

International Baccalaureate (IB) Program Toolkit

November 2017



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION**

333 Market Street
Harrisburg, PA 17126-0333
www.education.pa.gov



Commonwealth of Pennsylvania

Tom Wolf, Governor

Department of Education

Pedro A. Rivera, Secretary

Office of Elementary and Secondary Education

Matthew S. Stem, Deputy Secretary

Bureau of Career and Technical Education

Lee Burket, Director

Division of Adult and Postsecondary CTE

Tamalee Brassington, Chief

The Pennsylvania Department of Education (PDE) does not discriminate in its educational programs, activities, or employment practices, based on race, color, national origin, [sex] gender, sexual orientation, disability, age, religion, ancestry, union membership, gender identity or expression, AIDS or HIV status, or any other legally protected category. Announcement of this policy is in accordance with State Law including the Pennsylvania Human Relations Act and with Federal law, including Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1967, and the Americans with Disabilities Act of 1990.

The following persons have been designated to handle inquiries regarding the Pennsylvania Department of Education's nondiscrimination policies:

For Inquiries Concerning Nondiscrimination in Employment:

Pennsylvania Department of Education
Equal Employment Opportunity Representative
Bureau of Human Resources
333 Market Street, 11th Floor, Harrisburg, PA 17126-0333
Voice Telephone: (717) 787-4417, Fax: (717) 783-9348

For Inquiries Concerning Nondiscrimination in All Other Pennsylvania Department of Education Programs and Activities:

Pennsylvania Department of Education
School Services Unit Director
333 Market Street, 5th Floor, Harrisburg, PA 17126-0333
Voice Telephone: (717) 783-3750, Fax: (717) 783-6802

If you have any questions about this publication or for additional copies, contact:

Pennsylvania Department of Education
Bureau of Career and Technical Education
333 Market Street, 11th Floor, Harrisburg, PA 17126-0333
Voice: (717) 783-5530, Fax: (717) 783-6672
www.education.pa.gov

All Media Requests/Inquiries: Contact the Office of Press & Communications at (717) 783-9802

Table of Contents

I. Introduction	1
A. Research.....	2
B. Definitions and Terms	4
C. Policy	4
II. Program Guidance	6
A. School-Level Implementation	6
B. Structuring International Baccalaureate Programs/Courses	6
C. Primary Years Program	7
D. Middle Years Program	8
E. Diploma Program	11
F. IB Career-related Program (CP).....	13
G. Financial Considerations	14
III. Resources	18
A. Program Examples.....	18
B. Helpful Links.....	20
IV. References	20
Pennsylvania Colleges and Universities	
Accepting International Baccalaureate Credits	21

I. Introduction

This toolkit provides a resource that school entities can review and consider when developing and implementing the International Baccalaureate Program in their elementary, middle, high school, or career and technology center.

The International Baccalaureate (IB) Program is a rigorous standardized international education curriculum and pedagogy for students aged 3 to 19 years old. Through four organized programs, IB encourages personal, emotional, social, and academic achievement. The four programs are Primary Years Program, Middle Years Program, Diploma Program, and Career-related Program.

The Pennsylvania Department of Education is considering how to provide incentives to schools that offer advanced placement, International Baccalaureate, or college courses in secondary schools and enrollment in core academic subjects. This toolkit assists school entities by providing implementation strategies for the International Headquarters in Geneva, Switzerland with three regional Global Centers located in The Hague (Africa, Europe, and the Middle East); Bethesda, Maryland (the Americas); and Singapore (Asia-Pacific). The organization originated more than 30 years ago in Europe as an effort by international schools to assure quality educational standards for students and to provide continuity of education for children of individuals employed by their government's foreign services. The organization uses educators from around the world to update curriculum, train teachers, assess student work, and evaluate the program.

The IB curriculum design ensures a cohesive, comprehensive education for students, no matter where they lived in the world. Students who complete this program are preparing not only for success in college, but for success in life. Students gain a broader world views; follow in-depth approaches to the academic discipline; and develop time management, problem-solving, research, and organizational skills. IB programs assess a student's work throughout the year by looking at papers and portfolios, instead of one final assessment at the end of the year. They also focus on the development of skills and not just content understanding.

Schools that wish to implement any of the four IB programs follow a multi-year process of application, consultation, an onsite visit, and then a periodic cycle of self-study and site visitation. Schools must receive approval from the International Baccalaureate Organization before implementing the program.

Currently, 26 school entities in Pennsylvania are authorized or in the process of gaining approval to offer IB programs.

1. Four public schools offer, or are candidates to offer, the Primary Years Program.
2. Eight public schools offer, or are candidates to offer, the Middle Years Program.
3. Nineteen schools offer, or are candidates to offer, the Diploma Program. This includes four private schools.

