

University of Alberta

The Experiences of Advanced Placement and International Baccalaureate
Diploma Program Participants: A Systematic Review of
Qualitative Research

by

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DEDICATION

To my husband-Brandon-for creating space in both our lives to
make this journey possible.

ABSTRACT

Enriched high school curricula like the Advanced Placement and International Baccalaureate Diploma programs are endorsed as enhanced entry programs for postsecondary-bound students. Program participation is perceived to have benefits that appeal to broad stakeholder groups of students, parents or guardians, teachers, administrators, and universities. This qualitative systematic review established what is known about program outcomes by synthesizing pertinent qualitative research on student participation. Twenty relevant published articles were identified; these articles were published up to July 2013, written in English and listed in commonly accessible databases. Analytical themes developed include: the impact of peer relationships, the impact of the teacher-student relationships, the conceptualization of *success*, the construction of self-image, and perceived preparation for the future. Recommendations for future research are made.

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Chapter One

Introduction

In this thesis I examine the reported outcomes for participants in the Advanced Placement (AP) and International Baccalaureate (IB) programs. Chapter one includes my personal background and rationale for approaching this topic, along with an outline of how this study was conducted. Chapter two is a paper formatted for submission to *The Journal of Advanced Academics* that includes specific details about the approach undertaken, the results of the thematic analysis, and implications of the analytical themes that were generated. Section three analyzes the results in detail, explores in particular the personal, practical, and social significance of this work, along with its relevance to educational policy and leadership and identifies possible future studies, along with a discussion of the limitations of the work undertaken.

Background

My interest in participant outcomes of the AP and IB programs stems from my experience of working within a university student services. My role focuses on recruitment of new undergraduate students and specifically identifies graduates of the AP and IB programs as demographics of interest. Enrollment in these academic enrichment programs is understood to be the most obvious predictor of high-achieving students prior to the availability of grade 12 academic results. High-achieving students are thought to be a desirable student segment to actively recruit because of their potential for academic achievement and their ability to

contribute to a campus community. The recruitment of these students is not approached like that of a marketing team in that we do not ‘sell’ education, but rather we are a student service that acts as a resource to prospective students, their parents or guardians, and teacher-administrators. Accurate information regarding campus life, program options, and other institution-specific insight is offered at events, in print, and through conversation with the intention of assisting prospective students in selecting a best-fit institution to pursue their studies. Our job as a student service is to support student success that in part starts with a thoughtful selection of institution and program of study. With this student service approach to recruitment, it is integral that information shared with students during the recruitment phase is accurate and grounded in facts to allow students to make their best-fit selection.

Our recruitment unit attends around 25 yearly information sessions at local high schools who offer either the AP or IB program. Current junior high school students and their parents or guardians attend these sessions to decide if they should participate in an enriched program and consequently, which high school they would subsequently enroll in. Schools invite a representative of the University to speak on recognition options available to program participants. While attending these meetings, it was immediately obvious that my presence, university banner, brochures, and nametag were interpreted as a direct endorsement of program participation. I was often introduced as an ‘expert’ and saw how influential my messaging could be. In some instances, I had parents or guardians ask me to talk their children into attending an enriched program and

teacher-administrators asking me to voice support for both AP and IB programs in ways that I felt uncomfortable with. I felt that some parents or guardians were motivated by the prestige of their child participating in a program over the academic outcomes or their ability to succeed. Most of all, I found that students, parents or guardians, teachers and administrators often spoke of the perks offered by postsecondary institutions, as if they were the driving factors behind participation, rather than a student-initiated interest in pursuing an academic challenge that also offered benefits at the postsecondary-level.

This sentiment often extended to the returning graduates who came to speak about their experiences in the program and their transition to university. I wondered if the majority of graduates had indeed accurately articulated their experiences or if they had become accustomed to hearing what graduates should expect as outcomes. They spoke of earning transfer credit, but not if earning this credit had a positive impact on their studies. There were generic comments about being more prepared for university-level work, but rarely elaborations on how specifically they were better prepared.

I looked at existing policies on an institutional-level to see if I could better understand how the relationship between these pathway programs and the university I work for had been defined. I found that existing policies had primarily been constructed based on outcomes that were *perceived* to be true. These perceived truths appeared to have been constructed in a number of ways. Some policies have existed for long time periods of time and had become reified truths because ‘that is the way it always has been’. Additionally, knowledge used

in the review or creation of policies was primarily derived from referencing what a similar policy at a peer university is comprised of. Accuracy or truthfulness was perceived to be automatically present if a peer university had developed a policy. I was not able to find answers in terms of how the relationship between the university and AP or IB participation should function, but I did become intrigued by the complex decision-making processes involved in postsecondary administration and decided to pursue additional education.

My studies further complicated my understanding of AP and IB outcomes as I developed a knowledge and language to question the data that I had used in promotional presentations. Much of the ‘proof’ I had available to share with parents or guardians and prospective students included quantitative data. A single graduate methodology course gave me the tools and language to better understand the figures I had been using. Percentages that appeared easy to understand on the surface ultimately became complex. I also began to hear the percentages I had previously offered repeated out of context and extrapolated to support conclusions that I did not feel were accurate. With a basic understanding of rigor, I began to see how little the quantitative data actually demonstrated to me when referring to program outcomes and how detrimental they can be when inappropriately generalized.

One example includes an IB Organization publication titled *IB Diploma Program: A strong predictor of success in university*, where a number of statistics are provided to demonstrate support of the Diploma Program being favorably looked upon in postsecondary admissions process. A survey (that cites no

sources) from the UK indicated that of 150 faculty and admissions staff, 97% feel the diploma prepares students for university, 96% favoured a broad curriculum of the type offered by IB, and 57% felt the diploma program offers advantages to students. An additional source-less study reflects that a survey of 160 faculty and admissions staff from Australia and New Zealand showed that 77% of respondents felt that the IB Diploma Program prepares students well for university (IBO, 2010). The lack of source citation within the document is problematic, as is the fact that the data that are presented reflects only personal opinions and *perceptions* of staff in various levels of administration and does not refer to actual outcomes, but rather the *perceived* outcomes of the program. These data do not demonstrate that students who participated in the program were indeed more likely to be successful in postsecondary studies.

Additionally, data from the National Student Clearing House are used to present the statistics that students who earn an IB diploma are “38% more likely to graduate from university than other students in higher-education institutions” (IBO, 2010, p.3). Without qualification of what constitutes the comparator group of students it is difficult to understand these statistics in context; it is likely important to understand the success of IB students in comparison to honours students or other high-achieving programs. This is context that is not easy to communicate, but integral to understanding exactly what the data is representative of.

The College Board also produces promotional material that uses quantitative data in ways that may be interpreted as misleading. In the 9th *Annual*

Report to the Nation a caption asks “What do the data show? More graduates are succeeding on AP exams today than took AP exams in 2001” (p. 12) with a series of progressively larger circles demonstrating growth and success of the program. While indeed there are more students passing exams in 2011 than took exams in 2001, the ratio of students passing has actually decreased from 64.3% in 2001 to 59.6 % pass rate in 2011. While more students are participating, not all students are performing at a passing level. The growth of the program in numbers of participants is used to demonstrate an increase in success in the program when the number of students meeting a minimum standard has in fact decreased. An increase in participants is indeed a success, but program growth and student success are not one of the same.

This led to the thought that for the purposes of communicating program outcomes, quantitative data may be problematic as it is not likely to be consistently delivered within the correct context. With this problem in mind I became interested in qualitative outcomes to provide a greater context to ‘what is known’. It is the amalgamation of these experiences working with students, parents or guardians, teachers, postsecondary policy, and the messaging from governing organizations that has left me wondering if there is a gap between perceived and actual outcomes of program participation. I felt that the university, and myself acting as an agent of the university, had a major role in legitimizing and encouraging program participation. I wanted to know more about the experience of students and the general outcomes of AP and IB participation.

Purpose of Study

The purpose of this research was to make visible what is known and what is not by examining the currently accessible literature about qualitative program outcomes from student participation in AP or IB programs. Current data regarding program outcomes exist in single studies focused on specific phenomena. There has been no comprehensive review of all studies investigating qualitative program outcomes. This systematic review provides a synthesis of the full array of outcomes and the opportunity to look for common themes or a lack thereof that may be present in the body of literature as a whole. Better understanding of the data that already exist have the potential to provide additional information for stakeholders including students, parents or guardians, teacher-administrators, postsecondary institutions in the many decision-making processes related to program participation in these pathway programs.

Relevant Terms & Background

The following definitions are included as the terms have the potential to be new to the reader or are context specific:

- *Cohort* is used to refer to a specific group of students proceeding through a program at the same time. It is common for students to proceed through their entire program with the same group of students.
- *Discourse* is used to refer to the style of communication used to convey group norms and values as developed by a cohort in relation to their experience within a program.

- *International Baccalaureate (IB)* refers specifically to the IB Diploma program and is not inclusive of other IB programs.
- *Pathway Program* is used as a term to describe high school programs that offer enriched curricula with the intention of offering a smoother transition or ‘pathway’ to university studies. It is used in this paper to specifically refer to both the AP and the IB Diploma Program.
- *Postsecondary* refers to college or university-level education.

Review of Literature

In this review of literature I provide an introduction to the AP and IB programs including curriculum, assessment, and the Canadian context. I then review the relevant qualitative and quantitative literature to provide an overview of key findings to establish the broader context for this systematic review. Existing literature has examined pathway program outcomes in the areas of academic success, postsecondary transfer credit and student well-being.

Advanced Placement.

In an effort to keep gifted high school students attending local secondary schools, the Educational Testing Services was contracted in 1954 to develop and assess college-level classes within high schools (Callahan, 2003). Administration of the program was transferred to the American-based College Board in 1955 with the focus of the Advanced Placement program offering individual courses to provide motivated students the option of college-level course work in high school, thus giving students the ability to earn credit towards a degree and reduce the time

required to graduate from college (Callahan, 2003). Present-day functioning of the program operates in much the same way with a focus on providing “college-level work to motivated high school students” that has allowed “millions of students [to earn] college credit or placement while still in high school” (College Board, n.d., “College-level Studies & Assessments,” para. 4).

The College Board does not set out a specific curriculum to be followed. To label a course ‘AP’ each teacher offering the course is required to submit a course syllabus to the College Board for assessment in an audit system. According to the College Board, this audit process is designed to provide clear guidelines around what is required of curricula and to function as a check and balance to better assure postsecondary institutions that courses are designed to meet a specific standard (College Board, “AP Course Audit,” n.d.). The standardized element of the AP program is the cumulative exam at the end of each course. There are currently 34 AP exams available in subjects including Art, English, History & Social Sciences, Mathematics & Computer Science, Sciences and World Languages & Culture (College Board, “AP Courses,” n.d.). There is no mandatory number of courses that schools are required to offer or that students need to participate in. Evaluation takes place with a summative assessment with single final exams that are graded by the College Board on a five-point scale: 5 – Extremely well qualified; 4 – Well qualified; 3 – Qualified; 2 – Possibly qualified; 1 – No recommendation (College Board, “About AP Scores,” n.d.). These exams are often considered the final grade for the course.

Within the Canadian context, in 2013, 26, 642 AP exams were written by

17, 301 Canadian high school students at 565 schools with a mean exam grade of 3.46 out of 5 (College Board, 2013).

International Baccalaureate.

Governed by the International Baccalaureate Organization (IBO), the IB Diploma Program began in the 1960s as a common high school curriculum that would allow internationally mobile students to be admitted to North American or European universities. The Diploma Program is “an academically challenging and balanced program of education with final examinations that prepares students, normally aged 16 to 19 for success at university and life beyond” (IBO, “The IB Diploma Programme,” n.d., para 1). Currently the Diploma Program is offered by 2,462 schools in 140 countries (IBO, “IB World School Statistics,” n.d.).

The IB Diploma Program is a structured curriculum that focuses on six academic areas: primary language, secondary language, social studies, experimental sciences, computer science and math. There is flexibility in selecting an arts subject as a sixth class or an additional subject from the other five academic areas. Three of these classes are taken at the higher level (240 teaching hours) and three at the standard level (150 teaching hours). Additional program requirements include a 4000 word extended essay on a subject of the student’s choosing, a philosophy class focusing on the theory of knowledge and contributing time to activities that fall under the category of Creativity, Action, Service (IBO, “The IB Diploma,” n.d.). It is possible to not work towards an IB

diploma and to study only specific classes to earn certificates within the IB program.

Course assessment includes a summative exam with 80% of a student's grade that is graded and issued by the IBO and 20% formative assessments assigned by classroom teacher. Individual subjects are issued a final grade out of seven: 7 - Excellent; 6 - Very good; 5 - Good; 4 - Satisfactory; 3 - Mediocre; 2 - Poor; 1 - Very poor. The IB diploma is awarded to candidates who earn a minimum of 24 points, subject to minimum scores and participation in Creative Action and Service. An additional three points are possible depending on performance in theory of knowledge and extended essay. The maximum possible score is 45 points (IBO, "How to Interpret Grades," n.d.). Within the Canadian context, IB has been offered in Canada since 1974 and there are currently 150 schools that offer the diploma program (IBO, "Country Information for Canada," n.d.).

