

DENVER PUBLIC SCHOOLS INTERNATIONAL BACCALAUREATE PROSPECTUS

DPS currently has ten schools at various stages of membership in the International Baccalaureate (IB) program. Two programs are longstanding and well established (one as a formal IB member and one as a non-member imitation); the rest are in the formative stages. Some approaches embrace entire “feeder patterns” of elementary, middle and high school; some are isolated programs within a larger school. Some programs operate within a regular school’s budget; others receive additional personnel or other resources from the District. The District seeks to develop a plan for a more concerted, coordinated and comprehensive approach to IB, and also one that creates more “equity” among schools and quadrants in the District.

Description of IB Model

The following description of the IB program is excerpted from the International Baccalaureate Organization (IBO) website (excerpts in italics).

Mission Statement:

The International Baccalaureate Organization aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the IBO works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

The IBO currently offers three distinct educational programs:

- ***The Primary Years Programme (PYP) for grades ECE-5** focuses on the development of the whole child in the classroom and in the world outside.*
- ***The Middle Years Programme (MYP) for grades 6-10** provides a framework of academic challenge and life skills through embracing and transcending traditional school subjects.*
- ***The Diploma Programme for grades 11 and 12** is a demanding two-year curriculum that meets the needs of highly motivated students, and leads to a qualification that is recognized by leading universities around the world.*

The IBO began as a means to provide a consistent, high quality, rigorous education for children of families, particularly diplomats, who frequently moved from country to country as a part of their work. The initial focus was primarily on secondary education and emphasized the importance students understanding their place in the world, and their role as “global citizens”. Over time, the model was so well received that it began to be adopted by a broader population of schools internationally, and eventually became a premier programme in a number of U.S. High Schools. The overall IB system was expanded beyond secondary in the past fifteen years to include all grades in ECE-12 education. While more details of each program are provided below, it is important to note at this point that both the Primary Years (PYP) and Middle Years

(MYP) Programmes are designed for all students. In Denver, all of the current PYP and MYP programs being implemented are both schoolwide and without application or admissions requirements that would restrict entry. However, the Diploma Program, as indicated below, is very challenging and does typically have entrance requirements to assure the likelihood of student success.

The Primary Years Programme

The curriculum framework for the PYP consists of five essential elements: concepts, knowledge, skills, attitude, action. The knowledge component is developed through inquiries into six trans-disciplinary themes of global significance, supported and balanced by six subject areas.

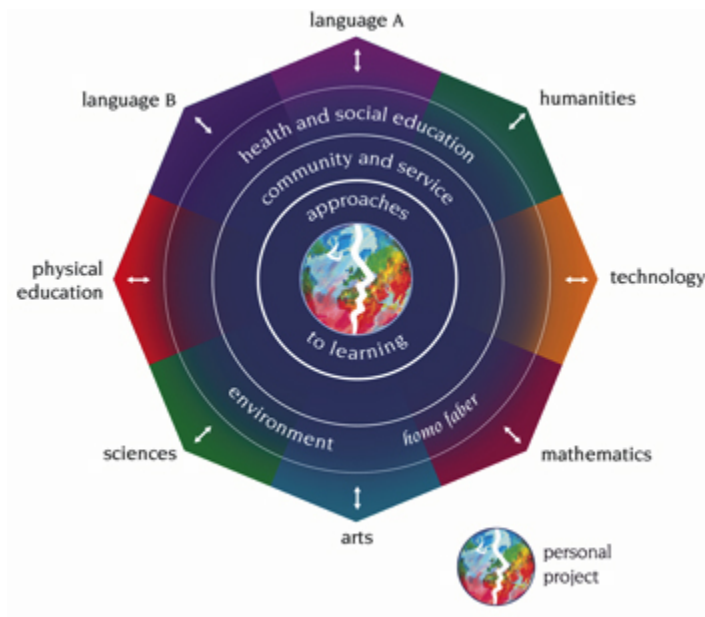


The Middle Years Programme

The Middle Years Programme is a programme of international education designed to help students develop the knowledge, understanding, attitudes and skills necessary to participate actively and responsibly in a changing world.

This period, encompassing early puberty and mid-adolescence, is a particularly critical phase of personal and intellectual development and requires a programme that helps students participate actively and responsibly in a changing and increasingly interrelated world. Learning how to learn and how to evaluate information critically is as important as learning facts.

The curriculum contains eight subject groups together with a core made up of five areas of interaction. This is illustrated by means of an octagon with the five areas of interaction at its centre.



