

About Us...

Dear Prospective Home Buyer,

Welcome to the Dobbs Ferry School District! You have chosen a community that values and supports education and provides its students with a “world-class” learning environment. As one of the first High Schools in Westchester County to offer the challenging and prestigious International Baccalaureate (IB) Diploma program, our student body is focused on mastering the 21st Century skills that they will need to be successful in college and careers in the new global economy.

The District’s educational philosophy supports its comprehensive Strategic Plan whereby all students are encouraged to challenge themselves academically and to think globally:

Our Vision... Independent Thinkers Prepared to Change the World

Our Mission... The Dobbs Ferry School District strives to develop independent, curious, and open-minded learners who think critically, work collaboratively, act ethically and are knowledgeable about the world around them

The administration, faculty and staff work diligently to teach students to be problem-solvers, to analyze information, to become effective writers and communicators, and to utilize their curiosity and imagination in order to prepare them for the future. Because today’s students are “wired” differently, we employ “blended learning,” a combination of innovative technology and differentiated instruction to enrich the curriculum and motivate each student to achieve academic success, as well as master social and emotional learning skills.

The Dobbs Ferry School District comprises 1450+ students and includes three schools: Springhurst Elementary School, Dobbs Ferry Middle School and Dobbs Ferry High School. The District is located in the quiet hamlet of Dobbs Ferry, NY, just 20 miles north of New York City. A close-knit community that values education, residents have high expectations for academic excellence and ALL students are encouraged to take the most challenging coursework and stretch intellectually. Class sizes are small and according to parents, students receive a “private school education in a public school setting.”

Over 98% of the faculty have Masters’ Degrees or higher and teacher mentoring and professional development is a priority for all staff. The District embraces parent involvement and the PTSA and Dobbs Ferry Schools Foundation play an integral role in our school family. These partnerships are fruitful because of the talent and dedication of the teachers in our schools and the community’s commitment to excellence in education.

If you’re looking for the best in public school education, you’ve come to the right place! Our students excel in academics (National Merit Scholars and Intel Science Semi-Finalists), athletics (State Champion Football Team) and the arts (NYSSMA Orchestras and Chorus). Please take the time to peruse the Dobbs Ferry School District website at www.dfsd.org or visit the District’s Facebook page at <https://www.facebook.com/dobbsferryschooldistrict>. You can also call our Public Information Officer, Elizabeth Hausman, at 914-693-1500 x3013 if you need more specific information. Additional documents, including “The Top Ten Things You Should Know About The Dobbs Ferry Schools,” will also give you some insight into what the School District and community can offer you and your family.

My door is always open as well, and I sincerely hope you decide to make Dobbs Ferry your new home.

Sincerely,

Lisa Brady, Ed.D
Superintendent
Dobbs Ferry School District

10..... That Count!

The top 10
things you should
know about
Dobbs Ferry
Schools

1. PRIVATE SCHOOL EXPERIENCE/PUBLIC SCHOOL SETTING

Approximately 1,450 students attend Dobbs Ferry High School (9-12), Dobbs Ferry Middle School (6-8) and Springhurst Elementary School (K-5). The District provides a dynamic and challenging curriculum for ALL of its students, which emphasizes critical thinking and problem solving skills.

2. SMALL CLASSES & INNOVATIVE INSTRUCTION

Average class size is 20-21 pupils in grades K-5 and 22-24 in the upper grades. Our intimate size enables teachers and staff to give personal attention to each student empowering them to reach their individual potential. Approximately 98 % of the District's teachers hold graduate degrees. Ongoing staff development, the Teacher Leader model and a strong mentoring program support instructional practices.

3. INTERNATIONAL BACCALAUREATE (IB) PROGRAM

Dobbs Ferry High School was the first district in Westchester County to offer the prestigious IB Diploma Program, a rigorous two-year college preparatory course of study for grades 11-12, recognized world-wide for its demanding academic requirements and in-depth study of subject content. One-third of graduating seniors receives the full IB Diploma and all DFHS students take at least two IB courses. The District obtained official authorization in 2016 to offer the IB Middle Years Program (MYP) in grades 6-10.

4. "STEM" IN ACTION

The high school's science research program has garnered science awards on the regional, state and international level including 40+ WESEF awards, 30+ WR-JSHS award and, a dozen ACORDA Science Excellence awards and can claim Intel (STS), ISEF and ISWEEP finalists in addition to 10+ Genius Olympiad International winners. State-of-the-art science labs support all the science disciplines and STEM is a major focus. Elementary School students use the renowned Singapore Math Program which fosters deep thinking, conceptual understanding and higher-level problem solving skills.

5. 97% COLLEGE-BOUND

DFHS graduates attend the most selective private and public colleges and universities in the country including the Ivy League, "Little Ivies," Big Ten, and State University of New York (SUNY) schools. Graduating seniors consistently earn some of the state and nation's top scholarship awards for academic achievement including National Merit Scholar Semi-Finalist and Finalist designation. Members inducted into the school's National Honor Societies increases yearly.

6. TEAM SPIRIT

Students excel both on and off the field. At least 70 % of High School and Middle School students participate on 44 interscholastic athletic

teams. The Eagles are not only a football powerhouse winning multiple state championships, but DFHS has fielded League Champion varsity teams in many of the Girls and Boys sports. Each school also "fields" academic Destination Imagination (DI) Teams that qualify regularly for the Global Finals, the largest creative problem solving competition in the world held each year in Tennessee.

7. CULTURAL ARTS FOCUS

Students participate in music, theater and the arts including yearly musicals and dramas, artist-in residency programs, dance ensembles, winter and spring choral recitals, band/string orchestra concerts, art exhibitions, and cultural arts exchanges. Springhurst is proud of their nationally recognized, award-winning Harmonaires, an advanced chorus which teaches children in grades 4-5 the techniques of voice and harmony. They have sung at Yankee Stadium, the White House and made recordings with professional pop vocalists.

8. CLUBS FOR EVERYONE

The High School offers more than 30 different clubs for students to join, plus a majority of students are involved in community service projects off the school campus. The Middle School hosts 20 extra-curricular clubs and Springhurst has an active student government and ecology club, among others. All students in the Elementary School take part in caring for the Outdoor Garden/Classroom and are involved in the COMPOST KIDS program. Students at all three schools are serious about the District's expanding recycling initiative.