Academic success.

For the Advanced Placement program, postsecondary preparation is a fundamental component of what the program aspires to and as such, much of the data on academic success focuses on how AP students fair in postsecondary education. The majority of data on academic success is quantitative and issued by the College Board. Morgan and Klaric (2007) investigated postsecondary success in a College Board study that followed 70, 000 students over 5 years. They found that achieving a three or higher on an AP exam had similar or better results than non-AP peers in the intermediate-level class. With different findings potential

due to the use of weighted averages, Klopfenstein and Thomas (2006), with a sample of 28, 000 Texas high school graduates, determined that the only AP variables found to have a significant impact were science and economics.

With the IB diploma program, Poelzer and Feldhunsen (2006) found that students who completed IB Science classes – Biology, Chemistry, and Physics – have demonstrated scores 10-15% higher on standardized provincial exams than students completing the standard curriculum. With the use of National Student Clearinghouse Data, Halic (2013) determined that both the retention (98% versus national rate of 75%) and four-year graduation rate (74% versus national rate of 38%) at 4 year institutions was significantly higher for Diploma Program candidates over national rates.

There is evidence that program participation can lead to increased academic success, but discrepancy on the variables involved. These findings are all dependent on contrast with a control group. It can be difficult to understand if these findings are generalizable because of the composition of a control group. It is worth questioning if it is accurate to contrast AP/IB versus a general classroom or should AP/IB participants be compared to another high-achieving demographic of student to determine if these students more likely to perform better than their peers regardless of program participation.

Postsecondary transfer credit.

An often-cited motivator for selecting a pathway program is the opportunity to earn postsecondary-level credit. Transfer credit allows first-year students to start in second-year courses. Within the literature, the issue of transfer credit and if it is beneficial is a contested topic. In a College Board report that incorporates data from Morgan and Ramist (1998) and analysis from Breland and Oltman (2001), it was suggested that on average students who attained a qualifying score of three out of five on final AP examinations appeared to achieve grades in subsequent higher level college classes that were comparable to students who actually took the first-year college course. This data supports the practice of offering transfer credit for first-year college classes and suggests that completing an AP class with a passing grade (three out of five or 60%) provides the equivalent foundation of the corresponding first-year college class. It is noteworthy that Breland and Oltman indicate that credit is often available for students who score a minimum grade of three; however, their own findings indicate that students who earned a top grade of five on an AP exam were the only section of students to perform better at an intermediate college class than their non-AP peers who had taken the first-year college class. Interestingly a National Research Council Report (2002) investigated these findings and determined that:

The methodology used by the investigators to gather and analyze their data makes it difficult to determine whether any apparent advantage held by AP students over non-AP students is a function of the colleges they attend, the classes they enter, their own academic backgrounds and

abilities, or the quality of the AP courses they took in high school. Further, there is no way to determine, from the data provided, the number of classes among the various colleges in which non-AP students outperformed AP students. It is possible that AP students were at a disadvantage in some classes or at some colleges. (p. 194)

The National Research Council report further stated that because IB classes are not designed specifically to follow first year American university classes, it can be more difficult to assess applicability of transfer credit. Assessing the appropriateness of university-level transfer credit for IB classes is an area that requires further research.

Transfer credit for both the AP Program and to a lesser extent, the IB program, specifically as they relate to the sciences, has been questioned by multiple large reports. National Research Council, Committee on High-School Biology Education (1990), questioned if the program is able to provide sufficient exposure that would be found at the majority of colleges, with a major concern on appropriate lab time; similar concerns were voiced by the National Research Council, Committee on Undergraduate Science Education (1999) and National Research Council, Committee on Programs for Advanced Study of Mathematics and Science in American High Schools (2002). Acknowledging that these reports are now older and may not reflect present-day curricula, such findings still question the appropriateness of awarding transfer credit and at what grade recognition should be awarded.

Student well-being.

With AP and IB becoming more commonly represented as university pathway programs by the governing organizations that administer the programs and high schools that offer the program, these programs are often presented as a standard route for students looking to pursue postsecondary education. It is worth understanding how this broad demographic of students who participate in these programs fare on an emotional level. The majority of information on student well-being involves analyzing the pathway programs from the student's perspective.

Hertberg-Davis and Callahan (2009) recognized that while students participating in the IB and AP programs believe that there are additional challenges and a more favorable learning environment, the program is not a good fit for all learners. Students have reported that the rigidity of the IB Diploma Program did not allow for learning pathways that met their specific needs. Foust, Hertberg-Davis, and Callahan (2009) found similar comments about rigidity, specifically in relation to the IB program. Similar concerns suggest the larger number of broad topics included in these classes results in a quick pace of instruction and lacks a sufficient emphasis on key concepts and ideas resulting in an environment that is not ideal for all students (Gollub, Bertenthal, Labov, & Curtis, 2002).

Foust, Hertberg-Davis and Callahan (2009) note that when students did speak favorably of the IB program, they did not address the curriculum or context of learning, but rather the fact that other students perceived to be advanced were

also taking the class, that the classes are taught by the most experienced teachers and that the heavy workload load was perceived to equate to a better classroom experience. Such comments appear to reflect an assumed prestige with the program rather than an appreciation for the alternative educational pathway.

Foust et al. (2009) analyzed the perceptions of students in AP and IB programs and found both positives and negatives to the association with the program. Significant items identified included a better classroom environment, a bond that formed between participants, and a sense of pride and self-confidence from successful completion of more challenging work. The negatives included unflattering stereotypes, a workload that limits other social opportunities and stress and fatigue that accompanies a rigorous program. Students did not report a concern about social life versus academic success, but rather academic success and social life versus sleep.

Conner (2009) defines a cohort model as a phenomenon that “helps to explain differences in students’ engagement levels ... [Cohort culture] refers to the attitudes, values, and practices that students in a particular group negotiate through interaction with one another and in reaction to the requirements and expectations placed on them by their institutional context” (p. 9). This is understood as a perceived benefit of the program, which is achieved by allowing students of a similar mindset to work with students with similar motivations and abilities (Tookey, 2000).

Summary.

Though not universally agreed upon, and subject to understanding the comparator group of students, there is quantitative data to support increased academic performance for participants of the AP and IB programs over their non-participating peers. Transfer credit is often a motivation for program participation, but there is disagreement if credit is beneficial to the student, especially within the sciences. Multiple National Research Council reports (1990), (1999) and (2002), (that are older and may not reflect current curricula) question if students who earn university-level transfer credit are at a disadvantage to their peers who have taken the first year course. In addition, more data is needed on the impact of IB transfer credit. Student well-being has been explored regarding the IB diploma program where a structured approach is understood to not be suitable for all university-bound students. There is not a significant amount of data on AP student wellbeing, likely due to the flexibility associated with the program.

These pathway programs have earned a reputation of prestige that is not unfounded, but perhaps not placed in an appropriate context. This brief review has demonstrated not much is known about the broad strokes of what program participants demonstrate, nor is outcome information presented in a way that can be easily transplanted to an individual context. A synthesis of the findings of various studies in this area does not exist. This study created an integrated synthesis of data to establish 'what is known' and look for thematic trends regarding outcomes of these pathway programs.

Research Questions

This systematic review aims to develop an account of ‘what is known’ within qualitative literature focusing on pathway program outcomes. This investigation will be guided by the following research question: What are known outcomes of participation in the AP or IB Diploma programs reported in qualitative research studies?

Research Design

To answer the research question, I undertook a qualitative systematic review of primary studies focused on outcomes of AP and IB program participation. As a method, a systematic review “brings research closer to decision-making” by synthesizing large pools of research data into a product that is intended to be a more manageable source of information for policymakers, stakeholders, and practitioners (Thomas & Harden, 2008, p. 2). This process allows for decisions to be based on the totality of what is known about a specific phenomenon rather than findings of single studies. More specifically, a qualitative systematic review (also known as qualitative evidence synthesis) is a “method for integrating or comparing the findings from qualitative studies through ‘themes’ or ‘constructs’ that lie in or across individual qualitative studies” (Grant & Booth, 2009, p. 94).

As established by Bronson and Davis (2012) the approach includes: 1) developing a defined research question; 2) creating a protocol stating the research question and the methods to be used; 3) retrieval of the relevant literature and

clear the inclusion criteria for the review; 4) extracting relevant information from the studies using a data abstraction form to systematically capture the relevant information; 5) critically appraise every study meeting the inclusion criteria using Consolidated Criteria for Reporting Qualitative Research (COREQ); 6) synthesize the information through thematic analysis; and 7) prepare a paper of the findings in language that will be understandable and useful for practice or policy decisions makers.

Researcher Reflexivity

With the understanding that research is never value free, I have included my own philosophical assumptions that ultimately guide and direct my thinking and actions.

Ontology.

Ontology refers to one's understanding of the nature of reality. I align with a moderate transformative/critical theory ontological perspective. The literature disagrees on how to properly categorize and name this perspective and I have used the titles "critical theory" as described by Lincoln & Guba (1994) and "transformative" as described by Mertens (2005) as one in the same. Lincoln and Guba describe critical theory as believing that multiple realities exist and that the nature of an individual's reality is shaped by the multiple realities and roles is part of and their social, cultural, political, gender and economic experiences and values. Along with multiple realities, time and space has an impact on what we perceive to be real. What has been known to be 'real' can be in actuality "reified

structures that are taken to be real because of historical situations” (Mertens, 2005, p. 23). As such, I find it is difficult to imagine the existence of one truth that can be discovered and understood universally.

I qualify my position as moderate as I believe our perspective is shaped by the various roles we choose and labels we are given, but I also believe there is a pragmatic element where we are able to actively or unconsciously shift the emphasis between roles. For example, I can choose (consciously or not) to focus on my reality from a gendered perspective as a woman rather than my middle-class economic standing. My middle-class standing may have the appearance as average or common in my everyday functioning but I may encounter situations where my gender causes feelings of ‘otherness’.

Epistemology.

Epistemology refers to the nature of knowledge and the relationship that exists between the knower and the would-be known (Guba & Lincoln, 1994). I again, identify with a transformative/critical theory in that knowledge has a subjective value that is socially and historically situated. It is because of this subjective value that it is important to consider the ramifications of research and to clearly understand potential harm, benefit or transfer of power that may result. I believe that it is not possible to engage in research from a ‘value free’ position. This does not render the pursuit of knowledge through research pointless, but rather speaks to the need to acknowledge the perspectives we bring to the creation of knowledge.

Selection of methodology.

Selecting systematic review as a methodology is compatible within the critical theory/transformational ontological and epistemological paradigms detailed above as this particular method allows for the gathering of multiple data points (that are ultimately perspectives and views) to be gathered, synthesized and summarized with the intention of providing a richer context. I do feel that it is possible to work with synthesis in a way that does not result in a positivistic corraling of data into one particular viewpoint. I believe transparent execution of methodology, the acknowledgement of author perspective and a descriptive approach to any summary or conclusions can aid in mitigating this issue. Where possible, enough data is presented to allow the reader to assess information. In addition, a focus on qualitative research helps better understand 'what is known' and to explore the broad possibilities for the existence of knowledge and the reality within which we interpret it.

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**Chapter Two: The Experiences of Advance Placement and International Baccalaureate
Diploma Program Participants: A Systematic Review of Qualitative Research**

Formatted for submission to the *Journal of Advanced Academics*

Introduction

The Advanced Placement¹ (AP) and International Baccalaureate Diploma² (IB) programs are endorsed as “pathway programs” for postsecondary-bound students by their governing organizations. As pathway programs, these enriched curricula are meant to bridge the transition between high school and postsecondary studies by offering academically prepared students a more rigorous high school experience. The College Board describes that “AP helps hundreds of thousands of high school students achieve their college dreams each year” and continues that “AP courses signal to admissions officers that you’ve undertaken the most rigorous classes your high school has to offer” and because of this “making it through an AP course and scoring successfully on the related AP Exam, you can save on college expenses” (College Board, ‘College-level studies’ n.d., para. 1, 3). Similarly, the International Baccalaureate Organization (IBO) characterizes the Diploma program as “an academically challenging and balanced programme of education” that “prepares students...for success at university and life beyond” and has “gained recognition and respect from the world’s leading universities” (IBO, 2012, p.2).

The governing organizations describe the possible outcomes of program participation in ways that appeal to a broad group of stakeholders including students, parents or guardians, teachers, school administrators, and postsecondary institutions. In order to better inform stakeholders in their decision-making

¹ See more on the Advanced Placement Program: <https://apstudent.collegeboard.org/home>

² See more on the International Baccalaureate Diploma Program: <http://www.ibo.org/diploma/>

process related to these enriched curricula, we undertook a systematic review. Individual studies have assessed specific phenomena related to program participation, but no comprehensive review of qualitative outcomes exists. As such, this systematic review synthesizes qualitative literature related to program outcomes from AP and IB participation.