4. One school offers the Career-related Program.

A. Research

Research conducted by the International Baccalaureate demonstrates that students in the IB Primary Years Program (PYP) and Middle Years Program (MYP) performed better than non-IB students in a global international schools' assessment study that ran from 2009-2011. Their research indicates that Diploma Program (DP) graduates complete college faster than their peers, feel more prepared for college-level coursework involving research, and are better able to cope with demanding workloads and time management challenges.¹

Taylor, from University of Colorado's Office of Academic Affairs, prepared a Survey of Research on Post-Secondary Outcomes for International Baccalaureate Students (Taylor, 2015). This document provides a synopsis of the research on IB. The summary from the document follows. Refer to the original document for the research references contained in the survey summary:

“A small body of research has focused on postsecondary enrollment and outcomes for students who participated in the International Baccalaureate (IB) program during high school. Research indicates that IB students generally have higher enrollment rates, higher retention and/or persistence rates, and higher graduation rates than the college population overall (Halic, 2013; Bergeron, 2015; Caspary 2011). Studies that attempt to control for academic achievement have yielded similar results (Shah, Dean, & Chen, 2010; Coca, et al., 2012; Conley, et al., 2014).

A small number of studies have examined student performance in particular subject areas and sought to identify differences based on exam score or type of exam (standard level or higher level). In their study of Florida IB students, Caspary & Bland (2011) found that IB students generally do well in their first college course in a subject area in which they have taken an IB exam. Higher IB exam scores were correlated with higher course grades and, in most cases, course grades showed little variation based on whether a student had taken the standard level or higher-level exam. The exception was math, where students who took the higher-level exam earned considerably higher course grades than students who took the standard level exam. Caspary & Bland also found that IB diploma recipients earned higher grades than students who participated in the IB diploma program but failed to earn the credential.

¹ International Baccalaureate Organization. (2016). [Benefits for Schools](#)

Shah, Dean, & Chen (2010) reached a similar conclusion in their study of University of California students. IB diploma recipients outperformed IB students who didn't earn the diploma. They found that IB exam scores were the best predictor of college GPA; but unlike Caspary & Bland, they did find a difference in GPA between students who took the higher level versus standard level exam, determining that the higher-level exam score was a better predictor of GPA.

It should be noted that there is a limited body of research related to the post-secondary outcomes of IB students and much of the work that does exist has been prepared for the International Baccalaureate Organization.”

In a 2007 study designed to determine whether IB courses represent a gold standard for high school coursework, the Fordham Institute examined the content, rigor, and clarity of four core subject IB courses:

1. Language A1 English-standard Level
2. Math-standard Level
3. World History-standard Level
4. Biology-standard Level

For these courses, the researchers of the 2007 study conducted by the Fordham Institute identified an overall grade for each IB course and summarized the strengths and weaknesses of each course. These summaries follow:

1. Language A English SL: Grade B+
Strengths: Rigorous and comprehensive exam; a detailed and rigorous expectations for literary analysis skills
Weaknesses: U.S. students in IB programs might miss exposure to core U.S. literature
2. Math SL: Grade B
Strengths: Curriculum guide clearly written; rigorous, comprehensive assessments
Weaknesses: Reliance on technology, resulting in a de-emphasis on analytical skills; some important pre-university content missing
3. World History SL: Grade B
Strengths: Demanding, well-constructed, content-rich exams; strong content within the narrowly defined course parameters
Weaknesses: U.S. students in IB programs could miss exposure to almost all core U.S. History content; even as a world history course, its 20th-century focus is too narrow; lacks emphasis on important chronological knowledge

4. Biology SL: Grade A

Strengths: Depth and coverage of content in curriculum guide; comprehensive assessment system

Weaknesses: "Systematization" of the program could confuse or overwhelm teachers or stifle curricular inventiveness (Byrd, Ellington, Gross, Jago, & Stern, 2007)

Research also shows that more than 70 percent of students pursuing Career and Technical Education (CTE) continue on to a two or four-year college.

Pennsylvania data shows that students exiting secondary CTE are prepared technically for postsecondary opportunities but would benefit from increased academic rigor.² The Career-related Program is one avenue to provide increased academic rigor.

B. Definitions and Terms

The four program components that schools can offer under the umbrella of International Baccalaureate are:

1. Primary Years Program (PYP). This IB program is for students aged 3 to 12 and focuses on the development of the whole child in the classroom and in the world outside.
2. Middle Years Program (MYP). The Middle Years Program is for students aged 11 to 16. It provides a framework of academic challenge and life skills through embracing and transcending traditional school subjects.
3. Diploma Program (DP). The IB Diploma Program is a rigorous two-year curriculum with final examinations that prepare students aged 16 to 19 for postsecondary education and beyond. Students achieving sufficient exam scores may qualify for college credit.
4. Career-related Program (CP). The IB Career-related Diploma Program is for students aged 16 to 19 who wish to engage in career-related education as well as benefit from the IB Diploma Program.

C. Policy

Schools and career and technical centers can decide to offer any of the four International Baccalaureate programs. Current state regulation does not prohibit schools from offering the programs.

² US Department of Education, Office of Career, Technical and Adult Education, Consolidated Annual Report for the Carl D. Perkins Career and Technical Education Act of 2006 Program Year 2007-2008, unpublished data.

