Introduction

With more than 25 percent of first-year college students needing remedial courses (Clemmit, 2006, p.193; Merisotis & Phipps, 2000, p. 69), there is a brewing debate about what it means to be college ready. Often, the debate about college readiness involves secondary schools creating climates in which students are offered opportunities to take advanced academic programs and classes that will prepare them for college-level coursework and hopefully, ensure that they do not have to take remedial education courses in reading, writing, or mathematics. The most common programs in this regard are the Advanced Placement Program (AP) and the International Baccalaureate Diploma Programme (IBDP). Each program provides students with a rigorous and challenging curriculum but the two programs are often treated differently by university admissions officers in terms of how students are awarded credit for the various course examinations. This paper will specifically explore the attributes regarding the college readiness of IB students and raise questions regarding avenues of future research necessary to begin to equalize the treatment of students who pursue IB examinations and university admission.

What is College Readiness?

There is a definite lack of consensus on what it means to be college-ready. Does it mean that students do not have to take remedial courses in reading, mathematics, or writing? Does the sheer avoidance of remediation mean that a student actually has the skills and attributes necessary to be a successful and productive member of a university community? Is there a greater level of college readiness like "habits of mind" or does college readiness simply mean having mastered a certain level of course content (Rhodes, 2007, p. 9)? ACT, Inc. defines college readiness as "having a 75 percent chance of earning a C or better, and a 50 percent chance of earning a B or

better in four common first-year college courses" (Olson, 2006, p. 26). Or is the ultimate measure of college readiness the idea that students eventually graduate from college?

In addition to discrepancies in the definitions of college-readiness, there are differences in the ways that college and universities term remedial education. Various institutions call remediation "developmental education", "college prep" or "basic skills". Regardless of the terminology used for remedial education, college faculties often ask the same question – "Why aren't students prepared for university-level work when students begin college courses if they have been granted a secondary school diploma?" As a side note, remedial education on the university level actually dates back to the 17th century when Harvard College provided Greek and Latin tutors for underprepared students who did not want to study for the priesthood (Merson & Phipps, 2000, p. 68).

Research Questions and Paper Structure

This paper is divided into three parts. The first part of this paper details the International Baccalaureate Diploma Programme (IBDP), an advanced academic program that is available to students in American and other secondary schools as an option to prepare them for university coursework and to make them more attractive to college admissions officers. Included is an overview of the IB Programme in the United States with statistics as to its' current reach and scope as well as attributes that the program develops in high school students. The second part of this paper addresses the differences between the IBDP and the Advanced Placement (AP) program through the eyes of one subject area, English, and raises questions about university perceptions of the two programs in light of both skills development and credit awards. For this part of the paper, discussion will be mainly limited to two public universities, George Mason University and James Madison University, both located in Virginia, United States, and of similar

undergraduate attendance size. The final section of this paper will be devoted to raising questions and possibilities for future research in the area of university perception of the IBDP.

The History of the International Baccalaureate Diploma Programme

The IB Diploma Programme (IBDP) originally came out of the International Schools Association (ISA) which was based in Geneva, Switzerland. It was intended to be a curriculum service for international secondary schools from which various international schools could be aligned with and work to develop common syllabi for courses (Hill, 2007, p. 27). Nearly 40 years old, the International Baccalaureate (IB), now maintains three separate curricular programs, the Primary Years Programme (PYP) for students three to 11 or 12 years, the Middle Years Programme (MYP) for students 11 to 16 years and the IBDP for students in the final two years of secondary school. In many American schools, the IBDP is combined with a pre-IB program if there is not a Middle Years Programme in place in the high school. School districts do not have to offer all three programs and often do not have the facilities or resources to offer the entire continuum (all three programs) to students. Each program (PYP, MYP, and DP) is authorized by IB separately for a school system or district and teachers are trained in the methodology of each IB program according to specific program guidelines and uniform world requirements.