9. 21st CENTURY TECHNOLOGY

The District's high-speed wireless internet network and redesigned classrooms support students bringing their own devices (BYOD) to school. The 1:1 Chromebook initiative with students in grades 4-12 is a major success. The schools also use G Suite for education powered by Google. The District has its own fully operational television station, DFTV (Cablevision Ch75 & Verizon Ch47), with cutting-edge media production capabilities. Programming includes student news shows as well as "District Dialogue," a talk show with the Superintendent. The District uses multiple social media tools/channels (Website, Facebook, Twitter, Instagram, YouTube) and School Messenger (email, text, phone) to communicate with parents and community members.

10. PARENTS WELCOME!

Parents play a pivotal role in supporting the Dobbs Ferry Schools and are partners in the education process. Thank you to the Board of Education, PTSA, Dobbs Ferry Schools Foundation, Trailguides, SPRING Community Partners, Booster Clubs and many other committee volunteers. The Dobbs Ferry Schools' values are reflected in its vision statement "**Independent Thinkers Prepared to Change the World.**"

*If you value and encourage creativity, curiosity, and the pursuit of knowledge, **Dobbs Ferry is the school district for your children.**
"...Preparing students for the future; to be successful and comfortable in a global economy, and effective citizens in the 21st Century..."*

For more information, visit our website at:
www.dfsd.org or call our schools at 914 693-1500; also
"like" us on Facebook at: www.facebook.com/dobbsferryschooldistrict



District Administration

Dr. Lisa Brady
Superintendent
914-693-1506

Douglas Berry
Assistant Superintendent
Curriculum & Instruction
693-1500 x3059

Jean Gismervik
Director
Special Education
693-1503 x1479

Ron Clamser
Assistant Superintendent
Finance, Facilities &
Operations
693-1500 x3030

**Springhurst
Elementary School**
914-693-1503

**Dobbs Ferry
Middle School**
914-693-7640

**Dobbs Ferry
High School**
914-693-7645

Julia Drake
Principal

Patrick Mussolini
Principal

John Falino
Principal

Raymond Cavallo
Assistant Principal

Anne Pecunia
Assistant Principal

Candace Reim
Assistant Principal

Dobbs Ferry High School Class of 2019

American University	SUNY Oneonta
Bard College	SUNY Oswego-6
Baruch College -2	SUNY Purchase
Boston University-2	SUNY Stony Brook
College of Mount Saint Vincent	Syracuse University-2
Cornell University-2	Temple University
Macaulay Honors College	The University of Tampa
Denison University	University of Alabama at Birmingham
DePaul University	University of Delaware -2
Duke University	University of Maine
Dutchess Community College	University of Massachusetts, Amherst -2
Embry-Riddle Aeronautical University-2	University of Miami
Fairfield University-2	University of Michigan
Florida Atlantic University	University of New Haven
Hamilton College -2	University of New Haven
Harvard College	University of North Texas
High Point University -2	University of Rhode Island -2
Johns Hopkins University	University of Rochester
Johnson & Wales University-2	University of South Carolina
Los Angeles Trade-Technical College	University of Vermont
Lynn University	University of Virginia
Manhattan College-2	University of Washington
Manhattanville College	University of Wisconsin, Madison
Marist College -2	Vanderbilt University
Mercy College -2	Villanova University
Monmouth University	Virginia Tech
New York University -5	Wesleyan University
Northeastern University-5	Westchester Community College -11
Pace University, New York City	Western New England University-2
Providence College	
Rensselaer Polytechnic Institute	
Rochester Institute of Technology-3	
Sacred Heart University	
School of Visual Arts	
Seton Hall University	
Sophia University	
St. John's University	
SUNY Albany-3	
SUNY Buffalo State	
SUNY Buffalo-4	
SUNY Cortland-6	
SUNY Delhi	
SUNY Maritime	

DOBBS FERRY HIGH SCHOOL
CLASS OF 2018 COLLEGE ENROLLMENT

American International College	Queen Mary University of London
Amherst College	Queen's University, Kingston
Babson College	Quinnipiac University
Bergen Community College	Rice University
Boston University	Rochester Institute of Technology (2)
Carnegie Mellon University	Roger Williams University (2)
Clark University	Savannah College of Art and Design (2)
Colgate University	Skidmore College
College of Mount Saint Vincent	St. Thomas Aquinas College
Concordia College, New York	SUNY Alfred
Concordia University, Montreal	SUNY Binghamton (6)
CUNY New York City College of Technology	SUNY Buffalo State
CUNY Borough of Manhattan Community College	SUNY Buffalo University (3)
Drexel University	SUNY Cortland
Endicott College	SUNY Fredonia (2)
Fordham University	SUNY Geneseo (2)
Georgetown University	SUNY Maritime (2)
Goucher College	SUNY New Paltz (2)
Harvard University	SUNY Oneonta
Haverford College (2)	SUNY Polytechnic Institute
High Point University	SUNY Purchase (2)
Ithaca College (2)	SUNY Stony Brook
James Madison University	Temple University
Jefferson University	The College of Saint Rose
Johnson & Wales University (2)	The George Washington University
Lehigh University	University of California, Berkeley
Liberty University	University of Connecticut
Manhattan College	University of Delaware
Manhattanville College	University of Denver
Mercy College (3)	University of Maryland
Muhlenberg College	University of Miami
New York University	University of Northern Colorado
Norwich University	University of Pennsylvania
Oberlin College	University of Virginia
Pace University (2)	University of Wisconsin
Parsons School of Design	Vassar College
Pennsylvania State University	Westchester Community College (13)
	Western Connecticut State University
	Worcester Polytechnic Institute