The Study

Research question

What are known outcomes of participation in the AP or IB Diploma programs reported in qualitative research studies?

As a method, a systematic review “brings research closer to decision-making” by synthesizing large pools of research data into a product that is intended to be a more manageable source of information for policymakers, stakeholders, and practitioners (Thomas & Harden, 2008, p. 2). This process allows for decisions to be based on the totality of what is known about a specific phenomenon rather than findings of single studies. More specifically, a qualitative systematic review (also known as qualitative evidence synthesis) is a “method for integrating or comparing the findings from qualitative studies through ‘themes’ or ‘constructs’ that lie in or across individual qualitative studies” (Grant & Booth, 2009, p. 94). Qualitative research is concerned with how people interpret their social world and it focuses on “interpret[ing] social phenomena (interactions, behaviours, etc.) in terms of the meanings people bring to them” (Pope & Mays, 2006, p.4). It is this ability to provide an in-depth examination of the experience or perceptions of

people that distinguishes qualitative from quantitative approaches and best suits the research question.

There are distinctions that set a qualitative systematic review apart from other reviews. The end goal of a qualitative systematic review is not to add together studies, as per meta-analysis, but rather to broaden the understanding of the phenomenon in question (Grant & Booth, 2009). In addition, a qualitative systematic review is a “product of scientific enquiry”, and not equivalent to a basic literature review (Sandelowski, 2007 p.93). With this understanding of rigor, stringent processes to guide a review are required. As established by Bronson and Davis (2012), a detailed approach to the systematic review we undertook included: 1) a defined research question; 2) a protocol stating the research question and the methods to be used; 3) retrieval of the relevant literature and clear inclusion criteria for the review; 4) extracting relevant information from the studies using a data abstraction form to systematically capture the relevant information; 5) critically appraising every study meeting the inclusion criteria; 6) synthesizing the information; 7) and, preparation of a report of the findings in a language that will be understandable and useful for practice or policy decision-makers.

Inclusion criteria

Inclusion criteria were developed using PICoS guidelines (Population characteristics, phenomena of Interest, Context, and Study design) as a framework for selecting relevant articles for inclusion (Sackett, 2000). These parameters

included: a) the population studied must focus on student participation in either AP or IB diploma programs, regardless of program completion. If a mixed sample is included (for example AP, IB and Honours students) and AP or IB student results cannot be separated from other programs, articles were excluded; b) the phenomena of interest are outcomes from participation in AP or IB. Outcomes are defined as cognitive or non-cognitive skill(s) that develop or increase as a result of program participation; c) the context must produce a research article that contains a sample and is not commentary, theory, or description; d) the study design must be qualitative in nature, which is defined as having a focus on naturalistic inquiry, reliance on the researcher as instrument of data collection, and reports emphasizing narratives over numbers (Royse, Thyer, Padgett, & Logan, 2006). Qualitative data can include observations, interviews, and document analysis that involve written or transcribed responses, quotations or descriptions (Patton, 2002). Studies that purport to be qualitative but contain only minimal reporting of qualitative data were excluded. Mixed method studies in which qualitative and quantitative data (including questionnaires posing open-ended questions) cannot be separated were excluded.

Search Strategy

The findings of a systematic review are dependent on an exhaustive search of the literature to ensure thematic saturation (Petticrew & Roberts, 2006). Search strategies and data sources were developed in consultation with a librarian knowledgeable in the methodology and a journal was kept to document all

processes and decision-making. Limitations on this review required all articles to be in English.

The search strategy required the inclusion of at least one program name and a minimum of one qualitative research term. The qualitative research terms were identified through the use of an established database filter of qualitative research terms that was modified to include additional terms that may produce qualitative results, but are technically not qualitative methods (in recognition of varied methodological approaches found in qualitative research) including: ‘case study’, ‘hermeneutics’, ‘longitudinal study’, ‘document analysis’, and ‘mixed method’. As a precaution against missing improperly categorized articles, an additional parameter that specifically searched article titles for the words ‘perception’, ‘perceive’, ‘view’, ‘experience’ or ‘belief’ was included as these key words located in the title of an article are suggestive of a qualitative methodology. Databases unable to accommodate complex search parameters were manually searched with the terms: ‘advanced placement’, ‘advanced placement program’, ‘international baccalaureate’, and ‘international baccalaureate program’. The search was undertaken in five steps: 1) complex databases searches, 2) manually searched databases, 3) organizational websites, 4) Google Scholar search, 5) hand searching references found in the previous 4 steps.

Data sources

Databases were searched from inception until July, 2013. Electronic databases searched included education and discipline-specific sources: ERIC,

Education Research Complete, Teacher Reference Center, CBCA Education, ProQuest Education Journals (1988 - current), Web of Science, SCOPUS , Child Development and Adolescent Studies, Academic Search Complete, PsychInfo 1987 to present, ProQuest Dissertations & Theses Full Text, ProQuest Dissertations & Theses: UK & Ireland. Educational Research Abstracts online, Education Index Retrospective, DOAJ: Directory of Open Access Journals, and ERA: Education & Research Archive. Pope, Mays and Popay (2007) note that reviews focused on qualitative research, and those primarily within the social sciences, often require searches beyond electronic databases to locate sufficient data. As such, data sources included both published literature and ‘grey’ or unpublished literature including “research reports, policy briefings and unpublished dissertations” in addition to “lay groups, and a host of different types of information available via the World Wide Web” (p.3).

Database searches identified 1394 results that were then exported to RefWorks where 644 duplicates were excluded. The remaining 750 articles were exported to Microsoft Excel where a further 50 duplicates were identified. Additional duplicates likely existed but were not excluded as duplicate if the abstract, title, and primary authors were significantly different. These 700 citations were then evaluated against the inclusion criteria described by Sandelowski and Barroso (2007). We undertook a progressive evaluation of elements of each study against the inclusion requirements until all retrieved articles were sorted into three categories: include, exclude, unsure. In total 54 articles were identified through electronic database searches as ‘include’ or

‘unsure’ and progressed to full-text evaluation. In addition to electronic database searches, three articles were located from the research section of *ibo.org*, two articles that had previously been obtained by an author, and two articles were located via Google Scholar.

Screening

In total, 61 articles were identified as either ‘include’ or ‘unsure’ and had the title and abstract assessed by a second reader which led to a full-text review where 37 articles were excluded with reasons including: 12 with a quantitative focus, 11 containing a sample of AP/IB program students but focused on a phenomenon that was not applicable, eight focused on AP/IB program outcomes, but not from a secondary student perspective, four that had the same data set in multiple formats (example: thesis and journal publication), where preference was given to peer-reviewed, published literature and two that were not primary research. The 24 remaining articles comprised the initial data to be evaluated for this systematic review. During the synthesis stage, four additional articles were further excluded because the “conceptual framework was fundamentally incompatible with the other studies” (Pope et al., 2007, p. 28) including two with minimal reporting of qualitative data, and two that contained an AP/IB program sample, but focused on a secondary phenomenon. These decisions were made independently by two reviewers; decisions were congruent and no need was identified to consult a third reviewer. Figure 1 summarizes the search and screening process.

Results

Data appraisal/screening

Appraising rigor of qualitative studies poses a significant challenge in that it is a subjective process. Saini and Shlonsky (2008) identify over 100 quality appraisal forms designed to evaluate qualitative research. Without a clear standard for quality appraisal, it is difficult to evaluate quality as part of inclusion criteria. For this systematic review, quality appraisal occurred according to a method established by Tong, Morton, Howard, and Craig (2009), whereby primary studies are not excluded on the basis of quality, but rather they are screened for certain methods, contextual details and findings, and it is left to the reader to “assess the trustworthiness and transferability of the study findings to their particular settings” (p. 543). This method of evaluation makes quality appraisal process completely explicit to the readers who can evaluate quality within their own context. The framework used to showcase these contextual details is the Consolidated Criteria for Reporting Qualitative Research (COREQ). COREQ is a 31-item checklist established by compiling 76 items from 22 checklists into a comprehensive list and developed to promote “explicit and comprehensive reporting of qualitative studies (interviews or focus groups)” (Tong et al., p.356). This particular reporting tool requires an assessment if contextual detail is present rather than requiring an interpretive assessment that has the potential to de-contextualize qualitative findings.

Data synthesis

To meet the objective of identifying AP/IB program student outcomes, data synthesis involved thematic synthesis that “aims to achieve analytical abstraction at a higher level, by rigorously examining overlapping and elements in common among studies” (Morton et al., 2010, p. 2). Thematic analysis is appropriate for synthesis projects that are looking to “address questions about people’s perspectives and experiences” and allows for an inductive identification of main ideas and conclusions across a body of literature (Thomas & Harding, 2008, p.2).

This analysis occurred in three stages including: 1) free coding of text ‘line by line’ that attempted to summarize outcomes in primary studies into ‘free codes’; 2) the organization and development of these outcomes found across all primary studies on the basis of similarity into related areas to construct ‘descriptive’ themes and; 3) the generation of more abstract ‘analytical’ themes (Thomas & Harden, 2008). This process was repeated until all of the initial outcomes located in the ‘line by line’ coding were adequately represented in one of the final analytical categories. The concepts were evaluated for similarity and grouped accordingly. Analytical categories were developed by one author and agreed upon by another. Text was identified as data if it presented in the form of quotations from AP or IB program participants or if text was labeled as ‘results’ or ‘findings’ throughout the abstract or report. All themes generated were driven by what was discovered within the literature and were not explored through a predetermined theoretical lens. This thematic analysis was primarily focused on

the frequency of themes located within the included literature, but also included a specific thematic subsets that while not frequent, does pose a “high level of exploratory value” (Dixon-Woods, Agarwal, Jones, Young & Sutton, 2005, p.47).

Figure 1. Flow diagram of search and retrieval strategies.

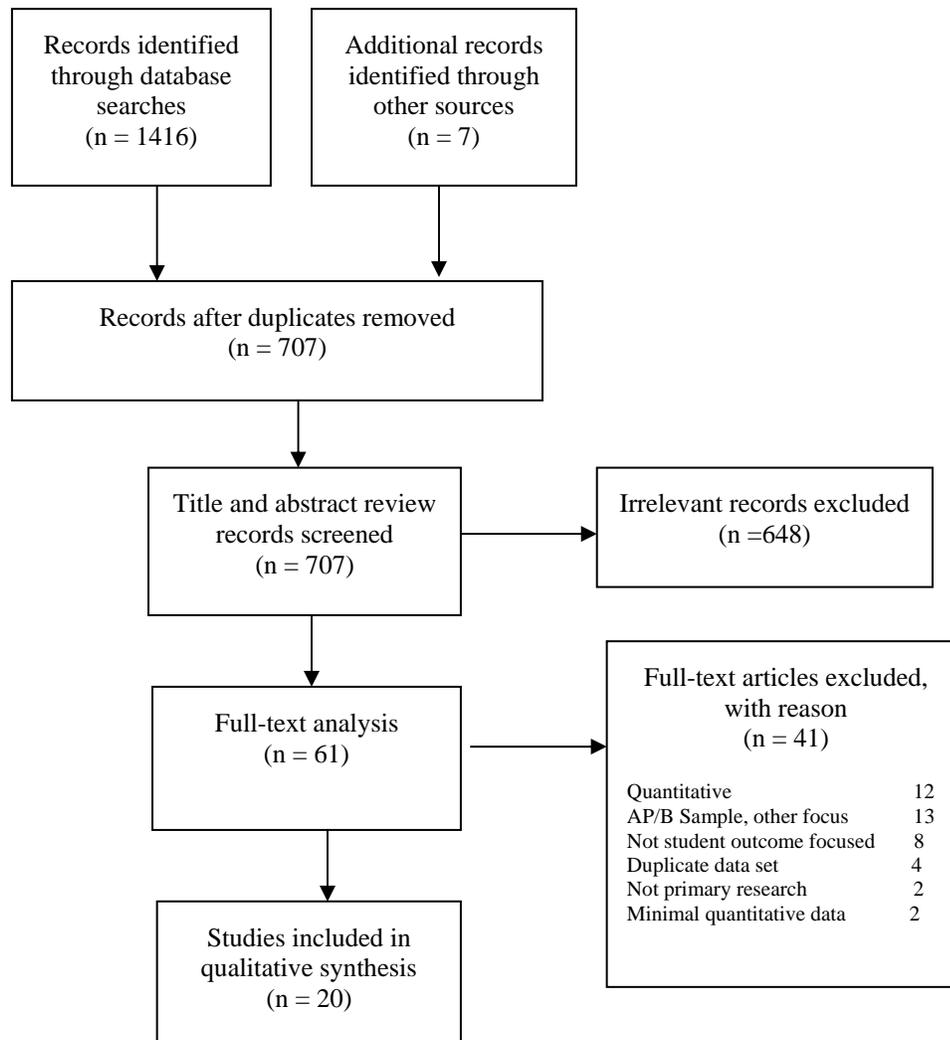


Table 1. Key features of qualitative aspects of primary research reports.