Pennsylvania regulation allows students who are eligible to take an International Baccalaureate exam to fulfill graduation requirements by obtaining a high score on an exam in a related content area. See 22 Pa. Code § 4.24(c)(1)(iii)(C). The table that follows answers the following question: What scores for IB exams are comparable to the proficient level on the Keystone Exams for the purpose of meeting state graduation requirements?³

Keystone Exam	Comparable IB Exams	Score
Algebra I	Mathematical Studies – Standard Level (SL)	4
	Mathematics – Standard Level (SL)	4
	Mathematics – High Level (HL)	3
	Further Mathematics – High Level (HL)	3
Keystone Exam	Comparable IB Exams	Score
Literature	Language A – Literature (SL)	4
	Language A – Literature and Literature (SL)	4
	Language A – Literature (HL)	3
	Language A – Literature and Literature (HL)	3
Biology	Biology	3

Schools with a Diploma Program and the Career-related Program can be approved as a PDE Career and Technology Education Program of Study to meet the requirements of The Carl D. Perkins Vocational and Technical Education Improvement Act of 2006.⁴

³ 22 Pa. Code § 4.24(c)(1)(iii)(C)

⁴ Public Law No. 109-270

II. Program Guidance

A. School-Level Implementation

Schools in Pennsylvania are permitted to offer IB programs. Any school, or group of schools, wanting to offer IB programs must first be authorized by the International Baccalaureate Organization to offer the programs. The requirements are the same for all schools. The authorization procedure is designed to ensure that schools are well-prepared to implement the IB program(s), including both curriculum and pedagogy. The process can take two to three years to complete. Schools, once authorized by IB to offer the programs, can award certificates and diplomas, and can use the IB logo.

Authorized schools are known as “IB World Schools.” All IB World Schools are required to participate in an ongoing process of review and development, using the same program standards and practices that mimic accreditation processes of self-study and site visitations. IB requires school administration and staff to participate in professional development as part of the application and candidacy process. In Pennsylvania, as of 2016, there are 26 authorized IB World Schools offering one or more of the four available programs.

The IB is a comprehensive curriculum that requires students to demonstrate knowledge and skills through both in-class and outside assessments in six academic areas. A school entity that offers IB must be prepared to provide the total program upon initial implementation. Advanced Placement, on the other hand, permits a school entity to pick and choose from over 30 offerings. While neither program is better than the other, they each have different outcomes for students. Students whose main goal is college credit should probably choose AP because colleges offer credit on a more widespread basis for satisfactory AP test scores than for IB scores. Students whose main goal is preparation for either a career with an international perspective or college in another country may prefer IB because of its recognition at overseas universities. Also, IB diploma students who plan to attend selective colleges may receive preferential admissions consideration and/or college credit for satisfactory IB exam scores. See [Appendix A](#) for a listing of Pennsylvania colleges and universities that recognize International Baccalaureate courses in their admissions process.

B. Structuring International Baccalaureate Programs/Courses

A school entity can offer any one of three programs without offering other IB programs. However, to offer the Career-related Program, a school entity must first offer the Diploma Program since students enrolled in the Career-related Program must also enroll in two of the Diploma Program courses.

Typically, a school entity will stagger the implementation of different IB programs, adding additional programs as each program is successfully implemented. For a fall

implementation within three school years, the school should begin the process in January at the latest.

If a school entity offers the Primary Years Program, the Middle Years Program and the Diploma Program, it is considered a continuum school. Professional development for continuum schools helps educators and administrators facilitate the articulation between programs, promote intercultural understanding and global engagement, and develop practical ways to integrate the IB learner profile in the classroom.

The requirements to become an IB World School, regardless of program, address standards in the following areas:

1. Philosophy
 - a. The school's educational beliefs and values reflect IB philosophy that the curriculum is a continuum of international education that encourages both personal and academic achievement, challenging students to excel in their studies and personal development.
2. Organization
 - a. Leadership and structure: The school's leadership and administrative structures ensure the implementation of the IB program(s).
 - b. Resources and support: The school's resources and support structures ensure the implementation of the IB program(s).
3. Curriculum
 - a. Collaborative planning: Collaborative planning and reflection support the implementation of the IB program(s).
 - b. Written curriculum: The school's written curriculum reflects IB philosophy.
 - c. Teaching and learning: Teaching and learning reflect IB philosophy.
 - d. Assessment: Assessment at the school reflects IB assessment philosophy.

Details about implementing the four International Baccalaureate Programs follow. For detailed information about gaining authorization to be an IB World School in each of the four programs, visit the links in the [Helpful Links](#) section of this document.

C. Primary Years Program⁵

The Primary Years Program (PYP) for pupils aged 3 to 12 focuses on the development of the whole child in the classroom and in the world outside as an inquirer. The authorization is linked to the building location, hence, in most cases, multiple elementary school buildings within a single district are required to each be

⁵ International Baccalaureate Organization. (2016). [Primary Years Program](#)

authorized.

