



Northville Public Schools

International Baccalaureate

***Report
to the
Board of Education
August 25, 2009***



**NORTHVILLE PUBLIC SCHOOLS
Northville, MI**

**INTERNATIONAL BACCALAUREATE PROGRAM/
ADVANCED PLACEMENT INTERNATIONAL DIPLOMA**

**Report to the Northville Board of Education
August 2009**

1 Summary Information

1.1 Original Board Charge

The Northville Public Schools APID/IB Study Committee is charged to:

- Review the research on APID and IB programs
- Consider the impact of the various options on student learning and academic achievement
- Consider a cost benefit analysis on all levels for each programming option. Consideration will be given to the following:
 - Profile APID
 - Profile all three levels of IB
 - Facility impact
 - Staffing and training costs
 - Scheduling, classroom set up and materials
 - Impact on current programs across the district
 - Operational costs including transportation
 - State funding allocation (inter-district collaboration)
 - Provide an analysis of feasibility/impact to the Board of Education by June 2009

1.1.1 Committee Members

| | |
|----------------------|--|
| Mr. Robert Watson | Principal, Northville High School (Co-chairperson) |
| Ms. Janice Henderson | Curriculum Coordinator, NPS (Co-chairperson) |
| Dr. Steve Anderson | Principal, Amerman Elementary School (Primary Years Program) |
| Ms. Heidi Capraro | Assistant Principal, Hillside MS (Middle Years Program) |
| Ms. Diana Hoffman | Assistant Principal, NHS (Middle Years Program) |
| Dr. Hubert Rast | World Language Teacher, NHS (Diploma Program) |

1.2 Rationale for the Investigation and Assessment of the International Baccalaureate Program (IB) and the Advanced Placement International Diploma (APID)

The Northville Public Schools constantly strive to improve the educational product that is offered to our students. While the Northville Schools already offer a comprehensive and highly successful college-prep curriculum for students in grades 9-12 – largely based on AP courses—, we believe that the International Baccalaureate (IB) Curriculum presents a unique opportunity to improve our already impressive schools and add to the attractiveness of our community. Our findings and conclusions are based on a thorough study of available literature and on the visits of two public high schools (International Academy, Bloomfield Hills, and Midland Dow High School), three middle schools (Norup International School, Berkley; Baker Middle School, Troy, and Royal Oak Middle School, Royal Oak) and two elementary schools (Lone Pine Elementary, Orchard Lake, Norup International School, Berkeley) that offer the International Baccalaureate Curriculum.

The committee identified four factors that best exemplify the International Baccalaureate’s appeal for Northville High School:

- Desirability and Attractiveness of Northville as a Community
- Internationalization of Workplace and Education
- Creation of Smaller Learning Communities within NHS
- Curricular Alignment with University Standards

1.2.1 Desirability and Attractiveness of Northville as a Community

Northville's desirability as a community is founded upon the excellence of its schools and the beauty of the city. The IB Program is, in our view, an opportunity to enhance our educational offerings for our high achieving students and to maintain and increase the desirability, value and competitiveness of our community. As frequently demonstrated, Northville's residents cherish and readily support new and exciting educational initiatives. At this point in time, urgent educational challenges are constantly arising. Tom Watkins, the former State Superintendent of schools, recently observed: "Saying you are one of the best school districts in the state, given the state of education in Michigan and America, is like saying you are the smartest kid in the dumbest class; it's a dubious honor at best. The students in our schools today will confront a rapidly changing, disruptive information and technology driven world that will defy predictability. Will they be ready? The answer is a resounding no, unless we begin to change as if our future depends on it (because it does)."¹

The success of the **IB International Academy**, rated by **Newsweek Magazine** as the best high school in America (June 2, 2003), is testimony to this educational crisis. The International Academy, in the meantime, has opened two satellite campuses (located at Lakeland High School in Western Oakland County and in Troy). In addition, many surrounding communities, among them Livonia and Novi next door, are applying to adopt the IB program in order to enhance the attractiveness of the schools and communities. Northville Public School should embrace the challenge and search for educational alternatives and improvements that enhance our own community and serve our bright and hard-working students. The existence of an IB Program in our district may help to retain families in an educationally vibrant Northville as well as help to attract new ones to our community.

1.2.2 Internationalization of Workplace and Education

Globalization and internationalization are economic, demographic and cultural realities. Increasingly, the future of our communities and children will depend on the quality of the international perspective. The State of Michigan, Oakland and Wayne counties, including the city of Northville have all experienced rapid economic and demographic internationalization. Global competition and cultural diversity are transforming our society and our very own communities. Education can no longer consider itself immune from this wide-ranging, comprehensive transformation, instead it must embrace and support these cultural and educational changes. Of particular interest for international and the increasingly mobile American families is the fact that students who earned an IB Diploma can transfer to some 2000 IB schools throughout the world or begin university studies anywhere in the world right out of high school. The regular US high school diploma does not guarantee admittance to universities abroad. In our view, the portability of the IB Diploma will be particularly attractive to our highly mobile populace.