DOBBS FERRY HIGH SCHOOL
CLASS OF 2017 COLLEGE ENROLLMENT

Albright College	Savannah College of Art and Design
American University	School of Visual Arts
Amherst College	Seton Hall University
Bucknell University	Stanford University
College of Mount Saint Vincent (2)	Sullivan County Community College (2)
Concordia University	SUNY Binghamton (5)
Cornell University	SUNY Buffalo (2)
Dartmouth College	SUNY Cortland
Dickinson College	SUNY Delhi
Dominican College	SUNY Geneseo
Elon University	SUNY Morrisville
Georgia Institute of Technology	SUNY New Paltz
Hartwick College	SUNY Oneonta
John Jay College of Criminal Justice	SUNY Oswego (2)
Keio University	SUNY Potsdam
Lafayette College	Syracuse University
Lincoln Technical Institute	The George Washington University (2)
Loyola Marymount University	The Ohio State University (2)
Manhattan College	Tufts University
Manhattanville College	Tulane University (2)
Marist College	United States Military Academy
Mercy College	University of California, Los Angeles
New York University (3)	University of Chicago
Northeastern University (3)	University of Pennsylvania
Pace University(4)	University of Rhode Island
Queens University of Charlotte	University of Vermont
Quinnipiac University	University of Wisconsin
Rensselaer Polytechnic Institute	Virginia Polytechnic Institute and State University
Rochester Institute of Technology (2)	West Virginia University (2)
Rockland Community College (2)	Westchester Community College (8)
Roger Williams University (2)	Western Connecticut State University
Sacred Heart University	

What a Difference a Century Makes!

The following chart provides a quick comparison of how traditional education has been organized in the past and how it needs to change in order to prepare students for living all their lives in a 21st century media culture. Media literacy education, with inquiry as its core, provides the engaging bridge over which students can pass to learn the critical process skills they'll need to not just survive but to thrive as adults in the 21st century.

19th – 20th Century Learning

- Limited access to knowledge and information (i.e. 'content') primarily through print
- Emphasis on learning content knowledge that may or may not be used in life
- Goal is to master content knowledge (literature, history, science, etc)
- Facts and information are "spoon-fed" by teachers to students
- Print-based information analysis
- Pencil / pen and paper or word processing for expression
- Classroom-limited learning and dissemination
- Textbook learning from one source, primarily print
- Conceptual learning on individual basis
- "Lock-step" age-based exposure to content knowledge
- Mastery demonstrated through papers and tests
- Teacher selecting and lecturing
- Teacher evaluates and assesses work and assigns grade
- Teaching with state-adopted textbooks for subject area with little accountability for teaching

21st Century Learning

- Infinite access to knowledge and information ('content') increasingly through the Internet
- Emphasis on process skills for lifelong learning
- Goal is to learn skills (access, analyze, evaluate, create) to solve problems
- Teachers use discovery, inquiry-based approach
- Multi-media information analysis
- Powerful multi-media technology tools for expression
- World-wide learning and dissemination
- Real-world, real-time learning from multiple sources, mostly visual and electronic
- Project-based learning on team basis
- Flexible individualized exposure to content knowledge
- Mastery demonstrated through multi-media
- Teacher framing and guiding
- Students learn to set criteria and to evaluate own work
- Teaching to state education standards with testing for accountability



About the International Baccalaureate Diploma Program

In 1998, Dobbs Ferry High School became the first “IB World School” in Westchester, a distinction that is officially authorized by the International Baccalaureate Organization (IBO). At the time, the IBO was still relatively unknown as an academic organization, yet its concept of a uniform international curriculum was far ahead of its time. Today, the IBO is internationally regarded as an academic model, firmly rooted in its commitment to providing students with opportunities to develop the skills necessary to succeed in a globally interdependent world. The IB Diploma Program’s interdisciplinary approach is one that is widely viewed by colleges and universities around the world as a comprehensive approach to higher education preparation. The rigorous curriculum, authentic assessments, promotion of international mindedness, and thorough teacher training are among the many reasons why the IB Diploma Program has become a desirable pursuit, and why it has attracted media attention all over the world.

Students have the following two choices when considering the IB Program offered at Dobbs Ferry High School:

- | | |
|---|--|
| <p><input type="checkbox"/> <i>Option 1:</i>
Students can take the most rigorous approach and pursue the IB Diploma (see requirements on the following page).</p> | <p><input type="checkbox"/> <i>Option 2:</i>
Students can choose to take individual IB courses in any of the six groups shown on the following page.</p> |
|---|--|

Students who pursue the IB Diploma understand that it is a comprehensive, two-year, pre-university course of study beginning in eleventh grade. The coursework is rigorous, intellectually stimulating, and leads to authentic internal and external assessments in which students must demonstrate a critical understanding of subject matter.

IB courses are open to all students. Students should consult teachers, guidance counselors, and the IB Coordinator in order to make informed decisions. Furthermore, passing an IB course does not guarantee that a student will earn college credit. It is strongly recommended that students and parents research how IB course credit would be applied on the college level and the scores required for college credit.

Please contact Marion Halberg, IB Diploma Programme Coordinator, at (914) 693-1500 if you have any questions. 



Requirements for the IB Diploma Program

A MINIMUM OF 24-28 TOTAL DIPLOMA POINTS DERIVED FROM SCORES IN...