As this paper focuses on the bridge between secondary school and university, the remaining comments regarding the history and program structure of the IB will be limited to the IBDP. The Diploma Programme is a two-year course of study that requires students to study material in six course areas culminating in a series of international assessments. Schools that offer the IBDP are permitted to allow students to pursue individual subjects or to require students to complete the entire Diploma sequence – an undertaking during which a student completes study and examination in six subject areas including foreign languages and the arts. In addition

to this requirement, students are also required to complete three additional obligations that are unique to IB – a critical thinking and philosophy course called, *Theory of Knowledge (TOK)*, the development and writing of a 4,000-word piece of original research known as the *Extended Essay* and the completion of 150 hours of Community, Action, and Service, also known as *CAS* (Sjogren & Campbell, 2003, p. 55). There are approximately 100 languages available for students to study as well as 29 other subjects. Schools choose which subjects to offer depending on resources but must cover all six general subject areas.

Students are awarded an IB Diploma if they achieve a score of total score of 24 points or more on their exams, do not fail more than one exam, and do not receive an "E" (elementary) grade on either their extended essay or their TOK essay. These particular two papers are graded by external examiners and are sent away for grading prior to the exam period. Exceptional TOK or extended essays can also help a student's total score by awarding up to an additional three points for particularly insightful work. Students in the United States, located in the Northern hemisphere, take their exams in May each year while students in Southern hemisphere schools test in November.

The TOK course is at the heart of every other IBDP course, as students in IB courses are continually asked to consider "how they know what they know." The course examines different ways of knowing, the role of knowledge in culture, and the role of the knower or the learner, to the outside world (Schachter, 2008, p.27). That is one of the cornerstones of IB theory, that the knower is in the center of all instruction and it is he or she that often guides the learning in an IB classroom. Another thing that sets IB apart from other advanced academic programs is its international focus. As the program did begin in Europe in the international school system, it has a decidedly world view and is less nationalistic in curriculum design. For example, students in

the United States take History of the Americas (HOA), a course that discusses history of the United States, Latin America, and the Caribbean (Schachter, 2008, p.28). Students at some IB schools can also take European History or Islamic History as well. Another example of internationalism would be the English A1 program. Instead of a specific focus on American literature, teachers of IB have curricular options to teach literature from all over the world and must, as part of their requirements, choose five works (out of 15 total) that were not originally written in English and are designated as "World Literature".

Coursework for IB examinations officially begins in the junior year but many schools typically have a pre-IB program of some kind to get students prepared for IB work and requirements or to lay the groundwork and build skills that will be needed in IB classes. The International Baccalaureate does provide training programs for teachers, both those teaching the DP courses and those teaching in pre-IB programs. Teachers of IB classes are required to be trained in IB teaching methodologies and before schools can offer the Diploma Programme, schools must complete "a rigorous self-study and other accreditation-type measures" (Byrd, 2007, p. 10). The organization maintains instructional consistency through oversight of instructors and a regular five-year review of school programs.

The Diploma Programme in the United States

Currently, the IBDP is offered in 1,938 schools across the world with 813 schools located in the areas of North America and the Caribbean. For statistical purposes, the International Baccalaureate divides schools and programs into regions and schools in the United States belong to a region now called IB Americas (IB World School Statistics, 2009). For the May 2008 examination session, there were 49,091 American candidates registered for various assessments; this number was the largest number of students of anywhere in the world with Canada registering

8,289 students, the United Kingdom registering 3,160 students, and Mexico registering 2,105 students as the next three largest registering nations (IB Statistics, 2008, p. 23). There are currently 670 IBDP schools in the United States and more schools are approved to offer IB programs each year. The United States is the fastest growing region of the world for school approvals (S. Wade-Pauly, personal communication, April 24, 2009). The first IBDP school in the United States was the United Nations International School in New York City approved in 1971. Over 85 percent of American IBDP schools are public and Robinson Secondary School, located in Fairfax County, Virginia, gives more IB exams each year than any other IBDP school in the world.