The Primary Years Program:

1. Addresses students' academic needs and their social and emotional well-being
2. Encourages students to develop independence and to take responsibility for their own learning
3. Supports students' effort to gain an understanding of the world and to function effectively within it
4. Helps students to establish personal values as a foundation on which international-mindedness will flourish

The curriculum embraces five essential elements: the understanding of concepts, the acquisition of knowledge, the mastering of skills, the development of positive attitudes, and the ability to take responsible action. These essential elements are assessed using a broad range of assessment strategies. The IB does not set examinations or moderate grades in the PYP.

Collaboration is an essential part of planning for schools implementing the PYP. All teachers are engaged in the planning process, defining the curriculum's central ideas, discussing how best to bring inquiry into those ideas in the classroom, and finding ways to meet the needs and interests of every student.

Teachers must attend training in order to implement the PYP. The IB offers a broad range of professional development to support educators in gaining a deeper understanding of the program.

To be eligible to implement the PYP, schools must:

1. Have at least two consecutive grades/years
2. Appoint a PYP coordinator to lead the program and communicate with the IB
3. Commit to the mandatory professional development of PYP teachers
4. Engage all students in the building in the program
5. Ensure that students spend the majority of their time with one classroom teacher
6. Ensure that the student experience is continuous, with students moving from one program to the next without any gap, in cases where a school chooses to offer other IB programs consecutively with the PYP

D. Middle Years Program⁶

The MYP is designed for students aged 11 to 16. It provides a framework of learning which encourages students to become creative, critical, and reflective thinkers. The MYP emphasizes intellectual challenge and encourage students to make connections between their studies in traditional subjects and to the real world. It

⁶ International Baccalaureate Organization. (2016). [Primary Years Program](#)

fosters the development of skills for communication, intercultural understanding, and global engagement, qualities that are essential for life in the 21st century.

The International Baccalaureate Middle Years Program comprises eight subject areas. Click on the links below for detailed information about each subject area:⁷

1. [Language acquisition](#)
2. [Language and literature](#)
3. [Individuals and societies](#)
4. [Sciences](#)
5. [Mathematics](#)
6. [Arts](#)
7. [Physical and health education](#)
8. [Design](#)

The MYP requires at least 50 hours of teaching time for each subject area in each year of the program. In years four and five, students have the option to take courses from six of the eight subject areas within certain limits, to provide greater flexibility in meeting local requirements and individual student learning needs.

Each year, students in the MYP also engage in at least one collaboratively planned [interdisciplinary unit](#) that involves at least two subject areas. MYP students also complete a [long-term project](#), where they decide what they want to learn, identify what they already know, discover what they will need to know to complete the project, and create a proposal or criteria for completing it. Students aged 13 to 14 pursue service learning through a community project, while students in year five of the program complete a personal project.

Student candidates for the internationally-recognized IB Middle Years Program certificate must complete eight eAssessments.

There are on-screen examinations in:

1. Mathematics
2. Language and literature
3. Sciences
4. Individuals and societies
5. Interdisciplinary learning

There are also ePortfolios (coursework) in:

1. Language acquisition
2. Physical and health education, arts, or design
3. The MYP personal project

⁷ International Baccalaureate Organization. (2016). [Middle Years Program Curriculum](#)

Candidates also must meet school requirements for participation in community service, known as service as action.

For a student to receive the MYP certificate, the student's scores on each of the eight assessments must be three or higher on a scale of one to seven, and the total score must be at least 28 points.

Any school with students aged 11 to 16 years old can apply to be an IB World School. Starting in 2016, the MYP can be implemented in partnerships between schools or by individual schools in abbreviated formats. The rule change allows schools to implement the MYP in any consecutive two-, three-, four- or five-year form, regardless of other IB programs offered. Schools that apply for MYP authorization after October 2016 will be able to use the flexibility of the new rule to initiate their MYP implementation.⁸

The MYP can accommodate flexible models of implementation that reflect unique local contexts. New scenarios for flexible implementation of the MYP include:

1. A school district or group of schools might offer the MYP for four or five years, in partnership with multiple campuses. The MYP strengthens teacher collaboration and curriculum alignment and helps create a consistent educational experience for students aged 11 to 16.
2. An IB World School that enrolls students for four years of secondary education might implement two years of the MYP for 14 to 16-year-olds. The MYP prepares students effectively for the Diploma Program, Career-related Program or other challenging senior secondary curriculum options. Plus, MYP eAssessment for 15 to 16-year-olds provides an internationally recognized qualification that helps inform university admission decisions.
3. A stand-alone middle school might offer a two- or three-year MYP for students aged 11 to 14. In this way, the school provides a framework for an international education.
4. A school that provides secondary- or both primary- and secondary-education as a single legal entity might use the MYP for two, three, four, or five years. The MYP may be used alone or in combination with other curriculum frameworks that meet community needs or local/ national requirements. This approach covers the spectrum of student options while providing a superior international education.