The Six Groups

1. English
2. Spanish, French or Italian
3. History
4. Biology or Physics
5. Mathematics
6. Art or Film

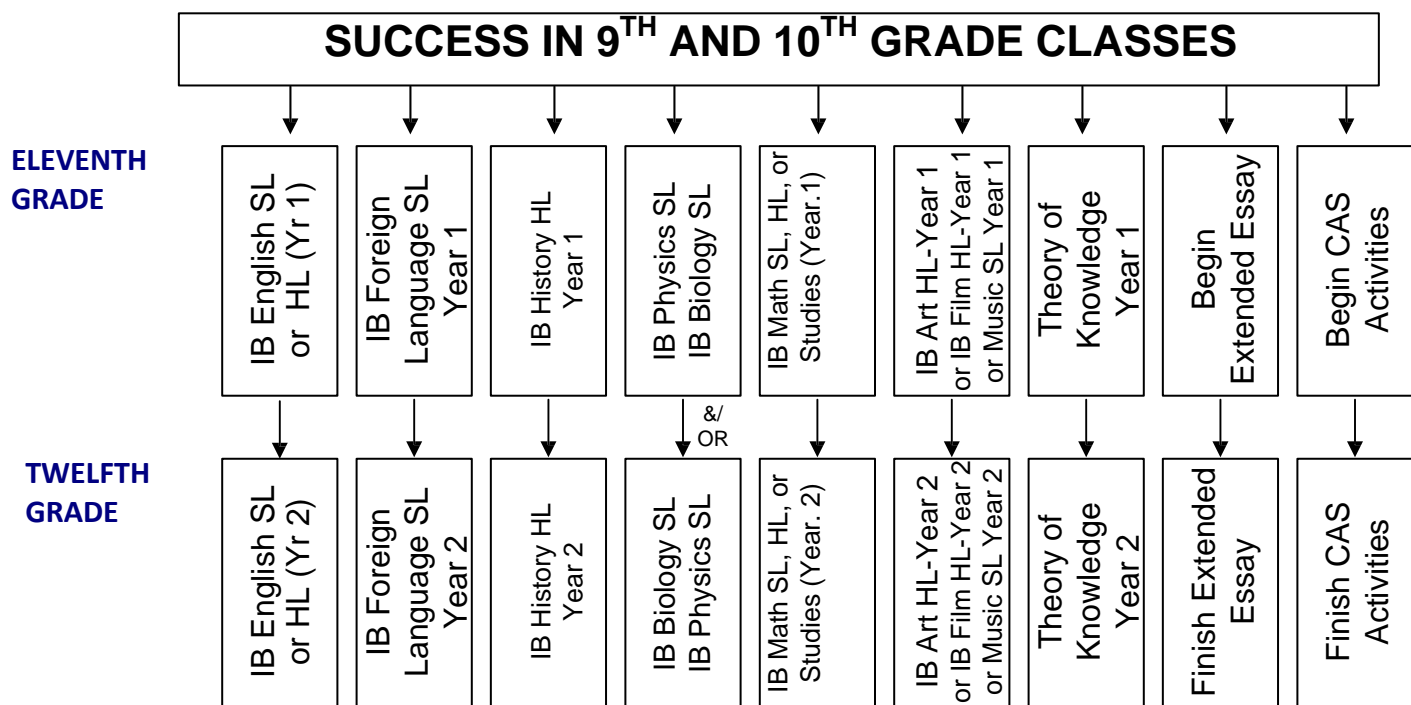
Three of the above courses from the six groups must be Higher Level (HL) courses.

Three Additional Requirements

1. Theory of Knowledge Course
2. Extended Essay (Independent Study)
3. CAS — (Creativity, Action, Service)

Extended Essay (EE) and CAS will be reflected as a P/F grade on the student's report card in the 3rd and 4th marking periods of their Junior year and the first 3 marking periods of their Senior year as the student meets the quarterly requirements set by the school. No credit is earned towards the EE and CAS except in regard to earning the IB Diploma as stated above.

Typical Course of Study for the IB Diploma Program





Frequently Asked Questions About the IB Program

1. **What are the other requirements for an IB Diploma besides taking IB courses?**

At the core of the IB Program are three central elements called Theory of Knowledge (TOK), Creativity-Action-Service (CAS), and an Extended Essay. Students who seek to earn an IB Diploma must complete the requirements of these three parts of the IB Program.

2. **What is Theory of Knowledge (TOK)?**

TOK is a course that is open to Juniors and Seniors. It is an interdisciplinary course designed to help students question and understand *how* they know what they know. Students study how individuals from various disciplines view the world to develop their own ways of thinking. By stimulating critical reflection and analysis of knowledge and experience across disciplines, TOK seeks to bridge and unify the academic subjects, in essence, to help students make sense of school and the world.

3. **What is Creativity-Action-Service (CAS)?**

CAS is an experiential learning component of the IB. Students seeking to earn an IB Diploma must complete a minimum of 150 hours of participation over their Junior and Senior years. A wide variety of activities fulfill this requirement, including many extracurricular, community service, and athletic activities. A handbook detailing the CAS program is available.

4. **What is the Extended Essay?**

The Extended Essay introduces students to the demands and rewards of independent work. Emphasis is placed on engaging in personal research and communicating ideas effectively in order to write a 4,000-word essay (about 18 pages) in an area of personal interest to the student. Each student seeking to earn an IB Diploma must write an extended essay over the course of his or her Junior and Senior years. A guide to the Extended Essay is available.

5. **How do students get evaluated in the IB Program?**

Students enrolled in IB courses still get grades from their classroom teachers, still take tests, do homework, complete projects, and take midterms—the same as any other student. In addition, students enrolled in IB courses take formal exams in May. Working in partnership with local teachers, the IB Organization works to ensure that students have ample opportunity to demonstrate what they know

and are able to do. The IB Organization compiles information about students from their teachers, from work students do over the course of the year, and from the end-of-course exams given in May to determine a final score on a 1 to 7 scale. Diploma students need a total of at least 24-28 points to earn the full diploma.

6. **What are the advantages of taking IB courses?**

The major advantages include a challenging learning environment, excellent preparation for university-level studies, recognition of IB course work by college admissions officers, the possibility of earning college credit or advanced standing, and the benefit of receiving a well-rounded, world-class, liberal arts education.

7. **Do students have to take advanced courses to qualify for the IB Program?**

Students are not required to take advanced courses in preparation for IB courses; however, to be better prepared for the rigor of the courses, students should consider taking the most rigorous challenges during 9th and 10th Grades. One may choose to take an IB course because of the desire to pursue learning in an area of particular interest or strength. The majority of our upperclassmen are enrolled in at least one IB Course.

8. **What do students do if they find an IB class too challenging?**

Numerous support services are offered to help students gain confidence and learn the required skills to manage their work and responsibilities. Support services include conferences with teachers, individual counseling and guidance, peer tutoring, and various levels of academic support. Although IB classes are more challenging than standard classes, colleges recognize IB course work, admire the rigor and challenge of the IB Program, and regard successful completion of an IB course as a credential of exceptional merit. Also, as with AP classes, IB course work can lead to college credit. Given the right support, students should consider the advantages of staying in an IB class.

9. **How much homework will students have?**

The amount of homework varies in the IB Program. Students should expect about ten to twenty hours of homework every week. Time management is essential because homework often consists of long-term assignments and a great deal of reading and writing.



Frequently Asked Questions About the IB Program (continued)...

10. What is the benefit of taking individual IB courses?

While the IB Organization suggests that students attempt a full diploma, not all students will take the full IB course load leading to an IB Diploma. Some students may choose selected courses where they have particular interests or strengths, similar to honors and Advanced Placement classes. Students who satisfactorily complete an IB course will earn a certificate from IB, and the course will be noted on their permanent transcript.