Attributes Developed in IB Students and CURT

In terms of oversight and curriculum development, the IB operates a group of regional offices around the world. In North America, there are regional offices in Vancouver and New York. One of the primary tasks of the regional offices is to assist college admissions personnel responsible for evaluating the IBDP and possibilities for college credit. In North America, IB has created the College and University Recognition Task Force (CURT). Members currently serving on CURT are from Skidmore College, Swarthmore College, St. Mary's University – Halifax, University of Texas at Austin, University of Toronto, Université de Sherbrooke, University of Chicago, Oregon State University and the Pennsylvania State University. The group works with school leaders and coordinators

to examine ways to better facilitate the movement of IB students into higher education. CURT has developed and endorsed a chart that will provided university admissions staffs with guides on how the IB Diploma recipient might

compare with other applicants in a selective and/or comparative admission environment (Sjogren & Campbell, 2003, p. 56).

The chart developed by CURT details 13 admissions assumptions that university staffs can compare IB Diploma candidates to other students vying for college admission. Students are considered "candidates" until they actually earn the IB Diploma, when scores are published in early July while most college admissions decisions are made by April 1 or earlier each year. The admission assumptions range from academic strength of curriculum to student engagement to research and writing skills, critical thinking, oral communication, extracurricular involvement, maturity and responsibility and diversity, among others.

Regarding academic strength of curriculum, colleges and universities can be assured that the IBDP is a rigorous program of study. Students study a broad range of subjects and often exceed state and national requirements for content. Included in a student's knowledge base would be first language and literature, a foreign language, social science, math, and natural/physical sciences as well as some knowledge of one of the arts. IB teaching methodology requires inquiry-based instruction where students are engaged in their learning.

Several courses have extended writing requirements as part of their assessments and the extended essay, the 4,000 independent research paper, allows students to prepare for the rigor and length of college-level writing. By requiring Diploma candidates to take the TOK course, secondary teachers are forcing them to consider their ways of knowing, a skill that can be applied to any discipline. By thinking about how they come to knowledge, students will often become more inquiring and engaged in the university classroom. The TOK course also "requires students to shape their opinions into logical discourse" (IB College Assumptions, 2008). In the area of oral communication, several courses have this task as part of their examination requirements

including English and foreign language, and many students also improve communication skills through the Creativity, Action, Service (CAS) requirements. This 150-hour community service obligation requires that students cultivate some kind of bond with the people they are serving and students must not only complete written reflections on the service hours they complete but also need to complete a CAS portfolio documenting all of their work and the bonds they develop. These tasks, in conjunction with the coursework, foster a sense of responsibility and maturity in students as they need to manage their time, set goals, and develop organizational skills (IB College Assumptions, 2008). Finally, all of the IBDP requirements and examinations are gender/race/ethnicity neutral. They are also impartial in terms of socio-economic status.

Besides the traits mentioned above, there are three other things that admissions officers should keep in mind about IB applicants. The first is that IB schools are held to extremely high standards. Becoming an IB school is both difficult and costly for a school. In addition to a self-examination and application, a school must complete a site visit from a three-person team and a review of their programs every five years. In 2007, the cost of offering the IBDP was \$8,850 plus a number of per candidate examination fees (IB 21 Things, 2007).

Besides schools being held to high standards, IB teachers are also held to high standards. In order for schools to offer IB courses, it is required for schools to offer a teacher training requirement as students are required to fulfill the requirements of several college-level courses (Sjogren & Campbell, 2003, p. 56). Students who take Higher Level (HL) courses have 240 hours of instruction while students who take Standard Level (SL) courses receive 150 hours of instruction over the final two years of high school. IB curriculum guides are optimally rewritten every five years, and IB expects that schools are also committed to ongoing professional development of their faculties in order to keep up with the curricular changes.