1.2.3 Creation of Smaller Learning Communities within NHS

The student population at Northville High School has been steadily increasing over the last decade and will reach 2,300 students in the foreseeable future. Research has consistently shown that students thrive in learning environments where they feel a connection with their peers and teachers. These connections are fostered in school environments where there are simply more opportunities to learn and work together. Northville High School in particular would combine the facility and program advantages of a traditional comprehensive large school with the personalized learning environment by creating a cohesive, yet flexible and inclusive community within the larger school.

¹ Tom Watkins, "Northville, being best in the state is not good enough." Northville Record. May 28, 2009.

1.2.4 Curricular Alignment with University Standards

The comprehensive study **Standards for Success**² shows that high schools standards and achievement tests throughout the country only partially correspond to the prerequisites deemed fundamental to freshmen's success in college. In particular, the researchers bemoan the fact that students are most often lacking the analytical, reasoning and research skills that are the prerequisites for a successful college career. We contend that the IB curriculum with its focus on precisely these particular skills prepares high school students in a comprehensive manner to become thriving, academically astute college students. See also the testimony of university admissions officers about the validity of the IB Program.³

1.3 Histories of the Advanced Placement International Diploma and the International Baccalaureate Program

The APID is a new diploma for high school students who study outside the US or US students who wish to enroll at foreign universities. The students need to take five AP courses with a particular course distribution and receive a three or higher on each exam.⁴

The International Baccalaureate was founded in Geneva, Switzerland in 1968 as a non-profit educational foundation. A group of talented, forward thinking teachers at the International School of Geneva, with assistance from several other international schools, created the IB Diploma Program. What started life as a single program for internationally mobile students preparing for university, has today grown into three programs for students aged 3-19.

The program in the early days consisted of a common pre-university curriculum and a common set of external examinations for students in schools throughout the world, seeking to provide students with a truly international education. Although the first IB schools were predominantly private international schools, they included a very small number of private national institutions and schools belonging to state education departments. This has changed over the years and today over half of all IB World Schools (authorized to offer one or more of our programs), are public schools.

1.3.1 Uniqueness of the International Baccalaureate Programs⁵

The International Baccalaureate offers a continuum of high-quality education that encourages international-mindedness and a positive attitude to learning. Their programs are accessible to students in 138 countries.

- IB offers a **continuum of education**, consisting of three individual programs. They span the years from pre-kindergarten to a pre-university diploma. While the IB was traditionally known for the Diploma Program, IB World Schools increasingly offer all three programs.
- The IB's curriculum represents the best from many different countries rather than the exported national system of any one. Their challenging Diploma Program is recognized by the world's leading universities. IB maintains high standards by actively training and supporting teachers, and

² **Standards for Success** released Knowledge and Skills for University Success, the result of a two-year study in which more than 400 faculty and staff members from twenty research universities participated in extensive meetings and reviews designed to identify what students must do to succeed in entry-level courses at their institutions. Conley, David T. Standard for Success. What it Takes for Students to Succeed in America's Research Universities. http://www.ous.edu/state_board/meeting/files/ddoc050408-ssppt.pdf

³ See page 33.

⁴ See Appendix A, p. 23 for more detailed information.

⁵ See www.ibo.org

- by authorizing and evaluating IB World Schools.
- IB encourages **international-mindedness** in IB students. To do this, IB believes that students must first develop an understanding of their own cultural and national identity. All IB students learn a second language and the skills to live and work with others internationally—essential for life in the 21st century.
- IB encourages a **positive attitude to learning** by encouraging students to ask challenging questions, to critically reflect, to develop research skills, and to learn how to learn. IB encourages community service because it believes that there is more to learning than academic studies alone.
- IB ensures that their programs are **accessible** to students in a wide variety of schools—national, international, public and private—in 138 countries. These IB World Schools form a worldwide community in which there is no such thing as a “typical” school (more than 50% of IB students are in state-funded schools). IB World Schools cooperate in curriculum development, student assessment and the governance of the IB, making this a unique international collaboration.