11. How widely accepted is the IB Diploma?

The IB Diploma is an internationally accepted standard of excellence, accepted by universities and other institutions in over eighty countries. Besides global recognition, most schools to which Dobbs Ferry graduates have been admitted recognize the IB Program. The IB website lists colleges and universities that grant credit, scholarships, and/or advanced standing for IB diplomas and certificates. When students are applying to universities, decisions about admissions will be partially based on their high school transcripts, not on whether they earn the Diploma. The most important factor in admissions will be the work in IB classes, not scores on the IB exams. However, IB exam scores will be important in decisions about placement and credit, so it is important to do well on IB exams, too.

12. Will students still have to take a Regents Exam in an IB course?

Yes. If a Regents Exam is normally given in the course related to the IB course, such as American History, then students will also take the regents exam. To maximize student performance on both exams, teachers take into account Regents curriculum requirements as well as IB requirements when planning their courses.

13. What are the main differences between the IB Program and the Advanced Placement (AP) Program?

As a general rule, the IB and AP Programs are roughly equivalent in their academic rigor. However, there are some differences in the content and tests. Content differences vary by subject. In general, the IB Program is more comprehensive and focuses on multiple methods of assessment as opposed to AP courses where a student is evaluated by the results of a single end-of-course exam. Depending upon the course, special attention may be necessary to certain topics so that a student who completes the course will be prepared to take either or both exams.

14. Will students who take an IB course have to take the exam?

Yes. As with AP classes, students who are enrolled in an IB course will be expected to prepare for and take the exam at the end of the course or IB credit will not be granted.

15. What happens if a student drops an IB course in the year of the May assessment?

The student will be responsible for the subject fee and any applicable late fees. At this writing, the fee to drop a course by January 15th is \$306 and to drop it by April 15th is \$537.

Useful Resources

The International Baccalaureate Organization

<http://www.ibo.org>

School's IB Webpage

http://www.dfsd.org/group_profile_view.aspx?id=8247cb57-d1a1-4f50-bc62-d01fd13310ba

RESEARCH SUMMARY



Implementation practices and student outcomes associated with the learner profile attribute “open-minded”

Based on a research report prepared for the IB by:
Howard Stevenson, Pat Thomson and Stuart Fox
The University of Nottingham

October 2014

Background

The learner profile, a key element of the International Baccalaureate (IB) Middle Years Programme (MYP), includes 10 attributes that are interwoven throughout the programme’s learning objectives. The focus of this study is the attribute “open-minded”. The learner profile suggests that to foster open-mindedness:

“We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.” (www.ibo.org)

This definition of open-mindedness reflects both a way of thinking—open-mindedness as an intellectual virtue—and a way of seeing the world—open-mindedness as international-mindedness.

This research has two broad aims. First, it seeks to examine the open-mindedness of students in the MYP, and second, it seeks to understand how IB World Schools develop open-mindedness among their students.

Research design

This research is based on a mixed-methods approach. Researchers developed an online survey consisting of 44 statements to generate quantitative data in relation to students’ open-mindedness in a variety of contexts. Mokken Scale Analysis was employed to identify clusters of questions that collectively measured different facets of open-mindedness. Out of the 44 survey questions examined, the researchers identified eight distinct modes of open-mindedness.

1. **Cultural and religious open-mindedness:** This mode refers to an individual’s critical receptiveness towards the values, practices and behaviours of other cultures and religions.
2. **Problem-solving open-mindedness:** This aspect of

open-mindedness reflects how critically receptive respondents are in approaching problems.

3. **Open-mindedness to challenge and critique:** The third mode measured in the survey represents how receptive respondents are to challenges of their opinions or values.
4. **Moral open-mindedness:** Moral open-mindedness refers to how open individuals are to alternative moral positions and beliefs and how critical they are prepared to be about their own moral code.
5. **Collaborative open-mindedness:** Collaborative open-mindedness refers to how receptive the respondent is to working with other people to solve a particular problem.
6. **Open-mindedness towards cultural difference:** This mode relates to how aware of cultural differences the respondent is and how much value he or she assigns to these differences.
7. **Open-mindedness towards cultural primacy:** This is similar to the previous mode but focuses on the value an individual perceives in learning about and from other cultures.
8. **Belief open-mindedness:** The final mode is similar to moral open-mindedness but focuses less on what is thought to be “right and wrong” and more on an individual’s broader belief system.

The survey was completed by 672 students, aged 11–16, across 6 schools in the United Kingdom. Five schools offered the MYP, and for comparative purposes, researchers included one non-IB school in the study. This school was selected on the basis of several factors, including demographic profile (appropriate age range) and academic achievement; that is, the school, a state-sector academy school, would be considered academically high-performing on measures used by the national inspectorate, OFSTED.

Simple descriptive analyses were used to explore the prevalence of the open-mindedness modes across the different schools. Regression analyses were then undertaken to establish whether the differences in student open-mindedness between schools were significant.

In addition to the quantitative data collection, the researchers made visits to four case study schools. A total of 88 school leaders, teachers and students participated in interviews or focus groups during this phase. Lastly, researchers analysed school websites and key documents from the schools. Table 1 offers information about the participating schools.

School name	IB school	Descriptor
Alpha	No	State sector, comprehensive
Beta	Yes	Independent sector, international school
Gamma	Yes	Independent sector, international school
Delta	Yes	State sector, comprehensive
Epsilon	Yes	State sector, comprehensive
Zeta	Yes	Independent sector, international school (faith-based)
Theta	Yes	Independent sector, international school

Note: Theta did not participate in the survey portion of the study.

Table 1. Participating schools

Findings

Student survey outcomes

Results 1: How open-minded are the students?

The descriptive data provided in Table 2 indicates how students at the six participating schools measured on the eight modes of open-mindedness, while holding constant the effects of demographic variables. Measures of central tendency are given as mean scores, and dispersion of results are illustrated as standard deviations for each school. School Alpha is a non-IB school while all other schools offer the MYP.

As seen in Table 2, the average open-mindedness scores across the schools show that students are typically more open-minded in some areas than in others, regardless of which school they attend. For example, open-mindedness when referring to one's beliefs or moral code is generally low, while students tend to be more open-minded about problem-solving or dealing with other cultures and religions. This may suggest that some modes of open-mindedness are easier to cultivate than others.