⁸ International Baccalaureate Organization. (2016). [New Eligibility Rule for MYP Implementation](#)

E. Diploma Program⁹

The Diploma Program, for students aged 16 to 19 years old, 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. It has been designed to address the intellectual, social, emotional, and physical well-being of students.

The International Baccalaureate Diploma Program (DP) curriculum sets out the requirements for the study of the DP. The curriculum is made up of the DP core and six subject groups.¹⁰

The DP curriculum core aims to broaden students' educational experience and challenge the student to apply their knowledge and skills. The three required core elements are:

1. [Theory of knowledge](#), in which students reflect on the nature of knowledge and on how we know what we claim to know.
2. [The extended essay](#), which is an independent, self-directed piece of research, finishing with a 4,000-word paper.
3. [Creativity, activity, service](#), in which students complete a project related to those three concepts.

The six subject areas are:

1. [Studies in language and literature](#)
2. [Language acquisition](#)
3. [Individuals and societies](#)
4. [Sciences](#)
5. [Mathematics](#)
6. [The arts](#)

There are multiple courses within each subject group.

In selecting the student's scope and sequences of courses in the DP program, the student may opt to study an additional science, individuals and society, or language course instead of a course in the arts. Students will take some subjects at higher level (HL) and some at standard level (SL). HL and SL courses differ in scope but are measured according to the same grade descriptors, with students expected to demonstrate a greater body of knowledge, understanding, and skills at the higher level.

Each student takes at least three, but not more than four, subjects at higher level and the remaining at standard level. Standard level subjects take up 150 teaching

⁹ International Baccalaureate Organization. (2016). [Diploma Program](#)

¹⁰ International Baccalaureate Organization. (2016). [Diploma Program Curriculum](#)

hours. Higher level comprises 240 teaching hours.

The International Baccalaureate assesses student work as direct evidence of achievement against the stated goals of the DP courses. DP assessment procedures measure the extent to which students have mastered advanced academic skills in fulfilling these goals, for example:

1. Analyzing and presenting information
2. Evaluating and constructing arguments
3. Solving problems creatively

Basic skills are also assessed including:

1. Retaining knowledge
2. Understanding key concepts
3. Applying standard methods

In addition to academic skills, DP assessment encourages an international outlook and intercultural skills, wherever appropriate. Student results are determined by performance against set standards and not by each student's position in the overall rank order.

For most courses, written examinations at the end of the DP form the basis of the assessment.¹¹ These examinations have high levels of objectivity and reliability.

Externally assessed coursework, completed by students over an extended period under authenticated teacher supervision, forms part of the assessment for several program areas including the [theory of knowledge \(TOK\)](#) essay and the [extended essay \(EE\)](#). In most subjects, students also complete in-school assessment tasks. These are either externally assessed or marked by teachers and then moderated by the IB.

In the DP, students receive grades ranging from one to seven, with seven being the highest. Students receive a grade for each DP course attempted. A student's final DP result score is made up of the combined scores for each subject. The diploma is awarded to students who gain at least 24 points, subject to certain minimum levels of performance including the successful completion of the three essential elements of the DP core.

Any school with students aged 16 to 19 years old can apply to offer the demanding, two-year DP curriculum. To provide the DP, schools must demonstrate that the infrastructure and pedagogical skills are in place to deliver the program to the IB's high standards. Schools must also:

1. Appoint a DP coordinator to lead the program and communicate with the IB;

¹¹ International Baccalaureate Organization. (2016). [Diploma Program Assessment](#)

2. Commit to the mandatory professional development of DP teachers; and,
3. Ensure that the student experience is continuous.

If a school chooses to offer other IB programs, then students must move from one program to the next, without any gap.

F. IB Career-related Program (CP)¹²

The Career-related Program is designed for students aged 16 to 19 years old interested in pursuing a career-related education in the final two years of secondary school. Each school works within the IB framework to create its own vision of the CP. The CP was specifically developed for students who wish to engage in career-related learning while gaining transferable and lifelong skills in applied knowledge, critical thinking, communication, and cross-cultural engagement. The career-related study prepares students for higher education, an internship or apprenticeship, or a position in a designated field of interest.

The IB CP is a three-part educational framework.¹³ It consists of:

1. [Courses from the IB's Diploma Program \(DP\)](#)
2. [The CP core](#)
3. [Career-related studies](#)

The CP incorporates the vision and educational principles of the IB into a unique program specifically developed for students who wish to engage in career-related learning. The CP's flexible educational framework allows schools to meet the needs, background, and interests of students.

The curriculum for CP students is a minimum of two IB Diploma Program courses, a core consisting of four components and a career-related study. In Pennsylvania, the career-related study can be a PDE-approved career and technical education Program of Study.

For CP students, Diploma Program courses provide the theoretical underpinning and academic rigor of the program; the career-related study further supports the program's academic strength and provides practical, real-world approaches to learning, and the CP core helps the student develop skills and competencies required for lifelong learning.

Students complete at least two DP courses in any of that program's subject areas. Career-related Program students can enroll in the authorized DP courses online. These courses are offered, for a fee, via the student's IB World School, by [Pamoja Education Ltd.](#) All fees are found on the Pamoja Education Ltd website.