The final thing that admissions officers should consider about IB applicants is the fact that the IB grading system is "criterion referenced where each student's performance is measured against well-defined and articulated levels of achievement. These are consistent from one examination session to the next and are applied equally to all schools throughout the world," (Sjogren & Campbell, 2003, p. 56-7). Although the first IB exams were offered in 1971, the distribution of grades has remained virtually the same from year to year.

In addition to the college admissions assumptions, CURT members agree that an applicant striving for an IB Diploma has many of the qualities necessary to be successful once they get to college: strong academic skills, positive contributions to their community, an ability to think critically and a willingness to accept challenges. Research has also borne this out with evidence of the diploma curriculum as preparation for student success at the post-secondary level. "For example, the University of Florida reported that 500 IB students completed their freshman year with a 3.38 grade point average (GPA) while the University average for all freshmen (including IB students) was a 2.90 GPA" (IB CURT, 2009). Independent university research has also found that IB students are accepted at higher rates than non-IB students, perhaps because college admissions officers value the attributes developed through the IB program. "In 1997/98, the College of William and Mary admitted 64 percent of the IB Diploma [candidates who applied] while in 1997, Smith College admitted 68 percent of the IB Diploma candidates [that applied]" (IB Research, 2007).

A study prepared by a Fairfax County, Virginia, parent found that students who took IB courses believed the coursework made them well prepared for college-level work. Rich LaValley, whose child attended South Lakes High School (an IB World School) attempted to survey 600 potential respondents with six questions via social networking sites. Of the 202

responses LaValley received, 96.5 percent of students said that IB courses helped with college preparation citing the top three areas as writing, study skills, and time management (L. Blair, personal communication, March 20, 2009).

The Debate between AP and IB in Terms of College Credit

Although it is generally understood that IB prepares students well for university-level work, there are differences in the ways that the colleges treat AP and IB programs. Over 1.3 million students took AP exams in 2006 (College Board, 2006) and AP is still more widely taught across the United States. Despite IB gaining ground each year and being approved for more and more secondary schools the two programs are not treated in the same way by higher education. Students and parents often complain that it is harder to get college credit for IB courses because the program is smaller and often viewed as a "foreign" program which is less familiar to colleges. "Usually students can get credits if they earn the full IB Diploma,...But for individual courses, colleges will often give credit for the AP version [of the course] but not for the very similar IB version, with no other reason than that is their policy" (Matthews, 2004, p. VA20). In addition to discrepancies in how colleges treat AP and IB, another issue is that no college seems to treat the two programs the same in terms of credit and even colleges of similar size and similar populations do not have uniform credit policies.

A representative example of these differences would be in the case of the IB English HL course and the AP Literature and Composition course. For the purposes of analysis, I will discuss two colleges – George Mason University and James Madison University, both located in Virginia, and both with a similar size undergraduate population and cost of in-state tuition. To begin, students who take IB English HL study 15 works over a two year period (junior and senior year) while in the AP Literature and Composition course, the number of works is actually

determined by the individual teacher (typically senior year only). AP syllabi are reviewed by the College Board in a new process called the AP Audit to ensure quality control and adherence to AP and College Board standards.

In terms of assessments, IB students complete two world literature essays, each 1,000 to 1,500 words and sent out to an external examiner. These papers are 20 percent of the IB English grade. In addition, students complete two oral components (30 percent of grade) which consist of an oral presentation in front of their class and an oral literary analysis which is taped and assessed. Scores in this component are internally developed by teachers and then sent to external examiners who may change the scores through a process known as moderation. Finally, students take two formal examinations in May of their senior year; one exam is a written commentary and the other is an open-ended question on texts that students study in one part of their curriculum. This is worth 50 percent of their IB English grade. On the AP side, students complete a final exam during May of their senior year. This exam makes up their entire AP grade and consists of a 50-minute multiple choice test, followed by three analytic essays based on literature and literary themes. Each part of the exam is externally graded.

IB exams are scored on a scale of zero through seven with four being a passing IB score.

