Retrieved May 24, 2007, from <http://ibo.org/mission/strategy/documents/FromGrowthtoAccess.pdf>
- International Baccalaureate Global Policy & Research Department. (2010). *Academic performance of IB students entering the University of California system from 2000-2002*. Cardiff: International Baccalaureate Organization.
- James, K. (2005). International education: The concept, and its relationship to intercultural education. *Journal of Research in International Education*, 4(3), 313-332.
- Jenkins, C. (2003). *Perception of the International Baccalaureate Diploma Programme: A report of an inquiry carried out at UK universities and institutions of higher education*. Cardiff: International Baccalaureate Organization.
- Kurasawa, F. (2007). *The work of global justice: Human rights as practices*. Cambridge, UK: Cambridge University Press.
- Loh, C. E. (2012). Global and national imaginings: Deparochializing the IBDP English A1 curriculum. *Changing English: Studies in Culture and Education*, 19(2), 221-235.

- Mayer, A.P. (2008). Expanding opportunities for high academic achievement: An International Baccalaureate Diploma program in an urban high school. *Journal of Advanced Academics*, 19(2), 202-235.
- McNeil, L.M. (2000). *Contradictions of school reform: Educational costs of standardized testing*. New York: Routledge.
- Poonosamy, M. (2010). The International Baccalaureate Diploma Programme in post-colonial Mauritius: Reaffirming local identities and knowledges. *Asia Pacific Journal of Education*, 30(1), 15-30.
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York: Basic Books.
- Resnik, J. (2009). Multicultural education – good for business but not for the state? The IB curriculum and global capitalism. *British Journal of Educational Studies*, 57(3), 217-244.
- Resnik, J. (2012). The Denationalization of Education and the Expansion of the International Baccalaureate. *Comparative Education Review*, 56(2), 248-269.
- Sisken, L., Weinstein, M. & Sperlin, R. (2010). *To be IB: Creating support structures and services for Title I high schools implementing the International Baccalaureate programme – final report*. New York: Institute for Education and Social Policy.
- Sisken, L. & Weinstein, M. (2008). *Supplemental survey to ‘creating support structures and services for Title I high schools implementing the International Baccalaureate programs.’* New York: Institute for Education and Social Policy.

- Tarc, P. (2011). How does 'global citizenship education' construct its present? The crisis of international education. In V. Andreotti & L.M. de Souza (Eds.), *Postcolonial perspectives on global citizenship education*. London: Routledge.
- Tarc, P. (2009). *Global dreams, enduring tensions: International Baccalaureate in a changing world*. New York: Peter Lang.
- Taylor, M.L., & Porath, M. (2006). Reflections on the International Baccalaureate program: Graduates' perspectives. *The Journal of Secondary Gifted Education*, 17(3), 149-158.
- Tomlinson, S. (1994). *Educational reform and its consequences*. London: IPPR/Rivers Oram Press.
- United Kingdom Higher Education Statistics Agency. (2011). *International Baccalaureate students studying at UK higher education institutions: How do they fare?* Cheltenham, U.K.: United Kingdom Higher Education Statistics Agency.
- Van Oord, L. (2007). To westernize the nations? An analysis of the International Baccalaureate's philosophy of education. *Cambridge Journal of Education*, 37(3), 375-90.
- Whitehead, K. (2005). *Advertising advantage: The International Baccalaureate, social justice and the marketisation of schooling*. Paper presented at the Australian Association for Research in Education, Parramatta, Australia.
- Whitty, G., Power, S., & Halpin, D. (1998). *Devolution and choice in education: The school, the state, and the market*. Buckingham, England: Open University Press.