¹² International Baccalaureate Organization. (2016). [Career-related Program](#)

¹³ International Baccalaureate Organization. (2016). [Career-related Program Curriculum](#)

The CP core components give context to the Diploma Program courses and the career-related study, drawing all aspects of the framework together. The core consists of four interrelated components: personal and professional skills; service learning; a reflective project produced over an extended period of time; and language development. Through the CP core, students develop personal qualities and professional skills, as well as intellectual habits required for lifelong learning.

Each school chooses the career-related study most suited to local conditions and the needs of its students. The career-related study must satisfy IB criteria for accreditation, assessment, and quality assurance.

CP students are assessed both internally by the school and externally by the IB.

Diploma Program courses within the CP are assessed in accordance with rigorous international standards. Students take written examinations at the end of their courses, which are marked by external IB examiners. The marks awarded for each course range from 1 to 7.

Every CP student must complete the four elements of the CP core: the reflective project; service learning; personal and professional skills; and language development. The reflective project is assessed by the school and moderated and graded by the IB. They are graded from A to E, with A being the highest. The school is responsible for confirming with the IB that students have completed the requirements for service learning, approaches to learning and language development. These are assessed by the school.

The career-related studies component is assessed by the school.

G. Financial Considerations¹⁴

Schools pay different fees depending on their status with the IB. Schools can be either authorized schools or candidate schools.¹⁵

1. Candidate Schools

- a. Candidate schools are in the process of becoming authorized and pay fees used to meet the cost of administering the authorization process. Schools pay an application fee when they submit their application to become an IB World School. They also pay a fee during each year they remain a candidate school.
- b. PYP, MYP, DPA: A school applying to implement the Primary Years Program (PYP), Middle Years Program (MYP) or Diploma Program (DP) pays a one-time \$4,000 application fee before the Application for Candidacy can be uploaded. This fee covers the review and processing of the application for

¹⁴ International Baccalaureate Organization. (2016). [Fees and Services](#)

¹⁵ International Baccalaureate Organization. (2016). [IB Americas Fees 2016-17](#)

candidacy and advice and guidance on program implementation during candidacy.

- c. Annually, as long as the school is a candidate, the school pays a fee of \$9,500. The fee covers such items as access to the online curriculum center, advice from the IB regional office or approved consultants, 20 hours of remote consultancy per candidate year, review and processing of the application for authorization, and the two-day on-site verification visit including travel, incidental costs, and writing and processing the report. The local school must provide accommodations for the site visit team.
- d. CP at approved DP schools: Fees are different for schools wishing to offer Career-related programs. The fees vary based on whether the school already offers the Diploma Program.
- e. CP schools already offering the DP and Continuum: Schools are charged a candidate fee of \$8,500 when applying for the CP program but do not pay an annual candidate fee in the subsequent years until authorization. This fee covers access to curriculum materials and updates, advice from the regional IB office or from approved IB consultants, 10 hours of remote consultancy, review and processing of the application for authorization, and the one-day on-site verification visit including travel, incidental costs, and writing and processing the report. The local school must provide accommodations for the site visit team.
- f. CP at schools not approved for DP: Until 2018, the application fee for CP schools without an authorized DP is waived. Annually, the school must pay the candidate fee of \$9,500. The waived application fee covers the review and processing of the application for candidacy and provides advice and guidance on program implementation. The annual candidate fee covers such costs as access to curriculum materials and updates, advice through the regional IB office or approved IB consultants, 10 hours of remote consultancy, review and processing of the application for authorization, and a one-day on-site verification visit including travel, incidental costs, and writing and processing the report. The local school must provide accommodations for the site visit team.
- g. Application and Candidate Deadlines: For schools beginning the IB program in August or September, the application deadline is April 1. Schools should anticipate the candidacy process will entail two years with the program being implemented in the third calendar year. For example, if a school applies for candidacy in April 2017, the school should plan on the program being implemented in August/September 2019. The annual candidate fee is due September 1 of each year.

2. Authorized IB World Schools

Authorized IB world schools are approved to deliver the various IB programs. Each year, an IB world school pays a fee for each program they are authorized to teach. There are other services available for a fee, but only one fee payment is required to deliver an IB program. The IB also conducts periodic evaluation visits, which have an additional fee¹⁶

If a school offers a combination of the Primary Years Program (PYP), the Middle Years Program (MYP) and the Diploma Program (DP) -- or offers all three -- that school pays a reduced fee to reflect their commitment to the IB.

3. IB Examination Fees¹⁷

In the Middle Years Program (MYP), Diploma Program (DP), and Career-related Program (CP) students take exams. Schools pay registration fees for each student and exam fees for subject areas tested. The costs of registration varies from \$51 for (MYP) to \$168 for (DP) per student. Subject examination fees vary from \$72–\$116 with core fees per student varying from \$10-\$89. Comprehensive information about examination fees can be found on the [International Baccalaureate Organization](#) website.