#	Author	Total Students	Program	Country	Data Collection	Theoretical Framework*	Analysis*	Principal outcome explored
1	Cavazos & Cavazos (2010)	9	AP/IB	USA	Interview	-	Grounded theory analysis	Latina/o experience
2	Coca et al. (2012)	25	IB	USA	Interview	-	Typological analysis	Minority college experience
3	Conner (2009)	4	IB	USA	Semi-structured interview	Case study	Analytic induction, Grounded theory	Extended Essay engagement
4	Culross & Tarver (2007)	24	IB	USA	Interview	-	-	First year perceptions
5	Dentith (2008)	21	AP	USA	Semi-structured focus group	-	Coding, descriptive themes	Weighted grades & female experience
6	DiGiorgio, (2010)	Interview 8, observation 100+	IB	Canada	Observation, interview, focus group	Ethnographic case study	-	Implementation of new program
7	Doherty et al. (2009)	10	IB	Australia	Focus group	Case study	-	Choosing IB over national curriculum
8	Foust et al. (2007)	84	AP/IB	USA	Semi-structured focus group	-	Content analysis	Tension between academics and social acceptance

#	Author	Total Students	Program	Country	Data Collection	Theoretical Framework*	Analysis*	Principal outcome explored
9	Foust et al. (2009)	84	AP/IB	USA	Semi-structured focus group	-	Content analysis	Non-academic program perceptions
10	Gan (2009)	11	IB	Australia	Written questions, semi-structured interview	-	Grounded theory analysis	Adjustment to IB learning style
11	Hayden & Wong (1997)	19 survey, 4 interview	IB	UK	Survey, interview	-	-	Cultural preservation
12	Hertberg-Davis & Callahan (2008)	200	AP/IB	USA	Observation, focus group	Grounded theory	Grounded theory analysis	Gifted students
13	Milburn (2011)	24	AP	USA	Interviews, reflexive journal, student writing, observation, focus group	Phenomenology	Initial coding, recording, pruning	Experience taking multiple classes
14	Nao (2008)	29	AP	USA	Observation, focus group	Interpretive Case Study	Discourse Analysis	Minority students & identity formation
15	Posthuma (2010)	100 survey/ 5 interview	AP	USA	Open-ended survey questions, ethnographic interviews	Critical ethnography	Thematic analysis	At-risk student participation

#	Author	Total Students	Program	Country	Data Collection	Theoretical Framework*	Analysis*	Principal outcome explored
16	Suldo et al. (2008)	48	IB	USA Canada	Focus group, open-ended survey	-	Grounded theory analysis	Coping methods
17	Taylor & Porath (2006)	16	IB	Canada	Open-ended survey questions	-	-	Graduates' perspectives on program
18	Taylor et al. (2002)	32	AP/IB	USA	Semi-structured Interview	-	Similar to grounded theory analysis	Academic dishonesty
19	Vanderbrook (2006)	5	AP/IB	USA	Interview	Phenomenology /Educational criticism	Coding	Perspectives of gifted females
20	Wray (2012)	24 interview/ 4 focus group	IB	UK	Semi-structured interview/ focus group	-	Open coding	Extended essay experience

Note: (-) unclear or unable to ascertain.

*Definitions: ethnography, to discover and describe individual social and cultural groups; phenomenology, to study people's understanding and interpretations of their experiences in their own terms and emphasizing these as explanations for their actions; case study, a process of research into the development of a particular person, group, or situation over a period of time; grounded theory, theories grounded in the empirical data built up inductively through a process of careful analysis and comparisons; discourse analysis, to examine language and how it constructs phenomena (social realities); content analysis, codes are identified before searching for their occurrence in the data; thematic analysis, concepts and theories are inductively derived from the data. Adapted from "Adolescent Experiences Following Organ Transplantation: A Systematic Review of Qualitative Studies," by Tong et al., 2009, *The Journal of Pediatrics*, p. 545. Copyright 2009 by Mosby Inc.

Table 2. Themes as identified in each primary research report.

Theme & Subthemes	Article Reference Number (see chart 1)																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Peer relationships																				
Comfort in ‘sameness’		•	•	•	•	•		•	•	•		•	•	•		•		•	•	•
Difficulty belonging				•	•		•	•	•			•		•					•	
Teacher-student relationship																				
Impact of teacher perception	•	•	•	•	•	•	•			•		•	•	•	•		•	•	•	•
Adult-like mentorship	•				•				•										•	•
Specific conception of teacher	•			•								•							•	
Construction of self-image																				
Expansion of possibilities		•			•	•	•			•	•	•	•				•			
Identify with ‘academic image’					•							•	•					•		
Tension with ‘academic image’					•					•		•		•				•		
Conceptualization of “success”																				
Defined by peer group			•		•					•			•	•		•	•	•		
Prestige by association					•		•		•			•					•	•		•
‘Success’ requires sacrifice			•					•	•	•			•				•			
Success requires ‘doing it all’					•		•	•	•	•			•			•	•	•		
Development of academic skills		•		•												•	•			•
Preparation for the future																				
Future rewards over learning	•	•		•	•	•	•			•			•				•	•		
Mitigating the unknown	•				•	•	•			•		•	•							
Program participation does not equate social capital	•	•												•					•	

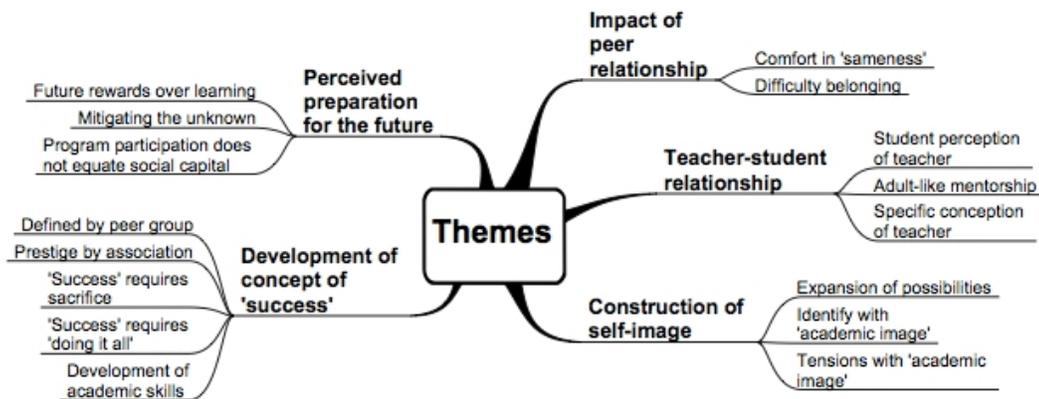
Table 3. Study methods, contextual details, and findings reported in primary studies.

Item	Studies Reporting Each Item
Personal characteristics	
Research interviewer or facilitator identified	6, 13, 14, 17
Credentials	13, 14, 17
Occupation	13, 14, 17
Gender	14
Experience and training	4, 13, 14
Relationship with participants	
Relationship established before study commencement	13, 19
Participant knowledge of interviewer (eg. personal goals)	13
Interviewer characteristics	6, 13
Participant selection	
Sampling (eg, purposive, convenience, consecutive)	1-14, 16-18, 19, 20
Method of approach	1 - 6, 8, 9, 13, 14, 16 -20
Sample size	1-20
Number and/or reason for nonparticipation	4, 6, 13, 17, 18, 20
Setting	
Setting of data collection	3, 4, 5, 10, 12-14, 18, 20
Presence of nonparticipants	13, 14, 16, 20
Description of the sample	1- 6, 8, 9, 10, 12-14, 18-20
Data Collection	
Interview guide (questions/prompts provided)	1, 3, 4, 13, 14, 16, 19, 20
Repeat interviews	3, 10, 19
Audio/visual recording	1, 2, 4, 6, 8-10, 12, 13, 16, 18-20
Field notes	2, 8, 9, 13
Duration	3, 4, 5, 13, 16, 18, 20
Data or theoretical saturation	12, 13, 20
Transcripts returned to participants	6
Data analysis	
Number of data coders	4,12
Description of coding tree	13, 20
Derivation of themes from data	1, 4, 5, 8, 9, 10, 12, 18, 20
Use of software	20
Participant checking	13, 14
Reporting	
Respondent quotations provided	1-3, 5-12, 16-20
Data and findings consistent	1-3, 5, 8, 9, 12-16, 18-20
Clarity of major themes	1-3, 5, 8-12, 16, 18-20
Clarity of minor themes	4, 5, 6, 12, 16-18

Analytical Themes

By grouping similar 'free codes' into categories, five analytical themes were identified including: impact of peer relationships, impact of teacher-student relationship, construction of self-image, development of concept of 'success', and impact of future planning.

Figure 2. Analytical themes and subthemes.



Impact of peer relationships.

Comfort in 'sameness'. One of the most frequent themes in this study suggests that peer groups frequently bond along common lines. A cohesive cohort seems to be related to a homogenous cohort. When students report positive peer relationships, it is often in relation to an element of 'sameness'. One study mentioned the role informal student leadership plays in this.

Difficulty belonging. When students are not able to identify with elements of homogeneity or norms and values as determined by the group, disengagement with their cohort or their program is reported. Specifically mentioned in relation

to the IB program, program participants and non-participants often misunderstand the realities of their peers.

Impact of the teacher-student relationship

Student perception of teacher. A strong theme existing in 15 studies is the impact of how students perceive teacher behavior in relation to both individual students and cohorts. More specifically, students report internalizing what is often thought to be greater expectations of enriched curricula students, which can become a strong motivating factor for participants. Often reported by students as a positive pressure, this relationship can reinforce a student's desire to do well, as to not disappoint their teacher who has demonstrated perceived faith in their ability to succeed.

Mentorship. Relationships with AP and IB program teachers are often referenced as 'enhanced' relationships, suggesting greater access to mentorship and perceived greater willingness for teacher's to invest time and effort in AP and IB program students. Students frequently reported feeling a more personal connection or engaging in adult-like relationships because of their interpretation of teacher behaviors that are perceived to be reserved only for program participants.

Specific conception of teacher. Students often reported a specific understanding of what AP and IB program teachers should be in relation to personality, perceived skill set and knowledgebase. Four studies referenced that teachers who did not fit this 'mentor' ideal are perceived in a negative way. Additionally, teachers who are perceived to not recognize the unique ability and

needs of AP/IB program students are thought to be less-skilled or ill-prepared and are often described in a negative light. Students report disengaging from academic subject matters when they encountered negative relationships with teachers.

Construction of self-image.

Expansion of possibilities. Program participation is reported as allowing the possibility for students to expand upon what they are capable of accomplishing. This is demonstrated through taking the program to prove what they are able to accomplish or realizing their true potential because of program participation.

Identify with 'academic image'. Specific traits perceived to be related to an 'academic image' that students strive to attain are frequently reported. These include high expectations of themselves, the need to be perceived as successful and competent, the need to test competencies, and feeling an element of prestige earned by association with the program. This image is often reinforced by program peers, non-participant peers and teachers.

Tension with 'academic image'. Four studies described occasions where students did not identify with the 'academic image' set by their peers or cohort. A disconnect in conforming to the perceived academic image can be disruptive to a student's evolving self-image. Students may not feel 'smart' enough or unable to be competitive based on perceptions of what is required rather than their true academic performance.

Development of concept of 'success'.

Defined by peer group. Though traditional academic parameters of success are frequently mentioned, 'success' is often defined by peer groups. This can include informally contrasting one's academic performance against that of a peer or formal class ranking. This can be expressed as positive peer pressure but does have extremes that become unhealthy, unrealistic pursuits that in one study resulted in dishonesty.

Association with program. Success is spoken of in terms of being part of a program and not being in a 'normal', 'regular' class stream. This sense of prestige is at times portrayed in an arrogant manner and is generally in contrast to 'other' students who are not part of the program or students who are part of the program but are not perceived of as eligible program candidates.

'Success' as sacrifice. A high degree of sacrifice is frequently referenced as a requirement of success. In addition, success is often referenced as requiring negative emotional impact. 'The struggle' seems to be a proud aspect of program mythology. While this theme is located in both programs, it is a stronger theme within IB findings.

Success requires 'doing all'. Success is not limited to academic grades, but being 'well-rounded' as an individual. Success is frequently spoken of in a manner that requires top performance in every area of life.

Skill set. An outcome of success from both programs is often related in terms of skill sets, most frequently non-cognitive elements related to a general

‘academic skill set’ including time management, study skills etc. These skill sets are often described in name only and not referenced with specific examples. The one specific skill set mentioned multiple times is related to the writing skills gained by IB students who wrote the extended essay.

Perceived preparation for the future.