Open-mindedness mode	Alpha		Beta		Gamma	
	Mean	Std dev	Mean	Std dev	Mean	Std dev
Cultural and religious	26.2	4.0	28.8	4.5	30.8	3.9
Problem-solving	11.9	1.8	11.8	2.2	12.6	1.8
Challenge	4.7	1.3	4.9	1.3	5.2	1.3
Moral	3.8	1.2	4.0	1.6	4.1	1.5
Collaborative	6.2	1.1	6.1	1.1	6.3	1.2
Cultural differences	4.5	1.2	5.2	1.7	4.8	1.2
Cultural primacy	4.4	1.0	4.9	1.8	5.0	1.5
Belief	4.0	1.2	4.0	1.4	4.3	1.3
Open-mindedness mode	Delta		Epsilon		Zeta	
	Mean	Std dev	Mean	Std dev	Mean	Std dev
Cultural and religious	29.1	4.2	26.3	4.9	29.7	3.6
Problem-solving	12.8	1.9	11.8	2.2	12.3	1.8
Challenge	5.4	1.4	5.1	1.5	5.1	1.3
Moral	3.6	1.3	3.9	1.2	4.4	1.2
Collaborative	6.4	1.1	6.1	1.1	6.5	0.9
Cultural differences	4.7	1.4	4.9	1.5	5.1	1.2
Cultural primacy	4.6	1.3	5.2	1.5	5.1	1.5
Belief	3.6	1.1	4.5	1.5	4.6	1.2

Table 2. Open-mindedness mean scores and standard deviations for all schools

While the data points to considerable similarity across schools, several differences between schools are worth highlighting. For example, school Alpha (the non-IB baseline school) has a lower mean score in more instances than any other school, reporting the lowest average score on four of the above indicators (cultural and religious open-mindedness, open-mindedness to challenge, open-mindedness to cultural difference and open-mindedness to cultural primacy). By contrast, school Delta, a state-sector, non-selective MYP school, has the highest mean score for three modes of open-mindedness (open-mindedness with regard to moral issues, open-mindedness about beliefs and open-mindedness to collaboration).

Results 2: Regression analyses of open-mindedness

This section examines the significance of differences in open-mindedness across schools using ordinary least-squares (OLS) regression analysis. A significant, positive regression coefficient suggests that the effect of attending a particular school generally makes students more critically receptive on a particular mode of open-mindedness than the effect of attending the baseline school (school Alpha), while controlling for factors including gender, age, number of spoken languages, religious beliefs, ethnicity and having been born or lived outside the United Kingdom. A negative significant coefficient suggests that attending a school makes students less open-minded than attending the baseline school.

Overall, analysis of the survey data suggests there are few differences between students at one school compared with another, confirming the impression given in the “Results 1” section. However, there are again some areas that have a significant effect on how critically receptive in different contexts students at the different schools may be.

In particular, there was a clear and significant relationship between attending an MYP school and a greater level of open-mindedness among pupils with regard to awareness of cultural differences. In this regard, students at schools Beta, Delta, Epsilon and Zeta were significantly more open-minded than students at school Alpha or Gamma (see Table 3).

School	Coefficient
Baseline: Alpha	
Beta	1.38*
Gamma	0.63
Delta	0.99*
Epsilon	0.47*
Zeta	0.86*

Note: OLS regression performed in Stata.

*The coefficient is statistically significant at 95% confidence level. Prob > F = 0.0046; r² = 0.0828; ar² = 0.048; Obs = 356

Table 3. Regression output for open-mindedness towards cultural difference

Further, students attending the non-IB school in this study typically scored 4.5 on a scale of 2–8 measuring how open-minded they are to the possibility of substantial differences between cultures (they typically scored right in the middle of the range), while students attending any IB World School typically scored above that middle point, ranging anywhere between 4.7 and 5.2.

In several instances, attendance at a particular MYP school led to greater average levels of certain types of open-mindedness. For example, students at school Gamma, and to a lesser extent school Zeta, were found to be significantly more open-minded towards the values and practices of other cultures and religions. Interestingly, when the effects of the control variables are considered across all participating schools, female students were more culturally and religiously open-minded, whereas age and being male were found to be negatively related to this form of open-mindedness, suggesting that younger boys were the least open-minded in the sample.

Qualitative case study findings

Interviews with teachers and school leaders at the four case study schools indicated that, generally, the learner profile was perceived to be “embedded” within the culture of each school. Moreover, the complexity of open-mindedness as a concept meant that teachers were opposed to trying to measure the attribute in a formal way. Interviews suggested that study participants believed the value of the learner profile lies in its flexibility and potential for creative interpretation. It was expressed that learner profile attributes, including open-mindedness, should be “felt” rather than “delivered” and that they would be diminished if a more instrumental approach to teaching and learning was adopted. However, the researchers noted that this approach generates a paradox within the IB curriculum—although the learner profile is an important element of the curriculum, it is generally discussed infrequently by teachers and school leaders. There is, therefore, not always a clear sense of how effectively a school is developing the attribute, where good practice is happening and how the practice can be developed.

At the same time, the findings suggest that IB teachers and students often have a well-developed understanding of open-mindedness, although this can be quite personal and sometimes limited in range. For students, the notion of being receptive to the ideas and views of others was frequently cited, as the following quote illustrates:

“I think that being open-minded is about taking into account, and trying to understand, other people’s opinions which is like not judging other people’s opinions or perspectives ... You try to see the good and the bad in everything and like not just all that is bad. It’s always trying to see both sides, or like however many sides or opinions that someone has about something—you kind of try and take that all in.” (MYP year 4 student)

Several teachers, however, identified tensions that existed when trying to develop open-mindedness and the extent to which open-mindedness requires “pushing boundaries”

especially within the context of culturally diverse environments. One teacher recounted an incident in which he responded to a request from students to explore issues related to teenage pregnancy by developing a reading comprehension on the topic. The teacher recalled, "If the kids are interested let them learn something and go with it. Develop it and support them." The incident, however, resulted in the teacher being reprimanded for discussing inappropriate issues.