Schools and students receive a variety of services as a result of these fees. Schools receive a coordinator's handbook, access to IB answers, access to the IB information system, and teacher feedback including subject reports. Students receive the assessment, access to results, a printed certificate, and transmission of results to universities worldwide, upon request.

4. Student Admissions, Access, Supports

There are various ways schools can prepare students to be ready to enroll in International Baccalaureate programs. A school district can become a continuum school with programs at multiple grade levels. Or, a middle school can focus its curriculum on courses that are scaffolded to prepare students for the rigor of an IB Diploma program or Career-ready program.

a. Fulfilling Equity Goals

Before embarking on a program to address equity goals, best practice encourages the examination of school collected data to inform the decision-making process on the root causes of IB participation inequities. It is most critical to ensure that student admission criteria to the program are not unnecessarily disqualifying students, who, with proper extra supports, could reasonably be successful in an IB program.

¹⁶ International Baccalaureate Organization. (2016). [Fees for Authorized Schools](#)

¹⁷ International Baccalaureate Organization. (2016). [Assessment Fees and Services](#)

b. Low-income and Minority Students

IB programs have shown growth in the numbers of low-income and minority students enrolled. These students have performed well post-graduation with college persistence and graduation. Hence, building a program that provides supports for these student populations can result in significant advantages for these students.

1. Develop a curriculum pathway that includes IB preparation content to increase the number of students qualified to register.
2. Remove school-based barriers that prohibit true open enrollment.
3. Make IB the default pathway (an opt-out rather than an opt-in model).
4. Focus on mastery and deeper learning in DP courses by covering fewer topics in greater depth increases access for more student populations.

c. Student Supports¹⁸

The IB curriculum is rigorous. Studies have found that successful students struggle to find a balance between academic and personal/social life while enrolled in the program.¹⁹ By providing robust supports for students, students can increase their success in the program. Potential supports include:

1. Institute peer and professional tutoring
2. Build peer support networks including peer and community mentors
3. Proactive and ongoing monitoring of individual student progress and tailored interventions
4. Establish wrap-around services to prevent or respond to factors that might interfere with student's ability to focus on academics
5. Build a culture of high expectations for all students
6. Emphasize time management skills
7. Emphasize academic and study skills to prepare students for college success
8. Create systematic college planning processes for all students by focusing on the PA Career Education and Work Standards
9. Proactively provide information to parents and families about college including an early focus on financing college through multiple avenues

¹⁸ International Baccalaureate Organization. (2016). [International Baccalaureate: National Trends for Low-Income Students 2008-2014](#)

¹⁹ International Baccalaureate Organization. (2016). [International Baccalaureate Implementation Study: Examination of District-wide Implementation in the US](#)

III. Resources

IB provides an online forum for schools and teachers. Schools and organizations participating in the IB are encouraged to exchange ideas and good practice in the development and delivery of IB education and to promote student exchanges, either face-to-face or electronically, to enhance students' international understanding.

IB also provides a digital toolkit. The [digital toolkit](#) is designed to provide authorized IB World Schools with a range of communications materials that can be used to present the IB and its programs to stakeholders such as students, parents, teachers, and school boards, as well as universities and government bodies.

A. Program Examples

Each authorized IB World School has a primary contact that is listed on the IB website. Questions can be directed to the [contacts listed below](#).

School	PYP	MYP	DP	CP	Entity Type	City
Barack Obama Academy of International Studies		X	X		State	Pittsburgh
Central High School			X		State	Philadelphia
Chambersburg Area Senior High School			X		State	Chambersburg
Cumberland Valley High School			X		State	Mechanicsburg
Downingtown STEM Academy			X		State	Downingtown
George School			X		Private	Newtown
George Washington High School			X		State	Philadelphia
Harrisburg Academy			X		Private	Wormleysburg
Harrilton High School			X		State	Rosemont
Joseph E. Hill & Sampson L. Freedman World Academy		X	X		State	Philadelphia
J.P. McCaskey High School			X	X	State	Lancaster
Lehigh Valley Academy Regional Charter School	X	X	X		State	Bethlehem
Manheim Township High School			X		State	Lancaster
Mercyhurst Preparatory School			X		Private	Erie
Northeast High School			X		State	Philadelphia
Pan American Academy Charter School	X				State	Philadelphia
Philadelphia High School for Girls			X		State	Philadelphia
School Lane Charter School		X			State	Bensalem
Upper St. Clair School District						
Streams Elementary School	X				State	Upper St. Clair
Boyce Middle School		X			State	Upper St. Clair
Fort Couch Middle School		X			State	Upper St. Clair

Upper St. Clair High School		X	X		State	Upper St. Clair
Vincentian Academy			X		Private	Pittsburgh
William W. Bodine High School for International Affairs			X		State	Philadelphia
Woodrow Wilson Middle School		X			State	Philadelphia
York Academy Regional Charter School	X				State	York