Future rewards over current learning. Mentioned frequently as a perceived or hoped for outcome is greater preparation for postsecondary studies. Program participation is frequently perceived as a ‘ticket to another level’. This includes a focus on future rewards over learning experience.

Mitigating the unknown. Students frequently made vague references to how program participation will prove beneficial or ‘pay off’ somehow in their future. Participation is frequently spoken of as ‘covering all of one’s bases’ in order to be prepared for all eventual scenarios.

Program participation does not equate social capital. Program participation may not be a “pathway” to postsecondary in all respects. Four studies reported students encountering difficulty bridging the gap between being academically prepared for postsecondary and having the social capital to translate those skills into a postsecondary admissions offer.

Table 4. Illustration of analytical themes and subthemes through select participant and author quotations.

Analytical theme: Impact of peer relationships	
<i>Subtheme</i>	<i>Examples</i>
a. Comfort in 'sameness'	<p>Student: "The class is trying hard to get good grades; it makes it a lot easier to learn" (p. 297, Clark Faust et al.).</p> <p>Primary Author: "The IB program allowed students who normally felt ostracized or restricted in regular classrooms the freedom to share their knowledge and interest freely with peers of similar ability" (p. 284, DiGiorgio).</p>
b. Difficulty belonging	<p>Student: "Say something wrong it's like the whole class is just like, 'No, that's not it, it can't be. That's not the answer. Where'd you get that from?' I'm like well I just have a different way of looking at things. If you try to look at it my way maybe you'll see it. But it's never looked at my way" (p. 134, Nao).</p> <p>Primary Author: "A participant expressed clear frustration over the inclusion of students into their classes who did not have the same degree of standards or records in achievement as themselves" (p. 154, Dentith).</p>
Analytical theme: Impact of the teacher-student relationship	
a. Impact of teacher perceptions	<p>Student: "So you want to do well to show them you have been taught well" (p. 411, Taylor et al).</p> <p>Primary Author: "Students in the 2006 cohort were aware of their reputation among teachers as a "smarter class" or "better class". These messages from teachers may have bolstered the students' confidence and pride and may have inspired them to work harder so as to not disappoint their instructors" (p.30, Conner).</p>
b. Adult-like mentorship	<p>Student: "He is a great teacher because he...treats us like mature adults like I think we should be treated..." (p. 141, Vanderbrook).</p> <p>Primary Author: "The rapport built with teachers during the course of the program fostered a sense of mutual respect in the classroom and allowed teachers to push IBDP students outside of their comfort zone" (p. 43, Caco et al.).</p>
c. Specific conception of teacher	<p>Student: "In regular classes, it's hard to concentrate because some teachers...don't really care as much. I've taken regular classes, and it's more, "just get his done, and you can pass!" And it's OK, but the highest level teachers care more for you to understand how to do it and not just pass" (p. 296, Clark Faust et al.).</p> <p>Primary Author: "Many AP students indicated that not all AP teachers appeared to be equally suited to teaching these advanced courses and that the competence of the AP teacher affected the quality and challenge level of the course" (p. 203, Hertberg-Davis & Callahan).</p>
Analytical theme: Construction of self-image	

a. Expansion of possibilities	<p>Student: “For me, being a minority... the only reason I’m here is to show others that I can do stuff. I can accomplish things. Because I’m looked as all the time, like you’re in the IB program? Why? Because I’m supposed to be one of those stupid ones. And I want to show others that I can succeed” (p. 209, Hertberg-Davis & Callahan).</p> <p>Primary Author: “For many of the girls, this program represented the opportunity to stretch their wings and act beyond the limits traditionally prescribed for them by society based on their gender” (p. 285, DiGiorgio).</p>
b. Identify with ‘academic image’	<p>Student: “I knew that I really wanted to be in an advanced program because I really enjoy just being around other intelligent, high-level people and conversations” (p. 204, Hertberg-Davis & Callahan)</p> <p>Primary Author: “She felt safe in the IB program because she was one of the ‘smart kids,’ and therefore, not as clear of a target for ridicule” (p. 143, Vanderbrook).</p>
c. Tensions with ‘academic image’	<p>Student: “If you are intelligent in a way that is more creative energy than being able to sit down and accept that geometry is geometry and you have to know it even though you don’t plan to use it, then AP classes are probably not for you. If you question these things, then you’re not going to do as well. That was my problem. I wanted to know why” (p. 205, Hertberg-Davis & Callahan).</p> <p>Primary Author: “Angela and other students of color in AP classes must contend with stereotype threat, the weight of societal racism and the misrecognition of their unique and sometimes quite powerful ways of ‘doing’ AP” (p. 145, Nao).</p>

Analytical theme: Concept of ‘success’

a. Defined by peer group	<p>Student: “I was influenced by my classmates who were pretty much around the same mark, so I didn’t feel [a lack of effort on my extended essay proposal] was a problem” (p.28, Conner).</p> <p>Primary Author: “Intellectual peers also acted as a gauge for the participants in this study. Chloe looked to her peers’ accomplishments in gauging her success. Specifically, she participated in a fundraising event and also decided to begin a tutoring program for elementary school students in part to distinguish herself from her peers’ extracurricular activities” (p. 144, Vanderbrook).</p>
b. Association with program	<p>Student: “Sometimes I get frustrated with the students in my regular classes...I pretty much like everyone, but sometimes some of what the people say in regular classes, it’s like ‘God, are you just naturally that stupid? Does a thought cross your mind that is intelligent at all?’” (p. 298, Clark Faust et. al).</p> <p>Primary Author: “The comments suggest some degree of intellectual superiority over non-participants were not as common and consistent as those suggesting superior motivation, but they did emerge” (p. 299, Clark Faust et al).</p>

- c. Success means ‘doing it all’ Student: “I think the pressure us that you have to do well across the board...If you fail one subject you will stuff everything up” (p.768, Doherty et al).
Primary Author: “She told us that girls need to be smart and pretty, too” (p. 160, Dentith)
- d. Increased threshold of sacrifice necessary for success Student: “I kind of work myself to death in IB because I’m trying to be at the top. And we have certain people in our class who are very, very, very at the top. And so I try to fight myself up to this elite group and it causes a lot of stress” (p. 302, Foust Clark et al.).
Primary Author: “Many even bore the late nights they frequently put in as marks of pride” (p.203, Hertberg-Davis & Callahan).
- e. ‘Development of ‘skill set’ Student: “The program will teach you general skills in learning and problem solving that will be useful no matter what career you choose” (p. 154, Porath & Taylor).
Primary Author: “IB students see IB classes as providing a more conducive learning environment that broadens their horizons, increases their breadth and depth of knowledge, and improves their writing skills and their study habits (p.57, Culross & Tarver).

Analytical theme: Perceived preparation for the future

- a. Future rewards over current learning Student: “I took them [AP courses] purely because it went on my transcript as AP. It was the most competitive schedule I could take and I thought it would make me the best possible candidate for college” (p.86, Millburn, 2011).
Primary Author: “Students who chose to participate in IB did so to gain an advantage in the college admission process, particularly at selective institutions and to better prepare themselves for college study” (p. 57, Culross & Tarver).
- b. Mitigating the unknown Student: “I am glad that I am doing IB...it opens so many doors” (p.767, Doherty et al.).
Primary Author: “These students are using this curriculum to facilitate future border-crossing” (p.768, Doherty et al.)
- c. Program participation does not equate social capital Student: “My teachers...they never said go to college or don’t go to college because they were just teaching me the subject” (p.103, Cavazos & Cavazos Jr.).
Primary Author: “Poor academic advising has the potential to derail IBDP students in their transition to college” (p.49, Caco et al.).

Discussion

Though these 20 studies explore a variety of different principal outcomes related to AP/IB program participation, there are five major themes that consistently prevailed. When seen independently each individual theme is not ‘new’ or perhaps even noteworthy; after all, the impact of peer group is indeed well-known. What this synthesis does bring to light is the powerful presence of conformity within a cohort. The prevalence of conformity through all 20 studies suggest that a critical factor of program success rests not primarily in academic ability, but rather the ability of participants to conform to variations of the peer relationships, teacher relationships, understanding of success, development of concept of self, and impact of future planning. In addition, analytical themes are interconnected. If students are not able to conform to a single analytical theme, they are likely to have difficulty adapting to the other scenarios. For example, a student’s self-image is reinforced by their peers and has an impact on their future planning. This study shows that what are seen as primarily individual impacts are linked to a ridged and potentially detrimental social environment that students must navigate to persist within the program.

It is not the purpose of this systematic review to create generalizable statements, but rather to understand the themes as they exist within the literature. At the same time thematic analysis should not strive for merely summarizing the existing themes within the literature, but should also seek “push beyond the original data to a fresh interpretation of the phenomena under review” (p. 8, Barnett-Page & Thomas, 2009). With this premise in mind, it appears that

program *success* occurs when a combination of homogeneous conditions connected to the identified analytical themes are present. If a student encounters tension within the common discourse associated with their cohort in any of these thematic areas, disconnection from the program is more likely. Indeed, conformity is not necessarily negative. Conformity, to a certain degree, is a required academic behavior needed to function in a postsecondary environment. What may be problematic is the combination of conformity and homogeneity. Conforming to a group norm or a desire to do well in school is not problematic. Conforming to a specific conception of who has the potential to be successful is problematic because it is unnecessarily narrow. This becomes especially troubling when it involves conceptions of race, socioeconomic status or gender in ways that anticipates academic performance. A clear issue within the literature involves the development of power imbalance amongst a cohort because of a perceived difference that causes academically-able students to feel unwelcome because they do not identify with ideals prevalent within the group. The power of homogeneity and expectation of conformity within these programs cannot be understated.

What is surprising is how rarely informal structures of these programs are named for not being conducive to success for all. In particular, themes in relation to subgroups of student populations (minority students, students of low socioeconomic status, and young women) are frequently referenced, but often pulled apart from the general discourse. The literature can still conclude that the program is effective and works well because it is true for the 'majority' of

students. All the while, difficulty encountered by program participants may not be primarily related to academic requirements, but rather the structure and culture that develops and becomes required of those within the program. This suggests that perhaps discourse should not focus on why subgroups of students are or are not successful, but rather how heterogeneous populations are required to conform and the tensions this creates.

We set out to examine program outcomes from the perspective of participants and the resulting data did not significantly touch upon the formal outcomes as expected by the governing bodies (see International Baccalaureate, 2009; Ewing, 2006), but rather themes related to the informal program structure. This suggests that the importance of norms and values related to student culture are significant. We wonder if the marketing of the AP or IB programs or the rewards offered by postsecondary institutions have unintentionally fostered an environment where the focus of enriched programs has become the management of these relationships and ideals that are ultimately not directly connected to academic performance. Related is the construction of 'prestige' within program participation and the extent to which these specific ideals are tolerated and accepted as part of formal program structure because they are disguised as 'prestigious'. This research suggests that even the brightest student is likely to encounter tensions within either program if they are unable to conform.

Study limitations

Findings within this study are impacted by several factors including the methodological rigor and reporting of data in included primary studies. Of the 20 studies, three doctoral dissertations (13, 14, 15) and single journal article (12), are the only datasets to demonstrate an identifiable theoretical framework.

Theoretical frameworks are often used in a haphazard manner, specifically in the case of grounded theory where the methodology is repeatedly used as a specific method of analysis (in six of 20 studies), rather than a process governing the entire theoretical framework of a study. Dixon-Woods et al. (2004), mention that “inconsistencies, misappropriations, and mislabeling of studies purporting to use grounded theory are common”, suggesting that this trend appears to be common within qualitative studies in general (p. 224). A lack of a distinguishable methodological framework within qualitative research does open the door to questions regarding quality and rigor of the work as it reduces the ability for others to fully interpret the context in which the findings were developed and may inhibit the ability to confirm findings.

In addition to the quality of methodological structure, one key limitation is how primary studies reported their findings. Qualitative studies rely heavily on interpretation and therefore require sufficient data (usually in the form of participant quotations) to demonstrate how interpretations of individual experiences came to be. While 18 of the 20 studies include participant quotations, only 14 studies utilize quotations in a rich manner that allowed the reader to understand if the data demonstrated by participants and findings as concluded by

the researcher are consistent. Lack of participant quotation to illustrate themes within qualitative literature has the ability to impact the development of themes and subthemes in systematic reviews, especially when trying to understand frequency of themes or phenomenon across the body of literature. In addition, studies that provided rich data to support their findings may have contributed to an overrepresentation of themes within this review. Closely related is that not all studies presented data in the form of major themes and minor themes. When themes are reported as a summary rather than a hierarchy it is difficult to distinguish between major and minor themes which may have an impact when attempting to gauge frequency.

Also a factor with potential impact is the school setting with which data is associated. Two of the studies reported data from an international school and suggested themes may be more related to the international aspect of a student's experiences versus the IB program aspects. Two studies also draw upon the same data set. While AP and IB programs are offered in diverse countries, only studies conducted in English were included in this systematic review.