AP exams work on a five point scale with three generally being considered the minimum to receive any college credit. IB English HL

encourages students to see literary works as products of art and their authors as craftsmen whose methods of production can be analysed in a variety of ways and on a number of levels. This is achieved through the emphasis placed in exploring the means used by different authors to convey their subjects in the works studied (IB Language A1, 1999, p. 4).

On the other hand, the AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature...As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone (College Board AP English, 2008, p. 51).

George Mason University (GMU), located in Fairfax, Virginia, offers 68 undergraduate degree programs and in fall 2008, there were just over 18,000 undergraduate degree seeking students; 2,558 were members of the freshman class (George Mason, 2009). In terms of credit, students who take the IB English HL course can be awarded six English credits for any score higher than a four. GMU also offers students who take the IB English SL examination an opportunity for credit if they earn a score of six or seven on the exam (George Mason International Baccalaureate). Although many schools do not offer credit for standard level examinations, GMU is one of the few that does but their policy of only awarding credit for a score of a six or seven is questionable. Upon investigation, no admissions counselor or officer at GMU could explain how the policy was developed or how credit decisions for the various exams had been made. The world average in 2008 for the IB English HL exam was a score of 4.77 for 30,572 candidates while the world average for the IB English SL exam was a score of 5.00 for 6,625 candidates (IB World School Statistics, 2009). On the other hand, over 320,000 students took the AP Literature and Composition examination in 2008 and 60.4 percent or 193,391 students received a score of three or above (College Board Student Grade Distributions, 2008). For students who applied to GMU, a score of three would give them three credits while achieving a score of a four or five would award six credits. Please note that students who take the AP exam

can earn the same amount of credit for one year's coursework that an IB student does for two years coursework.

James Madison University (JMU) is located in Harrisonburg, Virginia, and had a 2007-08 undergraduate enrollment of nearly 18,000 students. Like GMU, the school also offers 68 undergraduate programs. For the 2008-09 freshman class, nearly 4,000 students were enrolled (James Madison About JMU, 2009). At JMU, for IB English HL, a student can receive three credits, providing that they achieve a five on the examination. Again, this score of a five is higher than the world average of 4.77 on the exam (James Madison International Baccalaureate, 2009). For the AP Literature and Composition exam, JMU awards students three credits if they score a four or higher on the exam. During the May 2008 exam cycle, 86,633 students or 27 percent of all students who took the AP Literature and Composition examination could have received credit from JMU (College Board Student Grade Distributions, 2008).

But what do these discrepancies tell us? These universities are of similar size and I would venture to say that many students who apply to GMU also apply to JMU. Why does it seem easier to get credit for an AP exam than an IB exam? If both programs prepare students adequately for university level work and prepare them to think critically about the content they will eventually study, why are there such wide gaps in the ways that admissions officers perceive the two programs? What needs to be done?

Colleges seem to accept that IB students are well prepared and attractive to have on campus as they will not need remedial education but are slow to recognize the IB students with credit. Sandra Wade Pauly, university and government liaison for IB, said, "We [IB] face a challenge working with universities. IB kids do not need remediation and they're delighted to

have that. They [colleges] want this but they're reluctant to offer credit" (S. Wade-Pauly, personal communication, April 24, 2009).

Some admissions directors, however, do understand the value of IB and the attributes that students bring to their universities. Michele Sandlin, director of the Office of Admissions at Oregon State University, said

Oregon State University has had a progressive International Baccalaureate admission policy for many years which is based on the performance and success of scholars on our campus. Our study of IB students has shown that they are well prepared for the academic rigor at the university level and perform exceedingly well (IB Quotes, 2008).

Presently, Oregon State University guarantees admission to those students who complete the IBDP and awards \$2,000 scholarships at minimum to IBDP students. In addition, in regards to the IB English HL course, Oregon State will award up to eight credits in English and writing for scores of four and higher (Oregon State University).