Such examples highlight the need for teachers to develop the confidence to engage in controversial issues, and the need for schools to find ways to support what the researchers call "courageous teaching". Students also argued that open-mindedness requires a level of risk taking; for students this involved being willing to venture opinions that might be considered unorthodox.

Good practices in developing open-mindedness

The open-minded school

Within the study, the authors proffer the notion of the "open-minded school". In the open-minded school the development of open-mindedness as an attribute emerges through a complex relationship between the student, the learner profile and a number of organizational factors, including teaching and leadership, all of which reinforce one another. At the centre of this model is the learner. Within the wider context of the school, the researchers identify five dimensions of institutional open-mindedness.

- **Open-minded curriculum:** An open-minded curriculum is one that is based on freedom and flexibility, and therefore eschews prescription and rigidity. An open-minded curriculum also emphasizes inquiry as the basis for learning.
- **Open-minded pedagogies:** This concept relates to the willingness of teachers to explore alternative and innovative approaches, take risks and create learning opportunities that are intentionally challenging to students.
- **Open-minded leadership:** A key aspect of the open-minded school is the role of leadership that reflects, and models, open-mindedness both as an attribute and as a value.
- **Active open-mindedness:** One feature of an open-minded culture is making open-mindedness "active" in the sense that attitudes are transformed into actions. Open-mindedness can thus be seen as a form of active citizenship.
- **Inclusive open-mindedness:** This concept involves valuing individuals for who they are and resisting a school culture of compliance and conformity.

Recommendations

Open-mindedness emerged in this study as a complex concept encompassing several different elements. Within the IB curriculum, open-mindedness has a dual dimension in that it combines a commitment to international-mindedness and the pursuit of open-mindedness as an intellectual virtue. The researchers suggest it may be helpful to consider a more multi-dimensional, or multi-modal, approach to open-mindedness within schools. Developing a nuanced understanding of open-mindedness could, they argue, also help teachers to better identify and use opportunities for fostering open-mindedness among students through the curriculum.

Although the learner profile is central to the IB philosophy, there is not always a clear sense of whether a school is developing the attributes or how practice could be improved. The study findings indicate that it is necessary to ensure that the learner profile is systematically built into the professional dialogues that take place in IB World Schools, such as daily "teacher talk", whether it be part of formal meetings or informal professional conversations. As such, professional dialogues about the learner profile must be encouraged. These discussions are much more likely to occur when the learner profile is embedded intentionally within the culture of the school.

Regarding the learner profile as a whole, the researchers offer the following concluding advice: "It is important to ensure that teachers are talking more explicitly about the 'big issues' that underpin the curriculum rather than on what can appear as an exclusive focus on what one teacher described as 'the logistics of delivery' ... If the learner profile represents the heart of the IB it needs to be looked after. Teachers need to talk about its well-being, and how to nurture it. Such conversations should not be left to chance."

This summary was developed by the IB Research Department. A copy of the full report is available at www.ibo.org/research. For more information on this study or other IB research, please email research@ibo.org.

To cite the full report, please use the following:

Stevenson, H, Thomson, P and Fox, S. 2014. *Implementation practices and student outcomes associated with the learner profile attribute "open-minded"*. Bethesda, MD, USA. International Baccalaureate Organization.

Key findings from research on the impact of the IB Middle Years Programme

The International Baccalaureate (IB) Global Research department collaborates with universities and independent research organizations worldwide to produce rigorous studies examining the impact and outcomes of the IB's four programmes: the Primary Years Programme (PYP), the Middle Years Programme (MYP), the Diploma Programme (DP) and the Career-related Certificate (IBCC). Areas of inquiry include, but are not limited to: **standards alignment, programme implementation, student performance and the learner profile**. The findings below come from IB-commissioned and independent research relating to the MYP.

A study within a large, socio-economically diverse school district in the **United States** explored **student engagement and performance** in five MYP schools in comparison to five non-MYP schools. Using state assessments as a benchmark, the results indicated that a higher percentage of MYP students achieved proficient or advanced performance on mathematics and science assessments than did the matched comparison group (Wade 2011).

	MYP schools			Comparison schools	
	Grade	N	Per cent	N	Per cent
Mathematics Proficient or advanced	6	1,058	85.7***	1,090	82.6
	7	1,300	82.8**	1,115	78.9
	8	1,243	78.7***	1,228	73.1
Reading Proficient or advanced	6	1,034	90.9	1,071	90.8
	7	1,254	88.8	1,091	90.0
	8	1,208	88.7	1,182	88.2
Science Proficient or advanced	8	1,343	77.5***	1,293	72.0

*p < .05; **p < .01; ***p < .001.

Table 1. Percentage of students scoring proficient or advanced on mathematics, reading and science in MYP schools and non-MYP schools, 2009–2010 (Wade 2011).

In a subsequent study within the same **US** district, previous enrollment in the MYP appeared to have a positive impact on students' **global-mindedness**. Former MYP students responded more positively to statements in a global-mindedness survey than students who had attended a non-MYP school (Wade and Wolanin 2013).

Examining **student performance** on the International Schools' Assessment (ISA), this **global** study by the Australian Council for Educational Research (ACER) explored PYP and MYP student performance—in comparison with non-IB students—in mathematics,

reading, and expository and narrative writing. The data from a total of 50,714 international students, 68% of whom were IB students, suggested that the PYP and MYP cohort performed better than their non-IB peers in all four assessment areas and at many grade levels. MYP students scored particularly well in grades 9 and 10 mathematics and reading, as IB student averages were significantly higher than OECD Programme for International Student Assessment (PISA) means for these subjects (Tan and Bibby 2012).

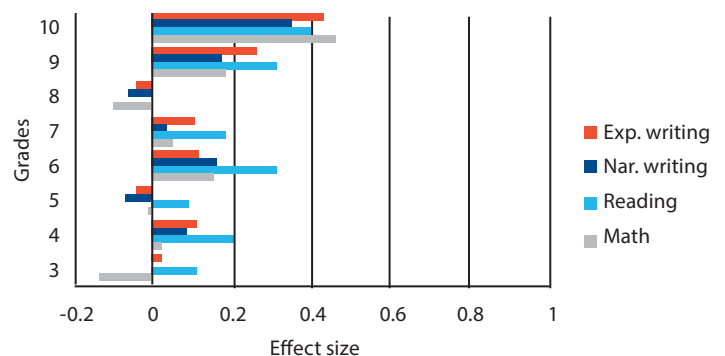


Figure 1. Effect size of difference in performance between IB and non-IB students by grade (Tan and Bibby 2012).