1. Chambersburg Area School District – Chambersburg Area Senior High School (CASHS) offers students the ability to enroll in an IB program. The IB program offers a continuum of programs that is holistic and challenging for the highly motivated student. Students gain rigorous and balanced academic preparation while learning how to think critically and apply what they have learned in different contexts. CASHS will be offering the Diploma Program to 11th and 12th grade students. The first cohort began in August 2015. The program will only be offered at CASHS and will be taught by certified IB trained teachers who are currently successful CASHS teachers. A student may choose to enroll in the full Diploma Program or take specific IB courses to earn an IB Certificate.²⁰
2. Harrisburg Academy – Harrisburg Academy is the first school in the Harrisburg area to receive IB World school accreditation and offers the IB Diploma Program to its upper school students. The IB Diploma Program aligns with the academy's high-quality college preparatory format and globally minded mission. Academy high school students may choose to pursue a full IB Diploma or may enroll in individual IB courses to earn a certificate. At the successful completion of the program, students receive an IB Diploma in addition to their Harrisburg Academy diploma, which may also result in advanced placement in college or credits. Since 2009, Harrisburg Academy has awarded 55 IB diplomas to its students.²¹

Harrisburg Academy's one-of-a-kind IB scholarship for summer study provides up to four high school students travel funds for national or international travel and summer study to an academic or service learning program. Tenth grade students pursuing a full IB Diploma or planning to take four or more IB Certificate classes at the academy are eligible to apply for the award. This scholarship is awarded to both new and returning students.²²

3. J.P. McCaskey High School – The School District of Lancaster is the only district in Pennsylvania that has an authorized IB Career-related Program. The district also has an authorized Diploma Program and is currently working on adding a Middle Years Program. CP students can select a career focus from any of the career and technology education PDE-approved program of study offered by the district. While the CP program is only a small portion of students enrolled in IB programs at the district, the CP program adds a rigor and pedagogy for students who aspire to attend college and who have a career focus.

²⁰ Chambersburg Area School District. (2016). [International Baccalaureate Home](#)

²¹ Harrisburg Academy. (2016). [The IB Diploma Program at Harrisburg Academy](#)

²² Harrisburg Academy. (2016). [IB Scholarship for Summer Study](#)

CP students must take the required two-year IB Approaches to Learning courses to be prepared for the CP certificate. In addition to the Approaches to Learning (ATL) curriculum, the students explore ethical dilemmas within their career and technology field, culminating in the Reflective project. The students achieve a minimum of 50 hours of extended world language instruction. The ATL class coordinates and monitors the service project hours. CP students must also elect two IB courses from the Diploma Program.²³

B. Helpful Links

- Program authorization booklets – Each of these booklets provide detailed information to aid a school seeking authorization to become an IB world school:
 - [Primary Years Program](#)
 - [Middle Years Program](#)
 - [Diploma Program](#)
 - [Career-related Program](#)
- [International Baccalaureate Organization](#)–Information on IB around the world
- [IB Americas \(IBA\)](#) – Information about IB world schools in Central, North and South America, including professional development workshops.
- [Association of IB World Schools](#) – The Associations of IB World Schools in the Americas are organizations of schools within a given geographic area.
- [IB Digital Toolkit](#)–The digital toolkit contains IB promotional resources (e.g., brochures, presentations, logos, etc.) for students, parents, teachers, and others.

IV. References

Byrd, S., Ellington, L., Gross, P., Jago, C., & Stern, S. (2007). [Advanced Placement and International Baccalaureate: Do They Deserve Gold Star Status?](#) Washington DC: Thomas B Fordham Institute.

Taylor, J. (2015). [A Survey of Research on Post-secondary Outcomes for International Baccalaureate Students](#). Office of Academic Affairs. Boulder, CO: University of Colorado.

²³School District of Lancaster (2015). [2016-17 Curriculum Guide, page 40](#)

Pennsylvania Colleges and Universities Accepting International Baccalaureate Credits

Below is a partial listing of PA colleges and universities that accept IB credits. The links provided direct you to the particular online resource that identify that institution's credit acceptance process or policy. Students should always ask admissions offices if they have a policy on accepting IB credits, even if it is not stated in the institution's catalog or on their website.

[Albright College](#)
[Art Institute of Pittsburgh](#)
[Bucknell University](#)
[Bryn Mawr College](#)
[Carnegie Mellon](#)
[Cedar Crest](#)
[Clarion University of Pennsylvania](#)
[Drexel University](#)
[Duquesne University](#)
[Elizabethtown College](#)
[Gettysburg College](#)
[Grove City College](#)
[Juniata College](#)
[Kings College](#)
[Lehigh University](#)
[Mercyhurst University](#)
[Messiah College](#)
[Millersville University](#)
[Moravian College](#)
[Muhlenberg College](#)
[Pennsylvania State University](#)
[Slippery Rock University](#)
[Temple University](#)
[University of Pennsylvania](#)
[University of Pittsburgh](#)
[University of Scranton](#)
[University of Sciences in Philadelphia](#)
[Ursinus College](#)
[Villanova University](#)
[Washington and Jefferson College](#)
[West Chester University of Pennsylvania](#)