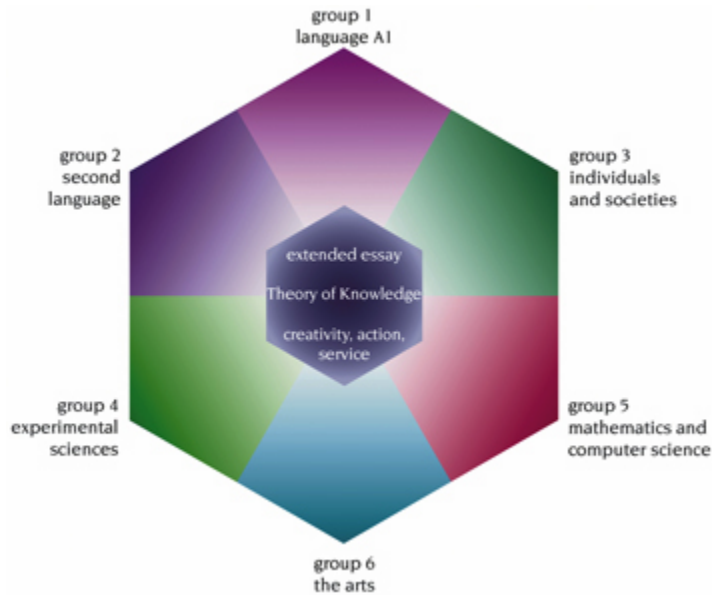
The Diploma Programme

The International Baccalaureate (IB) Diploma Programme is a challenging two-year curriculum, primarily aimed at students aged 16 to 19. It leads to a qualification that is widely recognized by the world’s leading universities.

Students learn more than a collection of facts. The Diploma Programme prepares students for university and encourages them to:

- *ask challenging questions*
- *learn how to learn*
- *develop a strong sense of their own identity and culture*
- *develop the ability to communicate with and understand people from other countries and cultures.*

The curriculum contains six subject groups together with a core made up of three separate parts. See the insert below for a graphic depiction of the Diploma Programme:



Goals of Adopting IB for DPS Schools

Before embarking on a wide-spread effort to create IB programs in DPS, the potential benefits of the program should be considered.

Goal 1: Increased student achievement.

The first benefit, in keeping with the goals of the Denver Plan, would be to increase student achievement, high school graduation, college and career preparation, and college matriculation. There are many potential benefits of adopting a school-wide design which entails, as does the IB, research-based curriculum design; a scope and sequence for curriculum planning; professional development for all teachers in the program; and a school-wide theme which serves to rally teachers, administrators and families around a common focus. Consensus papers on best practices for middle and high schools reflect many features of the IB program: mastery of fundamental knowledge and skills; academic rigor; and the opportunity to explore and develop interests in aesthetic, leisure, career, and other aspects of life. Most of these features can be found in schools which have shown positive results in student achievement, and they are broadly considered building blocks for schools that seek to improve. Many of the features of the IB program—collaboration, coherent school design, skilled and empowered faculty, curricular alignment, commitment to professional development—are also consistent with features of the Denver Plan.

While many of the features of the IB align with research-based best practice, a few do not. The IB either contradicts or makes it difficult to implement several practices that are integral to school improvement and student achievement. While schools are moving to adopt longer blocks and more flexible use of time in their schedules, the large number of IB course requirements, and the rigid interpretation of how these requirement must be fulfilled, inhibits this goal. As a whole-school design, the IB lacks a structure or practice designed to achieve a primary goal established by the National Middle Schools Association, that “every student should be well known as a person by at least one adult in the school who accepts responsibility for his/her

guidance.” Finally, IB overemphasizes curriculum as the vehicle for school improvement, whereas recent research increasingly shows that classroom instruction—not curriculum or programs—is the single most important factor in increasing student achievement. In this regard, the words of the Denver Plan capture one drawback of overinvestment in the IB program: “Within limits, we do not believe in programs or the latest fads. We believe in professional development and support of our teachers and our principals and the use of data to determine the progress our students are making.” There is nothing in the IB that prohibits massive investment in professional development, instructional leadership and data-driven instruction; but in a real world of limited resources, the IB scale tips too heavily towards programs rather than human capital as a repository for seed funds.

There is no available evidence that the IB will increase student achievement in DPS schools or that the IB has had a positive effect on student achievement in similar districts or schools. A thorough search of the literature has netted no empirical studies on the effects of IB on student achievement. The IB, itself, publishes no such results. A meta-analysis published by Comprehensive School Reform Quality Center identified which comprehensive school reform models show evidence of positive effects on middle and high school achievement; IB was not among them.

Some IB districts and schools have made modest claims to improved student achievement. The Academy School District north of Colorado Springs reports that IB students outperform their peers on state assessments; have higher acceptance rates to colleges; and perform better in post-secondary education than their peers. At the same time, Academy School District is a high achieving district overall: the difference between IB and non-IB students in the district is marginal compared to the differences between Academy District’s high proficiency levels and state averages.