Researchers from the National Foundation for Educational Research (NFER) conducted a curricular comparison of the MYP, the GCSE (General Certificate of Secondary Education) and IGCSE (International General Certificate of Secondary Education) in the **United Kingdom**. Findings suggested that the content of the curricula was largely similar, although the MYP offered greater curricular flexibility and was more interdisciplinary in nature. Additionally, the study found that, in comparison with non-MYP students, MYP students generally rated higher in certain **non-academic attributes** such as international and civic-mindedness as well as global awareness (Sizmur and Cunningham 2013).

To read summaries or the complete reports of research projects conducted or commissioned by the IB Global Research department, please visit <http://www.ibo.org/research>, or contact research@ibo.org.

Key findings from research on the impact of the IB Middle Years Programme

In a study exploring the influence of the MYP on **student performance** and **teacher pedagogy** in the **United States**, teachers reported that on the whole they believed the MYP benefitted students by encouraging higher order thinking and educating the whole child. Teachers also suggested that the MYP improved teacher pedagogy by encouraging collaboration and teaching beyond tested material (Kobylnski-Fehrman 2013).

A quasi-experimental study was conducted in the **United States** to investigate the **science performance** of PYP and MYP students (n = 50) in comparison with their non-IB peers (n = 50). This study, based on the Colorado Student Assessment Program (CSAP), found statistical differences in science performance between IB and non-IB students. IB students outperformed the comparison group on the CSAP across all three grade levels (Healer 2013).

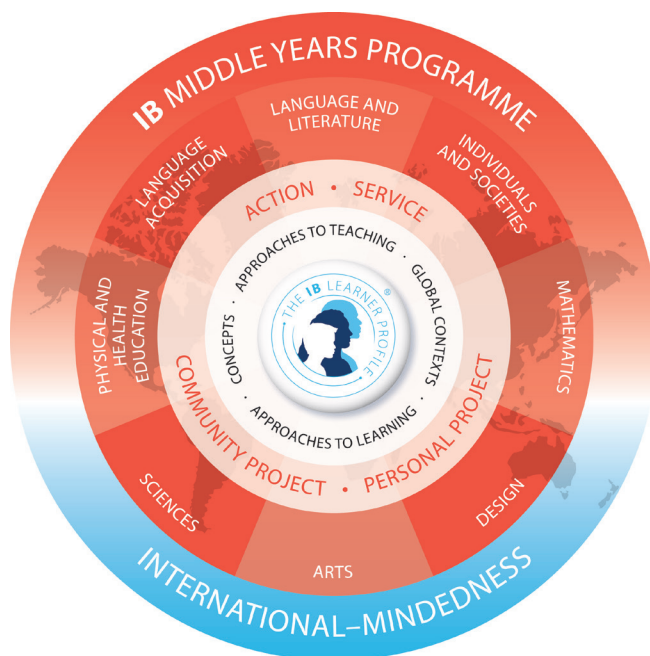
	5th Grade 2006		8th Grade 2009		10th Grade 2011	
	M	SD	M	SD	M	SD
IB scores	600.28	39.147	551.20	44.202	543.28	41.007
Non-IB scores	581.32	45.256	528.46	47.315	523.08	58.707

Table 2. Means and Standard Deviations of IB and non-IB CSAP science scores during the years 2006, 2009 and 2011 (Healer 2013).

Systematic observation was employed in 85 classrooms within 8 Texas PYP and MYP schools in the **United States** to investigate **instructional practice** and **student behaviors**. Observations revealed generally active and engaging instruction and positive student learning behaviors. Further, IB students were “on-task” 87% of the time, in comparison with a similar study of

general education students who spent 73% of the time “on-task” (Alford, Rollins, Stillisano and Waxman 2013).

Exploring the influence of accelerated academic programmes on student **stress** and **psychological well-being**, this external study gathered and analyzed data from 134 IB Grade 9 students in the **United States**. Although IB students self-reported higher levels of stress than their peers in general education, the emotional well-being of IB students was statistically similar to, and in some cases better than, the psychological functioning of their non-IB counterparts (Suldo and Shaunessy-Dedrick 2013).



This sheet aims to provide a brief sample of findings from recent research. It does not attempt to represent all research on the MYP available in the field. As with all research, findings must be placed within the particular contexts in which the studies took place.

Alford, B., Rollins, K., Stillisano, J., & Waxman, H. (2013). “Observing classroom instruction in schools implementing the International Baccalaureate programme”. *Current Issues in Education*, 16(2)

Healer, M. I. 2013. “A quasi-experimental quantitative study of the effect of IB on science performance”. (Order No. 3573948, University of Phoenix). *ProQuest Dissertations and Theses*, 102. Retrieved from <http://search.proquest.com/docview/1442456284?accountid=50153>. (1442456284).

Kobylnski-Fehrman, M. J. 2013. *The International Baccalaureate Middle Years Programme and its effect on students in poverty*. Georgia State University. http://digitalarchive.gsu.edu/eps_diss/104/.

Sizmur, J and Cunningham, R. 2012. International Baccalaureate Middle Years Programme (MYP) in the UK. Slough, Berkshire, UK. NFER.

Suldo, S. M. and Shaunessy-Dedrick, E. “Changes in stress and Psychological adjustment during the transition to high school among Freshmen in an accelerated curriculum”. *Journal of advanced academics*, 24(3), Pp 195–218.

Tan, L and Bibby, Y. 2012. *Performance Comparison between IB School Students and Non-IB School Students on the International Schools’ Assessment (ISA) and on the Social and Emotional Wellbeing Questionnaire*. Melbourne: Australian Council for Educational Research.

Wade, Julie. 2011. *Student Performance and Student Engagement in the International Baccalaureate Middle Years Programme*. Bethesda, MD: International Baccalaureate Organization.

Wade, J and Wolanin, N. 2013. *Continuation Study of Student Performance and Engagement in the Middle Years Programme*. Bethesda, MD, USA. International Baccalaureate Organization.

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