The decision to focus on outcomes from both AP and IB programs stems from our interest in outcomes for both programs, but also because six of the primary articles examined the programs simultaneously. While both programs focus on providing enriched curricula in a high school environment, the similarity of program structure does not extend beyond this. The IB diploma program is a ridged pre-set curriculum requiring six courses in specific areas of study, along with three additional program requirements, whereas participation in the AP

program can constitute a student taking a single AP exam. What is required of participants in each program is dissimilar and defining who is an AP student is quite broad, making a tandem assessment of programs challenging. Because of this, the initial generation of themes included separate assessments of each program. The outcome of this approach demonstrated nearly identical themes within each program, but what appears to fluctuate is the degree to which themes are present depending on commitment required by the program. The more intense the commitment required (full IB or taking multiple AP courses), the greater the intensity of themes. Despite precautions taken, it is possible that examining both programs at one time has cross contaminated themes, both at the level of the six primary studies, and then again through the process of this systematic review.

Further Study

Access to a postsecondary experience is becoming increasingly attached to participation and performance in enriched curricula like those offered by AP and IB programs. Standardized assessment within the programs allows for convenient admissions processes and the ability to identify high-achievers when looking across an already diverse and increasingly international prospective student body. This study suggests that minority students, young women, and other candidates unable to conform to the homogeneous elements within their cohort may be at a distinct disadvantage when it comes to postsecondary admissions for reasons other than their academic ability. An area for further study is examining the informal structure that develops within cohorts to determine if these social

elements do indeed have an impact that overshadows academic ability and therefore impacts future educational opportunities.

Related to this topic is further research on those who disengage from the programs and why. The majority of what is known of program participation comes from those who are successful and persist within the programs. Understanding why participants have not been successful could help to illuminate areas of program structure that can be addressed to allow for student engagement or disengagement to focus primarily on interest and academic ability rather than the ability to conform to a social structure.

Given the relevance of issues of conformity, social norms and social positioning, including gender and race, it would be important to include studies that reflect theoretical understandings of scholars such as Bourdieu. His concepts of social and cultural capital, as well symbolic violence may open up further understandings of the power within educational institutions and also across educational institutions and how this leads to cultural domination. The importance of understanding the mechanism of social domination and reproduction, or the logic of practice, can add new insights (Bourdieu, 1986; 1996).

Conclusion

The purpose of this study was to investigate the outcomes of student participation in the AP and IB programs. Through an examination of 20 relevant articles, five common analytical themes: impact of peer relationships, impact of

teacher-student relationship, construction of self-image, development of concept of 'success', and impact of future planning were identified based on student-reported outcomes. In addition to the identification of existing themes, this study calls in to question the presence of homogeneity and the role of conformity and the impact these elements have on participants, particularly minority students and young women. Future studies should investigate if students who are able to conform to the informal program structure are the students who are most likely to succeed, and to inquire into reasons students stop program participation. Additionally, investigations through a theoretical lens of Bourdieu may prove beneficial.

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Chapter Three

In this chapter I justify the “‘so what?’ and ‘who cares?’” required by research in the social sciences through a framework common to narrative inquiry by examining findings through the lens of personal, practical, and social implications (Clandinin & Caine, 2013, p. 174). Generalizable statements are not an intended product of systematic review; however, relevant points of consideration are gleaned from the themes identified. The framework of personal, practical (both to the discipline of Educational Policy Studies and the methodological considerations) and social significance allows for interpretation of findings in a format that provides a foundation for future discussions related to the structure and reward of AP and IB programs. I conclude with an examination of the limitations of this study and suggest potential areas for future research.

Personal Significance of Findings

Personal justification requires researchers to consider “who they are and are becoming in relation to the phenomena, [and] to consider who they see themselves as being in relation to participants” (Clandinin & Caine, 2013, p. 174). The impetus behind the topic of this systematic review comes from my personal experience in working with stakeholders of the AP and IB programs. As such, there is personal significance to what I learned from this research. Through the process I undertook I learned to ask new questions and as a result have been able to more critically evaluate the work I engage in on a daily basis. My work matters to me as I know it impacts students’ lives, the lives of their parents or

guardians and the larger community they are part of. It too matters to me, as I am contemplating future educational endeavors of my own child and me as a parent.

The first element of significance is that within the strategic recruitment processes I coordinate, it is important to broaden the definition of a high-achieving student. The intention behind the recruitment of high-achieving students is to engage a demographic that has demonstrated a level of academic ability that suggests they are likely to be successful in university. The findings of this review indicate that success or disengagement within AP or IB programs may not always be primarily associated with academic ability; students choosing to not participate in an enriched program should not be automatically understood to be lacking in ability to function at higher academic levels. For example, during adjudication of major scholarship winners, it has been a common (albeit unofficial) practice to give greater weighting to participation in enriched curricula over students who choose only to participate in provincial curricula, particularly when it is known the school a student attends does offer an enriched program that they have elected not to participate in. It is extremely convenient on an administrative-level to focus efforts on engaging only AP and IB program students as a high-achieving demographic. All the while, such an approach may unintentionally be a form of systemic discrimination and ultimately disadvantage minority students, young women and those who simply do not conform to program structures.

While I believe the themes identified within this review may exist in varying degrees within the Western Canadian AP and IB programs I work with, I

wonder if the demographic of students impacted is similar. Anecdotally, the majority of AP and IB program students that I work with are members of a racial minority. In addition, literature on postsecondary persistence within the Canadian context finds that racial identity is not as critical a factor in predicting postsecondary attendance as it is in the United States (where the majority of data in this study originates), but rather the most reliable factor in predicting postsecondary participation is parental educational attainment (Lehmann, 2007).

Within my work it has previously been recognized that not all students, specifically those in rural communities, have access to enriched programs. The limitations of defining high-achieving as linked to enriched curricula programs may have great consequences that are in parts impacted by geographic location, gender, minority status and potentially first generation learners. For me this has raised new questions about equity of access to educational programs. Greater thought needs to be committed to understanding the concept of 'high-achieving' and the specifics that students categorized as such are expected to demonstrate.

Secondly, this review reinforces my belief that program participation is not appropriate for all postsecondary-bound students. Brought forth by the analytical theme 'impact of peer relationship,' it is evident that there is a significant social element to program participation, specifically when taking full IB or multiple AP classes, as students are likely to proceed through their high school career with the same cohort of students. Programs that are based on cohort model require participants to function in a social environment and feel comfortable navigating the group dynamics such a scenario entails. From my

own experience, I know that this level of conformity can be exclusive and has the potential to marginalize some students. I wonder if this form of marginalization is sanctioned through my current work, where we place emphasis on recruiting students from the IB and AP programs. In one of the subthemes it is evident that a common motivation for program participation is the prospect of future rewards. In addition, students commonly spoke of participation in terms of ‘mitigating the unknown’ or using program participation to maximize all potential future opportunities. Both of these future-oriented outlooks may make day-to-day persistence in these rigorous programs especially difficult and potentially disorienting. I wonder when the focus is in the future, do the present day goals of students become developing an academic image, or demonstrating extreme behaviors in pursuit of future success? Or perhaps retaliating against peers who approach program participation in a different manner? I wonder if refocusing this future-oriented approach to program participation might help to mitigate some of the negative aspects of conformity and pressures related to success and identity that were identified as themes in this review. I believe these findings suggest the need for incentives that are tied to program participation to be reframed as a reward for the specific group of students who enjoyed their learning experiences and subsequently performed well, as opposed to a motivating factor for program participation.

Closely related to my work are the liaison activities I undertake with program coordinators who are looking to shape and grow AP or IB programs within their school. Through conversations with these teachers, it appears to be

commonly assumed that the best way to recruit new participants and foster program participation is through offering tangible rewards for the extra effort required by students in these programs. These rewards are often linked to how the university will recognize achievement through transfer credit, scholarships, guaranteed access to housing or early course registration. As previously mentioned, themes generated from this review suggest that these rewards are important factors of why students choose to participate, but once students belong to the program, the element of ‘sameness’ and ‘belonging’ to a cohesive group is also a valued element of program participation. This review has generated themes related to ‘sameness’ and exclusivity that can become restrictive to students who do not identify with them. I do feel that sameness in and of itself is not a negative concept and that it is even possible for sameness to be a positive area of focus when coordinators are looking for ways to expand program participation. That said, I continue to worry if it is uncritically assumed to be good or if migration of exclusion is not addressed. For now however, my conversations with coordinators and events hosted for students will focus on building cohesive cohorts and also raise questions about supporting students who may be marginalized, particularly those who have been identified in this work (young women and minority students). I too believe that this data suggest one of the keys to building strong academic programs within schools should not focus on future rewards, but rather on building a robust learning environment where students are able to bond over positive elements of ‘sameness’ related to academic interest that are broad and potentially can be more inclusive. As my daughter becomes

eligible in several years to potentially enroll in enriched curricular, I know that I will consider conversations about difference, marginalization and exclusion both with her and also her school. It has brought forth new questions for me about the role of parents or guardians in junior and senior high school landscapes.

Practical Significance of Findings

The practical interpretation is the “‘so what’ question ...that brings [researchers] closer to the experiences of others and the social contexts in which they are positioned” (Clandinin & Caine, 2013, p.147). The most practical interpretation of the significance of the themes identified by this review is to examine how student-reported outcomes of participation align with outcomes articulated by the governing bodies, specifically in relation to the concept of postsecondary pathways. This synthesis set out to examine program outcomes from the perspective of participants to better inform stakeholders in their decision-making processes and the resulting data did not speak significantly to formal postsecondary preparation, but rather focused on themes related to the informal program structure. Perhaps what is of practical significance and allows for a closer understanding of the experiences of participants is to examine the relationship between informal and formal program structures. What is surprising is how rarely informal structures of these programs are named for not being conducive to success for all. In particular, themes in relation to subgroups of student populations (minority students, students of low socioeconomic status, and young women) are frequently referenced, but often pulled apart from the general discourse. The literature can still conclude that the program is effective and

works well because it is true for the 'majority' of students. All the while, difficulties encountered by program participants may not be primarily related to academic requirements, but rather are related to the structure and culture that develops. This suggests that perhaps discourse should not focus on why subgroups of students are or are not successful, but rather how heterogeneous populations are required to conform and the tensions this creates.

An additional consideration related to the relationship between formal and informal program structure is the construction of 'prestige' associated with program participation. The data suggests that the formal program culture insinuates prestige that is in turn defined and applied by participants within the informal program structure. It is worth questioning the extent to which certain extreme subthemes reported in the informal program structure under 'development of concept of success' and 'construction of self-image' are tolerated and accepted formal program structures disguised as 'prestigious'. Connected to this idea of prestige, it is worth asking if the demand for AP and IB program students by postsecondary institutions has unintentionally fostered an environment where the focus of enriched programs has become the management of relationships and ideals that are ultimately not directly connected to academic performance. Recognition of these programs by institutions has legitimized these programs as pathways to further studies. This raises questions of equity and social justice, particularly as they relate to program participation as I wonder if systemic discrimination occurs through postsecondary policy as a result. It is worthwhile to ask what role institutions must play in addressing issues of

equitable access to educational possibilities. These questions are particularly relevant in a largely publicly funded postsecondary education system, such as the one I work in.

A practical significance of my work is also directly related to the systematic review process I undertook for my master's thesis. While common to the health science disciplines, systematic reviews are not often used in education. It was difficult to locate published education-related systematic reviews or to locate extensive methodological resources originating from within the discipline. Systematic review would seem to have a valuable role to play within the cycle of educational research. Criticism of educational research has identified a disconnect between research and implementation of knowledge (Hargreaves, 1996, Hillage et al., 1998). Hammersley (2002) adds that "one response to the current crisis in educational research has been greater emphasis on the importance of disseminating research findings" (p.126). Systematic reviews provide the ability to both connect research and practice and to disseminate information to the varied stakeholders who stand to benefit from educational research (Harlen & Crick, 2004; Andrews, 2005). Indeed there are relevant issues to consider regarding the use of systematic reviews, specifically when dealing with qualitative data. As methods for synthesizing qualitative literature are still emerging, there is ongoing "development and debate" regarding approach and purpose (Thomas & Harding, 2008). Analyzing this debate, Sandelowski and Barraso (2007) ask "can you sum up a poem?" noting a common critique that suggests "the very nature of qualitative research makes it resistant to synthesis"

(p.7). It is possible that attempting to synthesize qualitative studies that present differing philosophical assumptions that come with diverse qualitative methodologies leaves potential to have essential contextual meanings lost within synthesis. Additionally, if a goal of qualitative research is to understand phenomena including lived experience, synthesis of qualitative research is, in the end, data that is three times removed from a lived experience (Saini & Shlonsky, 2008). These critiques are worthy of being considered, but do not completely devalue the process of qualitative systematic review and its relevance to educational research. Thomas and Harden (2008) contend that the potential of what can be achieved with this approach is too important to not develop further. They state that “a strong case has been made for qualitative research to be valued for the potential it has to inform policy and practice” but that we squander this value if we are “not able to handle the deluge of data” (p 2). Undertaking this systematic review has allowed for the identification of themes that are relevant to educational policy derived from primary research undertaken in different decades, by different researchers, from varied countries, who set out to investigate differing phenomenon. It is arguable that the overarching trends of conformity and homogeneity would be difficult to identify with such clarity had a review process not been undertaken, as these topics were not the focus of any one study or reported as significant issues in primary studies. This review suggests there is a practical relevance to the use of systematic reviews in educational research.