Schools with IB programs tend to have higher test scores than average, but this can be explained as a function of student selection rather than student learning. In cases such as the Academy School District, a high-income, highly educated community has schools with high test scores. In Denver’s two IB or IB-like programs, students are pre-selected for the programs based on their prior test scores and academic achievement; therefore, it is no surprise that they score high once they are admitted into the program. There seem to be no available examples of IB schools where high student achievement can be explained by anything other than demographics or student selectivity.

There is discussion in the academic and popular literature of the importance of a greater focus on international education and/or intercultural understanding. These arguments range from the need to preserve America’s competitiveness in a global society to the need to diminish America’s hegemony on the global stage. Regardless one’s values or political philosophy, there are good arguments being made for the IB program’s international theme.

In sum, there are doubtless many potential benefits of the IB model, but the model is not proven to improve student achievement in schools with low-income populations, to narrow the achievement gap, or to bring low-achieving students up to proficiency in reading, writing or mathematics. While the IB model promises several benefits to student learning, it also comes

with the potential of compromising other best practices for student learning. [Caveat: this conclusion is based on the information I could find; I would welcome evidence to the contrary if somebody can show it to me.]

Goal 2: Increased student enrollment.

The second benefit would be to increase enrollment in DPS schools, both as an indicator that Denver schools are becoming more attractive to, and better serving, the community; and as a means, through increased per pupil revenues, of underwriting the costs of the IB program. In this regard, if implemented properly, the IB has a more likely chance of success. The IB is one of the best regarded “brands” in education. Parents perceive it to guarantee academic excellence and educators tout its educational merits (even if these merits, as explained above, are largely unproven). There seems to be increasing student enrollment in schools where IB is employed.

Current Status of IB Programs in DPS

The IB is following two paths to implementation on the east and west sides of Denver.

East Denver IB and International Programs

In the east side, two longstanding programs, the George Washington High School IB and Hamilton Middle School International Prep (IP) grew organically through local efforts. GW is currently the only fully authorized IB program in Denver. There is now discussion of connecting the programs to feeder patterns to serve a broader range of students in more schools. Bradley Elementary is currently a candidate school with IB. Garden Place and Smiley Middle School (Smiley already has an international theme program in one of its “academies”) have indicated interest in becoming IB schools and are in varying stages of research and program development. Underlying the activities on the east side are several strengths as well as challenges.

Strengths:

- The IP and IB offer a rigorous academic and college preparatory program.
- Students who succeed in the IB Diploma Program earn college credit while still in high school and go on to attend some of the nation’s finest colleges and universities.
- Selective programs create a perception of excellence that draws families—especially middle income families—to the schools and keeps them in the district.
- The programs are in high demand. They attract students from more than 12 elementary enrollment areas, compete successfully with private schools, and serve a valued constituency in the community.
- Both programs have far more applicants than they admit. Hamilton selects about 230 of 350 students who apply, and about 150 enroll in the IP. GW selects about 150 of 350 who apply.

Challenges:

- As one east-side principal stated, “Separate but equal is inherently unequal.” Two programs in the same school, one serving a select student population, are probably inherently inequitable. Class sizes in the IB and IP programs are smaller than in the general programs in the same buildings; teachers are more experienced, highly educated, and trained; and more outside resources, in the form of program fees (the IB program

coordinator estimates \$800 per student for textbooks and test fees), flow into the international programs than into the general programs.

- Not only is there inequity within schools, but between schools. GW and Hamilton are located closer to middle-income neighborhoods in southeast Denver. There is currently no similarly attractive option for low-income neighborhoods in northeast Denver. Hamilton students receive transportation because the IP is designated as a Magnet Program.
- Enrollment in the IP and IB programs is disproportionately middle income and white.
- The programs turn away many applicants who apply. Presumably, there are an additional 300 students every year who were not admitted, but would like to attend a program like the IB, whether for the academic rigor, international theme, select student population, or other benefits they perceive. Some students who are turned away from the program choose other DPS schools/programs, but some go outside the district; no analysis has been performed on how many students leave DPS after failing to gain entry into the IP and pre-IP programs.
- The GW IB suffers almost 50% attrition: the program dwindles from 150 ninth graders to 79 seniors in this year's graduating class.
- Programs operate on a variety of fiscal models. GW receives two additional FTE's from the district and supplements through fundraising and student fees. Hamilton fundraises for two additional FTE's beyond the district's allocation.

One east side elementary school, Bradley, is in the authorization process to become an IB Primary Years Program (PYP). In the past, Garden Place Elementary has been associated with the International Preparatory Magnet Program, an international program not affiliated with the IB; its magnet status has been discontinued for the 2007-08 school year. There are currently no real efforts underway in any of the east side schools to reach out to other schools to coordinate the creation of feeder patterns or to collaborate in the adoption of the IB program.