One other piece of IB puzzle is that college acceptance rates for IB students tend to be higher than those for students who do not take IB courses. At GMU in 2007, 66 percent of applicants were accepted. Of those students who were IB candidates, 88.4 percent of applicants were accepted and for those students who were full diploma students, there was a 97.5 percent acceptance rate at GMU (IB Research, 2007). At JMU, the numbers had a similar trend with a 58 percent total acceptance rate, 65.1 percent for IB candidate students, and 76.9 for full diploma candidates. This fact alone shows that colleges value what IB teaches students.

Issues for Future Research and Questions

One of the issues that IB faces is the fact that it has grown in the United States exponentially over the last 10 years. This amazing level of growth, with more schools being approved to offer various IB programs each year, is now forcing IB to actively consider ways to close the gaps in the perceptions that colleges and universities have concerning both the IBDP, the individual courses, student performance on examinations, and how that might translate to success in a university environment. The simple fact and one that IB should be proud of is that graduates of either the IBDP or various certificate courses do not need to enter remedial classes in those subjects once they enter college. But closing the gap of how students might be awarded credit will be a battle for IB as they struggle with a global mission of educating productive citizens and encouraging "students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right" (IB Mission Statement, 2005).

From an organizational standpoint, IB does recognize that the group needs to complete and publish research concerning both college readiness and university perceptions in the United States (S. Wade-Pauly, personal communication, April 24, 2009). As IB has traditionally been thought of as a "European" or "foreign" program, American universities have been slower to recognize applicants. In addition, IB has spent more time growing their programs in the United States, and has only small staffs available to conduct research or to work with university recognition. On an exciting note, a recent award of \$700,000 by the U.S. Department of Education to the University of Pennsylvania's graduate school of education will provide for a longitudinal study of IB students in postsecondary education. The research is slated to be completed in 2011 and is the first quantitative study of the relationship between participation in

the Diploma Programme and postsecondary outcomes for students. "The study will research indicators of academic readiness for college, access to college, academic performance, persistence to bachelor's degree attainment and access to post-baccalaureate degree programmes by analyzing 12 years of data from the Florida K-20 Data Warehouse and the National Student Clearinghouse" (IB News, 2009). It is the hope that the research by the University of Pennsylvania will help IB learn what happens to students beyond the IBDP.

From the eyes of this writer, I see a few other avenues of research for IB to consider that may assist in their quandary concerning university perceptions. I offer the following ideas:

- 1. Look at the differences in the type of student who pursues the full diploma and the student who pursues only IB certificates. What qualities do they share and what attributes are different? Are their college choices different in terms of application and admission?
- 2. Review how high schools note IB work on transcripts and how this is sent out with college applications. Are admissions counselors always aware that students are pursuing IB coursework or the IBDP?
- 3. Compare IB course syllabi and program guides with traditional freshman coursework in various subjects. What skills cross over? Are there skills where IB courses are ahead of traditional freshman college courses?
- 4. Develop a survey to track IBDP graduates and their progress in university coursework. Do they complete their college requirements in four years? Earlier? What percentage of students continues on to further educational opportunities?

5. Evaluate IB in terms of closing the achievement gap of traditionally underrepresented and culturally, linguistically and diverse learners. Devise a study that targets these groups and their achievement. Track their college acceptance, enrollment and completion.

These suggestions above are not exhaustive but are offered as a start for IB to begin changing the perceptions of university admissions officers and providing data to back up the already published College Admission Assumptions. As more schools begin teaching the IBDP, it may also only be a matter of time before college admissions officers may have to revisit their policies in response to pressure from potential applicants and their parents. One thing that potential applicants should remember about IB, however, is that the credit issue was never really part of IB's mission and goal; the aim of any IB program whether it be PYP, MYP, or DP is to educate the whole student and prepare them to think critically. This will ultimately prepare them for whatever they choose to pursue in later life, not a certain number of credits.

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