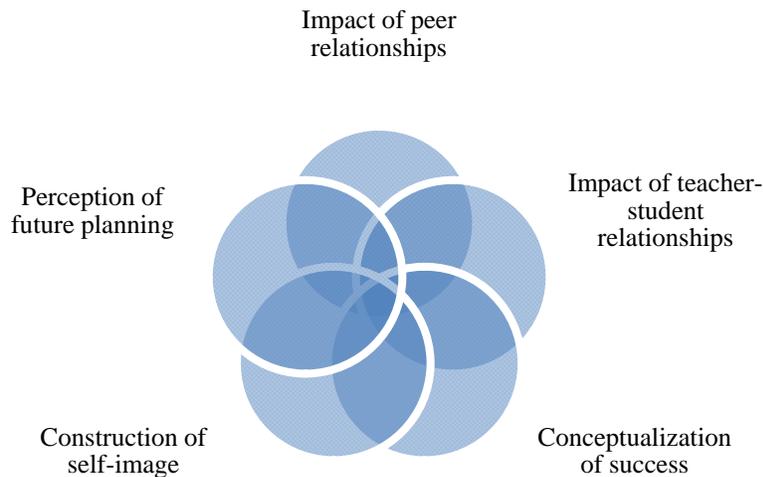
Social Significance of Findings

When isolated independently, the five analytical themes identified are not 'new' or perhaps even noteworthy; after all, the impact of peer group is indeed well-known. However, what this synthesis does bring to light is the powerful presence of conformity within a cohort. It is this element of conformity that raises issues of social significance. Indeed, conformity is not necessarily negative. Conformity, to a certain degree, is a required academic behavior needed to function in a postsecondary environment. What may be problematic is the combination of conformity and homogeneity. Conforming to a group norm or a desire to do well in school is not problematic. However, conforming to a specific conception of who has the potential to be successful is problematic because it is unnecessarily narrow. This theme becomes an issue of social significance when it involves conceptions of race, socioeconomic status or gender in ways that anticipate academic performance. A clear issue within the literature involves the development of power imbalances amongst a cohort because of a perceived difference that causes academically-able students to feel unwelcome because they do not identify with ideals prevalent within the group or group norms. Choosing to function outside of a cohort mentality may be a difficult approach for students to take.

Though the analytical themes can be characterized as primarily internal, individual impacts (development of self-image, conception of success), it seems that these themes contain significant overlap (see figure 3 on page 76). For example, it becomes difficult for a student to develop an idea of what success

means on an individual level without influence from their peers, teacher, conception of self, or future plans. Additionally, a student's self-image is likely reinforced by their peers and teacher and has an impact on their future planning. This overlap of themes takes, what can be characterized as primarily individual impacts, and transforms them into ridged social environments that students must navigate to persist within the program. This suggests an environment develops where students are vulnerable to the discourse that evolves within their cohort. Interestingly there was an absence, either due to a lack of documentation or real, demonstrating alternative ways of participating in an enriched program. These ideas related to conformity and academic persistence have been previously addressed within the literature, though through postsecondary students. Granfield (1991) found that working-class students needed to develop a method to manage their stigma by mimicking the behaviors of their middle-class peers. In addition, Tinto (1975) described that "insufficient social interaction seems to lead primarily to voluntary withdrawal" from postsecondary studies (p.109). While not an appropriate characterization of every program, it has been demonstrated through an examination of the literature that there is potential for enriched programs to unintentionally perpetuate forms of systemic discrimination. This independently is problematic, and also carries a broader significance when looking in particular at the privileges awarded to successful program participants.

Figure 3. Relationship of analytical themes.



The broader social significance is related to how access to postsecondary experiences is becoming increasingly attached to participation and performance in enriched curricula like AP and IB programs. Both the AP and IB programs promote the standardization of their programs as an advantage to students who can guarantee their credentials to be understood as elite and adding ease to administrative processes in postsecondary admissions when looking to identify ‘high-achievers’ across an already diverse and increasingly international prospective study body. This review suggests that minority students, young women, and other candidates unable to conform to the homogeneous elements within their program cohort may be at a distinct disadvantage when it comes to postsecondary admissions for reasons other than their academic ability.

Lastly, of social significance is a thematic subset that while not frequent, does pose a “high level of exploratory value” (Dixon-Woods, Agarwal, Jones, Young & Sutton, 2005, p. 47). Data in this review under ‘perceived preparation

for the future' speaks to the importance of recognizing that demonstrated academic ability in AP or IB programs does not alone equal access to postsecondary studies. Students require access to the cultural capital to navigate admissions processes required to earn postsecondary entry. This study suggests that programs cannot be conceptualized as a true 'game changer' when speaking of the transition to postsecondary entry for all student groups. This is in particular the case for students without additional support to connect their academic knowledge obtained by program participation with the postsecondary entry and admissions process. Postsecondary education plays an integral role in the overall development of Canadian society. The recognition of higher-order skills often puts postsecondary graduates in position to be shapers of society from both social and economic standpoints. The power to participate in development of class structure makes access to education a topic that is of social relevance.

Significance to Educational Policy, Administration and Leadership

It is important to situate my work within the context of educational policy development. Perhaps it is not surprising to locate disparities within outcomes reported by program participants of AP and IB programs when much of the policy surrounding program implementation in high schools and admissions and reward at the postsecondary-level have neoliberal constructs that arguably conflict with the promotion of social justice. Olsen, Codd and O'Neill (2004) describe neoliberal framework as utilitarian and identify educational choice as a primary social objective that is distributed as a commodity. The concept of educational choice is relevant to enriched program participation as it can be inferred that on

some level participants and stakeholders value the *choice* to select what is perceived to be a 'better' educational option. In addition, students and parents or guardians are 'sold' the idea of program participation as though it were a commodity through information evenings and colorful brochures. Neoliberal frameworks value utility and efficiency as the main criterion for resources allocation, which is reflective of how approaches to postsecondary recruitment and admission of these students have been described. Within these frameworks outcomes are measured in terms of increased educational productivity which is demonstrated in previously mentioned AP program marketing materials where success is linked to the number of participants regardless of student achievement, and again in the need for coordinators to grow their programs in terms of student population. The impacts of a neoliberal focus are evident in social effect, including a disproportionate acquisition of resources by the most advantaged students, which has been demonstrated as a theme within this review. Neoliberal frameworks are indeed present in the various decision-making processes impacting AP and IB program stakeholders, and it is at direct odds with what social justice policy aim to achieve. A social justice framework has a primary social objective of equity and sees education as a social good. It functions under a distributive principle of fairness with resource allocation based on need. The major educational outcome is a fairer distribution of educational benefits and has the social effect of redistribution of benefits by limiting choice (Olsen, Codd & O'Neill, 2004). The work undertaken in this systematic review demonstrates potentially troublesome outfalls of exclusion and marginalization in this process;

to counteract this, policy makers should consider questions of social justice and equity and that either offset the impact of IB or AP programs for the entire student populations, or restrict how and when these programs are offered. Further research must be developed that explores the intersections between educational policies and the social complexities that are called forth by offering pathways programs in schools. Reducing educational disadvantage at both primary and postsecondary educational institutions should be high priority in a world where social justice matters and can be achieved through equity policies and a more critical examination of current practices.

Significant to a discussion on policy are educational administration and educational leaders. Lacking a standard definition, administration has been described as organizationally constituted whereas leadership can be understood as a personally constructed political category (Samier, 2006). As a personally constructed category, leadership is subject to influence of an individual's values and experiences (English, 2008). Similarly, understanding administration as an organizational practice suggests the necessity of interpreting and navigating the context of others as a required element in the execution of administrative processes. Defining these human elements illustrates the degree to which personal values and truths are implicated in the roles of educational administration and leadership. As identified by an analytical theme in this review, the role of the teacher and their personal views can have a significant impact on students. As such, the influence of personal values of administrators and leaders

working within AP or IB programs are important, specifically in light of issues raised regarding equity.

English (2008) suggests that becoming a good leader requires the ability to recognize and scrutinizes one's own 'mental prisms'. To become aware of our truths (and potential blind spots) he proposes five impacts including that perception and truth are not absolute or universal but linguistically and culturally defined. This suggests that the same evidence can lead to differing conclusions. Perception and truth are also both relational and circular in that they are often reliant on contrast with other statements. In addition, perceived truths are also often linked to a larger narrative that contains hidden assumptions that are not always immediately obvious. It is also true that perception can be false. Lastly, truth and perception produce a situated reality. Our worldview is grounded in a specific linguistic and cultural timeframe. English suggests that no statement can be forever 'true'. The ability to analyze one's own mental prisms allows for a deeper understanding of personal motivations. This ability to be self-reflexive and to examine personal perceptions and truths is not only a requirement for a good leader, but seem to also be imperative for leadership looking to address inequality.

Willower and Uline (2001) reference a 'big tent' approach to educational administration that consists of a dialogue where "every viewpoint is given a kind of parity" (p. 456). They argue that this strategy "cuts off the kind of rigorous thinking and debate that gives a field of study its intellectual zest and potency" (p.456). This 'big tent' approach can be expanded beyond their intended context

and into the larger discussion of educational leadership. While it may not be possible to comprehensively define what leadership is, it might be possible to define what it should strive to be. Perhaps the criteria of “recognition, redistribution, democratic deliberation and agency could be the basis for socially just leadership practices” that in turn become the criteria for educational administration and leadership practices in general (Blackmore, 2006, p. 196). Why is social justice relevant to educational administration and leadership? Blackmore (2006) suggests it is of importance because “if school leaders and teachers are not prepared to lead to reduce inequality, who will?” (p. 196).

Study limitations

Findings within this study are impacted by several factors including the methodological rigor and reporting of data in included primary studies. Of the 20 studies, three doctoral dissertations (13, 14, 15) and single journal article 12, are the only datasets to demonstrate an identifiable theoretical framework. Theoretical frameworks are often used in a haphazard manner, specifically in the case of grounded theory where the methodology is repeatedly used as a specific method of analysis (in six of 20 studies), rather than a process governing the entire theoretical framework of a study. Dixon-Woods, Shaw, Agarwal and Smith (2004), mention that “inconsistencies, misappropriations, and mislabeling of studies purporting to use grounded theory are common,” suggesting that this trend appears to be common within qualitative studies in general (p. 224). A lack of a distinguishable methodological framework within qualitative research does open the door to questions regarding quality and rigor of the work as it reduces the

ability for others to fully interpret the context in which the findings were developed and may inhibit the ability to confirm findings.

In addition to the quality of methodological structure, one key limitation is how primary studies reported their findings. Qualitative studies rely heavily on interpretation and therefore require sufficient data (usually in the form of participant quotations) to demonstrate to the reader how interpretations of individual experiences came to be. While 18 of the 20 studies include participant quotations, only 14 studies utilize quotations in a rich manner that allows the reader to understand if the data demonstrated by participants and findings as concluded by the researcher are consistent. Lack of participant quotation to illustrate themes within qualitative literature has the ability to impact the development of themes and subthemes in systematic reviews, especially when trying to understand frequency of themes or phenomenon across the body of literature. In addition, studies that provided rich data to support their findings may have contributed to an overrepresentation of themes within this review. Closely related is that not all studies presented data in the form of major themes and minor themes. When themes are reported as a summary rather than a hierarchy it is difficult to distinguish between major and minor themes which may have an impact when attempting to gauge frequency.

Also a factor with potential impact is the school setting in which data was collected. Two of the studies reported data from an international school and suggested themes may be more related to the international aspect of a student's experiences over the IB program aspect. Two studies also draw upon the same

data set. While AP and IB programs are offered in diverse countries, only studies conducted in English were included in this systematic review.

The decision to focus on outcomes from both AP and IB programs stems from my interest in outcomes for both programs, but also because six of the primary articles examined the programs simultaneously. While both programs focus on providing enriched curricula in a high school environment, the similarity of program structure does not extend beyond this. The IB diploma program is a ridged pre-set curriculum requiring six courses in specific areas of study, along with three additional program requirements, whereas participation in the AP program can constitute a student taking a single AP exam. What is required of participants in each program is dissimilar and defining who is an AP program student is quite broad, making a tandem assessment of programs challenging. Because of this, the initial generation of themes included separate assessments of each program. The outcome of this approach demonstrated nearly identical themes within each program, but what appears to fluctuate is the degree to which themes are present depending on commitment required of the program. The more intense the commitment required (full IB or taking multiple AP program courses), the greater the intensity of themes. Despite precautions taken, it is possible that examining both programs at one time has cross contaminated themes, both at the level of the six primary studies, and then again through the process of this systematic review.