West Denver IB Programs

In the west side, the initial implementation of the district-wide revitalization program has led to development of a feeder pattern of Sabin Elementary School, Henry Middle School and Kennedy High School in southwest Denver. In northwest Denver, Brown Elementary is implementing the PYP and Lake Middle School is implementing grades 6-8 of the MYP. Lake students will have the option of continuing the MYP by choosing to attend the MYP at Kennedy. Sabin (PYP), Brown (PYP), Lake (MYP6-8) and Henry-Kennedy (MYP 6-10) have candidate status as IB schools and are fully implementing the IB program.

Strengths:

- Schools implementing the IB are showing improvements in school culture. There is an increased sense of optimism, enthusiasm and efficacy in these buildings, especially at Sabin, Brown and Henry, where school-wide implementation is well underway.
- Principals say that the IB is promoting more teamwork, collaboration and focus on student learning. They predict that this will increase student achievement over time.
- Schools endured a difficult year or two of transition challenges in implementing the IB, but principals report that the schools emerged stronger and "raised the bar" in the process.

- Principals think that enrollment is starting to increase, though tracking enrollment is difficult.

Challenges:

- Implementation of the IB preceded a long-term cost estimate or means of paying for the program over time. All school principals say that implementing the IB will require additional personnel and program fees, but specific needs are still unclear.
- Staff attempting to implement the IB have found that the IB program requirements contradict some elements of the Denver Plan (especially the double block periods for literacy and math) and court-mandated guidelines for English Language Acquisition.
- It is difficult to track enrollment to determine enrollment patterns related to the IB. Accurate enrollment statistics at the school level are unavailable.
- The principal at Kennedy cites as the biggest challenge that the IB is still a school within a school. She hopes to establish the IB MYP for all students in grades 9-10, although buy-in by the faculty and community are still unclear.

Strategies for Future Implementation

If the District decides to invest in the IB program on a comprehensive scale, following are strategies to move from the current, inconsistent approach to a larger scale and more coherent implementation by 2012.

1. Identify a single IB liaison to work with the IB Association of Rocky Mountain Schools (IBARMS) who should also work to coordinate IB activities within the District and ensure fidelity to the IB model. The IBARMS is interested in identifying district partners, creating k-12 program continuity, and branching into more urban and low-income schools. The relationship between IBARMS and DPS needs to develop more constancy and the environment in which IB is being implemented in DPS needs to appear more coherent.
2. Combine all participating west-side middle and high schools into a single MYP program under a single program coordinator (including Henry, Lake and Kennedy). Negotiate with the IBARMS to pay a single MYP fee for multiple sites. Launch east-side MYP schools similarly as a single program once those get underway.
3. Attempt to consolidate PYP schools under a single or small number of program coordinators and negotiate to pay fewer PYP program fees to IBARMS.
4. Phase implementation of future IB MYP programs starting in the sixth grade. This includes transitioning any east-side middle schools and high schools into the formal IB program. Gradual implementation will allow for planning, staff training, and psychological adjustment to the program as it gets phased in over time.
5. Create an honors program within the MYP to preserve rigor, but structure it to remove inequities. The means of qualifying for the honors program should be reviewed to ensure that it follows a high standard of practice. Entry into the honors program should be fluid and flexible: students should have the ability to take honors classes in subjects for which they are qualified; they should receive support in the form of elective, after-school or summer programs to allow them to accelerate and “catch up” to the honors program if they do not initially qualify. The honors and non-honors programs should receive proportionate resources such as class sizes, teacher qualifications and instructional materials.

6. Create funding sources to offset the financial burden to students for testing fees and other “hidden costs” of the of the MYP and DP. Establish a financial assistance policy to determine equitable means of allocating subsidies to students in need.
7. Negotiate resolution of the contradictions between the IB and Denver Plan, especially as regards the schedule. For example, consider opting some MYP students out of some course requirements—thus disqualifying them from MYP certification—in order to emphasize more fundamental needs such as literacy and mathematics. Resolve discrepancies between the IB and ELA requirements.
8. Establish standards for leadership, faculty buy-in, enrollment, and community development which must be met and sustained before adopting and renewing IB programs. Develop an approach to adoption and implementation of the IB model that considers leadership capacity and commitment; school culture and faculty buy-in; enrollment; and community participation. Adoption of a school-wide program of this scope usually follows a year-long process of facilitated planning and decision-making.
9. Share the financial risk between the schools and the district. In order to pay for additional personnel and program fees, the district will need to invest in phasing in the IB programs. Over time, schools should be able to offset additional personnel costs and IB fees through increased per pupil revenues. Schools launching IB programs should agree to five-year enrollment projections which, if not met, would mean cessation of funding for the IB program. Accurate systems must be identified for tracking student enrollment into the schools and district.
10. Establish in advance a program evaluation process that includes the ability to attribute changes in student achievement and student enrollment to the IB program. Periodically review and renew the program contingent upon meeting learning goals as well as enrollment goals.

Budget

See separate attachment.