Future Research Directions

Access to a postsecondary experience is becoming increasingly attached to participation and performance in enriched curricula like AP and IB programs. Standardized assessment within the programs allows for convenient admissions processes and the ability to identify ‘high-achievers’ when looking across an already diverse and increasingly international prospective study body. This study suggests that minority students, young women, and other candidates unable to conform to the homogeneous elements within their cohort may be at a distinct disadvantage when it comes to postsecondary admissions for reasons other than their academic ability. An area for further study is examining the informal structure that develops within cohorts to determine if these social elements do indeed have an impact that overshadows academic ability and therefore impacts future educational opportunities.

Related to this topic is further research on those who disengage from the programs and why. The majority of what is known of program participation comes from those who are successful and persist within the programs. Understanding why participants have not been successful could help to illuminate areas of program structure that can be addressed to allow for student engagement or disengagement to focus primarily on interest and academic ability rather than the ability to conform to a social structure.

Given the relevance of issues of conformity, social norms and social positioning, including gender and race, it would be important to include studies

that reflect theoretical understandings of scholars such as Bourdieu. His concepts of social and cultural capital, as well symbolic violence may open up further understandings of the power within educational institutions and also across educational institutions and how this leads to cultural domination. The importance of understanding the mechanism of social domination and reproduction, or the logic of practice, can add new insights (Bourdieu, 1986; 1996).

Conclusion

The purpose of this review was to investigate the outcomes of student participation in the AP and IB programs. Through an examination of 20 relevant articles, five common analytical themes including: impact of peer relationships, impact of teacher-student relationship, construction of self-image, development of concept of 'success', and impact of future planning were identified based on student-reported outcomes. In addition to the identification of existing themes, this study calls in to question the presence of homogeneity and the role of conformity and the impact these elements have on participants, particularly minority students and young women. Borrowing from narrative inquiry, the significance of these themes were examined though the lens of personal, practical, and social significance. While generalizable statements are not a product of systematic review, relevant points for future consideration are raised. It is suggested that future studies should investigate if students who are able to conform to the informal program structure are the students who are most likely to succeed, and to look to understand why students stop program participation.

Additionally, investigations through a theoretical lens of Bourdieu may prove beneficial.

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Appendix A: Search Strategy

ERIC

Earliest to July 2013

1. exp Advanced Placement/
2. exp Advanced Placement Programs/
3. (advanced placement or international baccalaureate).mp. [mp=abstract, title, heading word, identifiers]
4. 1 or 2 or 3
5. exp Qualitative Research/
6. exp phenomenology/ or exp hermeneutics/
7. exp Action Research/
8. exp ETHNOGRAPHY/
9. exp Focus Groups/
10. exp Content Analysis/
11. exp Field Studies/
12. qualitative.mp.
13. (ethno\$ or emic or etic).mp.
14. (leininger\$ or noblit or hare).ti,ab.
15. (field note\$ or field record\$ or fieldnote\$ or field stud\$).mp.
16. (participant\$ adj3 observ\$).mp.
17. (nonparticipant\$ adj3 observ\$).mp.
18. (non participant\$ adj3 observ\$).mp.
19. (hermeneutic\$ or phenomenolog\$ or lived experience\$).mp.
20. (heidegger\$ or husserl\$ or merleau-pont\$).mp.
21. (colaizzi\$ or giorgi\$).mp.
22. (ricoeur or spiegelberg\$).mp.
23. (van kaam\$ or van manen).mp.
24. (Grounded adj5 theor\$).mp.
25. (constant compar\$ or theoretical sampl\$ or triangulat\$).ti,ab.
26. (glaser or strauss or chenitz).mp.
27. (content analys\$ or thematic analys\$ or narrative analys\$).mp.
28. (unstructured categor\$ or structured categor\$).mp.
29. (unstructured interview\$ or semi-structured interview\$ or semistructured interview\$).mp.
30. (maximum variation or snowball).mp.
31. (audiorecord\$ or taperecord\$ or videorecord\$ or videotap\$).mp.
32. ((audio or tape or video\$) adj5 record\$).mp.
33. ((audio\$ or video\$ or tape\$) adj5 interview\$).mp.
34. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$).ti,ab.
35. (meta-ethnog\$ or metaethnog\$ or meta-narrat\$ or metanarrat\$ or meta-interpret\$ or metainterpret\$).mp.
36. (qualitative adj5 meta-analy\$).mp.
37. (qualitative adj5 metaanaly\$).mp.

38. purposive sampl\$.mp.
 39. action research.mp.
 40. focus group\$.mp.
 41. (photo voice or photovoice).mp. [mp=abstract, title, heading word, identifiers]
 42. exp Case Studies/
 43. case stud* or longitudinal or document analys* or "mixed method*".mp.
 44. or/5-43
 45. 4 and 44

CBCA Education (use Command Line)

Earliest to July 2013

("advanced placement" or "international baccalaureate") and (qualitative OR ethnol* OR ethnog* OR ethnonurs* OR emic OR etic OR leininger OR noblit OR "field note*" OR "field record*" OR fieldnote* OR "field stud*" or "participant observ*" OR "participant observation*" OR hermaneutic* OR phenomenolog* OR "lived experience*" OR heidegger* OR husserl* OR "merleau-pont*" OR colaizzi OR giorgi OR ricoeur OR spiegelberg OR "van kaam" OR "van manen" OR "grounded theory" OR "constant compar*" OR "theoretical sampl*" OR glaser AND strauss OR "content analy*" OR "thematic analy*" OR narrative* OR "unstructured categor*" OR "structured categor*" OR "unstructured interview*" OR "semi-structured interview*" OR "maximum variation*" OR snowball OR audio* OR tape* OR video* OR metasyntes* OR "meta-syntes*" OR metasummar* OR "meta-summar*" OR metastud* OR "meta-stud*" OR "meta-ethnograph*" OR metaethnog* OR "meta-narrative*" OR metanarrat* OR "meta-interpretation*" OR metainterpret* OR "qualitative meta-analy*" OR "qualitative metaanaly*" OR "qualitative metanaly*" OR "purposive sampl*" OR "action research" OR "focus group*" or photovoice or "photo voice" or "case stud*" or longitudinal or "document analys*" or "mixed method*" or (ti(perception* or perceive or view* or experience* or belief*)))

Proquest Dissertations & Theses Full-text and Proquest Education Journals (use Command Line)

Earliest to July 2013

ALL("advanced placement" or "international baccalaureate") and (ALL(qualitative OR ethnol* OR ethnog* OR ethnonurs* OR emic OR etic OR leininger OR noblit OR "field note*" OR "field record*" OR fieldnote* OR "field stud*" or "participant observ*" OR "participant observation*" OR hermaneutic* OR phenomenolog* OR "lived experience*" OR heidegger* OR husserl* OR "merleau-pont*" OR colaizzi OR giorgi OR ricoeur OR spiegelberg OR "van kaam" OR "van manen" OR "grounded theory" OR "constant compar*" OR "theoretical sampl*" OR glaser AND strauss OR "content analy*" OR "thematic analy*" OR narrative* OR "unstructured categor*" OR "structured categor*" OR "unstructured interview*" OR "semi-structured interview*" OR "maximum variation*" OR snowball OR audio* OR tape* OR

video* OR metasyntes* OR "meta-syntes*" OR metasummar* OR "meta-summar*" OR metastud* OR "meta-stud*" OR "meta-ethnograph*" OR metaethnog* OR "meta-narrative*" OR metanarrat* OR " meta-interpretation*" OR metainterpret* OR "qualitative meta-analy*" OR "qualitative metaanaly*" OR "qualitative metanaly*" OR "purposive sampl*" OR "action research" OR "focus group*" or photovoice or "photo voice" or "case stud*" or longitudinal or "document analys*" or "mixed method*") or ti(perception* or perceive or view* or experience* or belief*))

Education Research Complete and Education Index Retrospective (EBSCO)

Earliest to July 2013

("advanced placement" or "international baccalaureate") and (qualitative OR ethnoc* OR ethnog* OR ethnonurs* OR emic OR etic OR leininger OR noblit OR "field note*" OR "field record*" OR fieldnote* OR "field stud*" or "participant observ*" OR "participant observation*" OR hermaneutic* OR phenomenolog* OR "lived experience*" OR heidegger* OR husserl* OR "merleau-pont*" OR colaizzi OR giorgi OR ricoeur OR spiegelberg OR "van kaam" OR "van manen" OR "grounded theory" OR "constant compar*" OR "theoretical sampl*" OR glaser AND strauss OR "content analy*" OR "thematic analy*" OR narrative* OR "unstructured categor*" OR "structured categor*" OR "unstructured interview*" OR "semi-structured interview*" OR "maximum variation*" OR snowball OR audio* OR tape* OR video* OR metasyntes* OR "meta-syntes*" OR metasummar* OR "meta-summar*" OR metastud* OR "meta-stud*" OR "meta-ethnograph*" OR metaethnog* OR "meta-narrative*" OR metanarrat* OR " meta-interpretation*" OR metainterpret* OR "qualitative meta-analy*" OR "qualitative metaanaly*" OR "qualitative metanaly*" OR "purposive sampl*" OR "action research" OR "focus group*" or photovoice or "photo voice" or "case stud*" or longitudinal or "document analys*" or "mixed method*" or TI (perception* or perceive or view* or experience* or belief*))

SCOPUS (Use Advanced Search)

Earliest to July 2013

TITLE-ABS-Key("advanced placement" or "international baccalaureate") AND TITLE-ABS-Key(qualitative OR ethnoc* OR ethnog* OR ethnonurs* OR emic OR etic OR leininger OR noblit OR "field note*" OR "field record*" OR fieldnote* OR "field stud*" or "participant observ*" OR "participant observation*" OR hermaneutic* OR phenomenolog* OR "lived experience*" OR heidegger* OR husserl* OR "merleau-pont*" OR colaizzi OR giorgi OR ricoeur OR spiegelberg OR "van kaam" OR "van manen" OR "grounded theory" OR "constant compar*" OR "theoretical sampl*" OR glaser AND strauss OR "content analy*" OR "thematic analy*" OR narrative* OR "unstructured categor*" OR "structured categor*" OR "unstructured interview*" OR "semi-structured interview*" OR "maximum variation*" OR snowball OR audio* OR tape* OR video* OR metasyntes* OR "meta-syntes*" OR metasummar* OR

"meta-summar*" OR metastud* OR "meta-stud*" OR "meta-ethnograph*" OR metaethnog* OR "meta-narrative*" OR metanarrat* OR " meta-interpretation*" OR metainterpret* OR "qualitative meta-analy*" OR "qualitative metaanaly*" OR "qualitative metanaly*" OR "purposive sampl*" OR "action research" OR "focus group*" or photovoice or "photo voice" or "case stud*" or longitudinal or "document analys*" or "mixed method*" or TI (perception* or perceive or view* or experience* or belief*))

Web of Science (use Advanced Search)

Earliest to July 2013

TS=("advanced placement" or "international baccalaureate") AND (TS=(qualitative OR ethno* OR ethnog* OR ethnonurs* OR emic OR etic OR leininger OR noblit OR "field note*" OR "field record*" OR fieldnote* OR "field stud*" or "participant observ*" OR "participant observation*" OR hermaneutic* OR phenomenolog* OR "lived experience*" OR heidegger* OR husserl* OR "merleau-pont*" OR colaizzi OR giorgi OR ricoeur OR spiegelberg OR "van kaam" OR "van manen" OR "grounded theory" OR "constant compar*" OR "theoretical sampl*" OR glaser AND strauss OR "content analy*" OR "thematic analy*" OR narrative* OR "unstructured categor*" OR "structured categor*" OR "unstructured interview*" OR "semi-structured interview*" OR "maximum variation*" OR snowball OR audio* OR tape* OR video* OR metasynthes* OR "meta-synthes*" OR metasummar* OR "meta-summar*" OR metastud* OR "meta-stud*" OR "meta-ethnograph*" OR metaethnog* OR "meta-narrative*" OR metanarrat* OR " meta-interpretation*" OR metainterpret* OR "qualitative meta-analy*" OR "qualitative metaanaly*" OR "qualitative metanaly*" OR "purposive sampl*" OR "action research" OR "focus group*" or photovoice or "photo voice" or "case stud*" or longitudinal or "document analys*" or "mixed method*") OR TI=(perception* or perceive or view* or experience* or belief*))

Educational Research Abstracts

Educational Index Retrospective

DOAJ: Directory of Open Access Journals

ERA: Education & Research Archive

Earliest to July 2013

Search each of “advanced placement” and “international baccalaureate” (include quotes) and browse results.