Main activities of the IB Organization:

The IB works in four areas:

- the development of curriculum
- the assessment of students
- the training and professional development of staff
- the authorization of evaluation of schools

1.3.2 International Baccalaureate Schools in Michigan

In 2004, when Dr. Rast first researched the IB program, IB schools were merely an afterthought in Michigan. Only four IB schools existed.⁶ When in 2003 the Newsweek Magazine ranked the International Academy in Bloomfield Hills – a public magnet high school – as the best high school in the US, students, parents, teachers, school administrators and school board members all over the metro area were made aware of this exciting new program. Five years later, the fact that more than 75 schools and school districts⁷ are members of the International Baccalaureate Schools of Michigan Organization (www.ibsom.org) are testimony to the attractiveness of IB programs to school districts in Michigan. IB programs are gaining broader recognition, not only in terms of academic merit and reputation, but also through state and federal legislation. A number of legislative and education policy successes have been achieved that help support and sustain IB programs. There has been quite a bit of success in terms of exam funding, teacher training expenses, bonuses and scholarships. For example, in Florida IB diploma holders are entitled to receive 100% of their tuition and fees plus \$600 a year paid at any public university in Florida or a comparable amount to any private college in Florida. Students completing IB courses who do not receive their diplomas and have at least a 1270SAT / 28ACT may also qualify for this award. This award is renewable each year for four years pending a cumulative college GPA of 3.0.⁸

At the time when the ISB of Michigan is working to

- improve university recognition
- spur legislative action in support of our work with students
- serve as a liaison with the state Department of Education
- offer symposia and information sessions on a variety of topics concerning the Primary Years Program, the Middle Years Program as well as the Diploma Program

⁶ Detroit Country Day, International Academy, Portage Central and Northern.

⁷ See Appendix A, p. 10.

⁸ <http://www.che.sc.gov/AcademicAffairs/EEDA/Files/Legislation.pdf>

The number of IB of schools in Michigan has been growing tremendously. As of summer 2009, 21 schools have adopted the IB curriculum and many more are considering the implementation of IB programs in their schools and districts.⁹

1.4 International Baccalaureate Mission Statement

“The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.”¹⁰

1.5 IB World School Characteristics

The International Baccalaureate does not own, operate or manage any schools. Instead, they work in partnership with 2,714 IB World Schools in 138 countries who offer their programs. These schools:

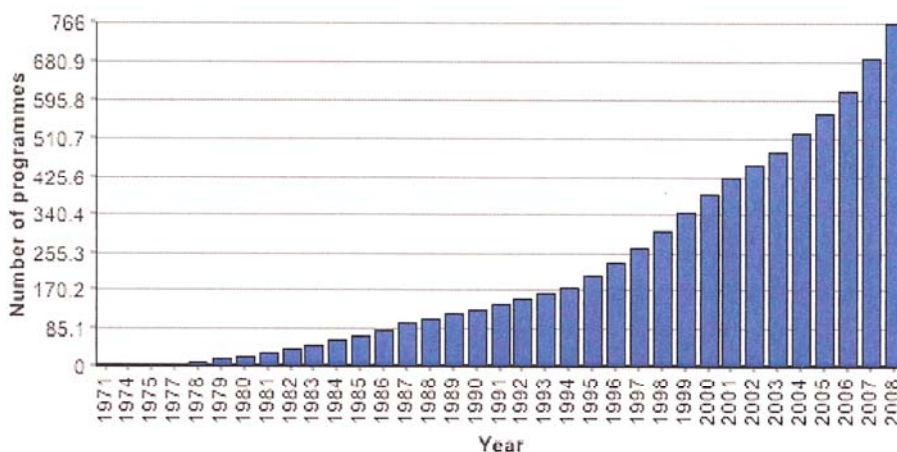
- share the mission and commitment of the IB to quality international education
- have been authorized by the IB to offer one or more of the three programs
- play an active and supporting role in the worldwide community of IB schools
- share their knowledge and experience in the development of the IB programs
- are committed to the [professional development](#) of teachers

The interdependent nature of the relationship between IB World Schools and the IB is a unique and a defining characteristic of the worldwide IB community.

The number of IB World Schools in North America¹¹ is growing rapidly:

- **Growth of IB Diploma Programs from 1971 to 2008:**

0 – 766

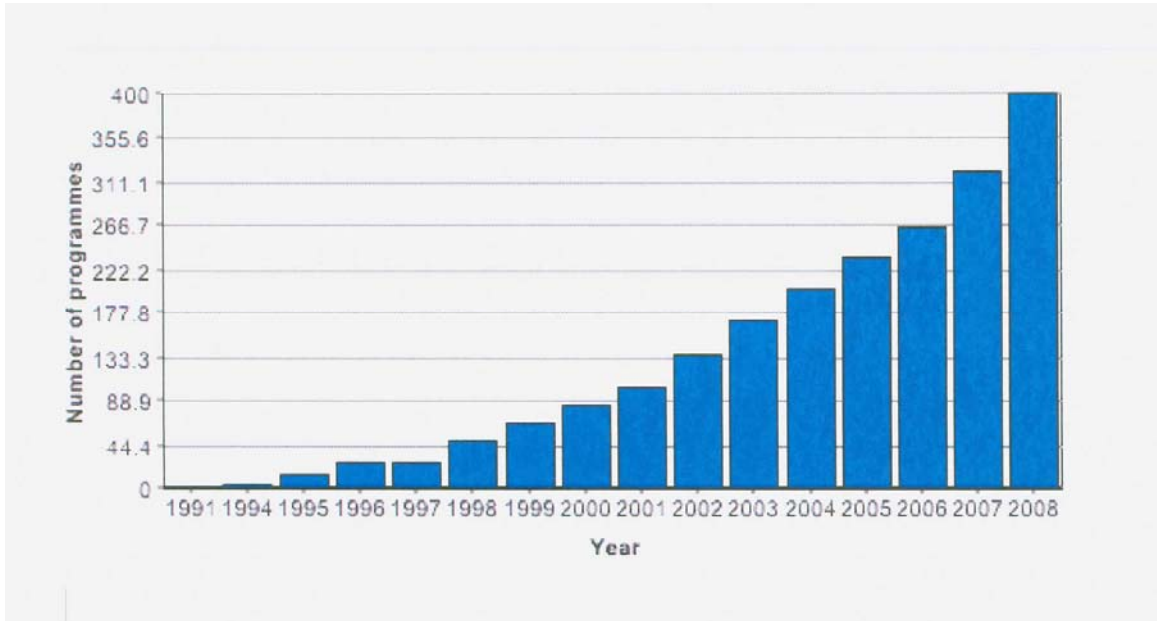


⁹ See Appendix B, p. 14.

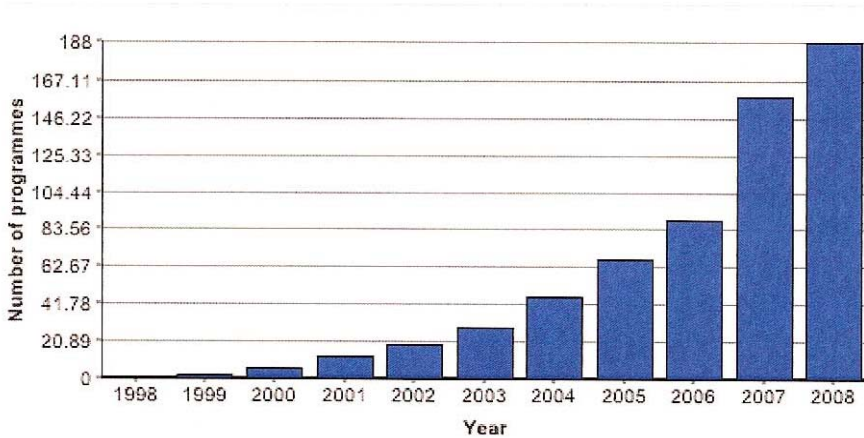
¹⁰ <http://www.ibo.org/informationfor/supporters/>

¹¹ See Appendix C for worldwide growth of IB, p. 15.

- **Growth of IB Middle Year Programs from 1991-2008:** 0 – 401



- **Growth of IB Primary Years Programs from 1998-2008:** 0 - 188



1.6 Learner Profile

The aim of all IB programs is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. The IB organization developed the following learners' profile. IB learners strive to be:

Inquirers They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.

Knowledgeable They explore concepts, ideas and issues that have local and global significance.

In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.

Thinkers They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.

Communicators They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.

Principled They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.

Open-minded They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.

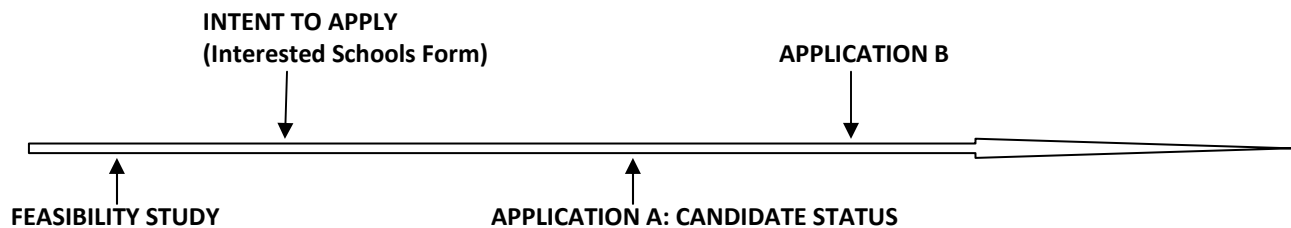
Caring They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.

Risk-takers They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.

Balanced They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.

Reflective They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

1.7 IB Application Process Become an IB World School



The application process includes one exploratory phase, Feasibility Study, and two levels of the application process. The feasibility study is a time for the district to give consideration to IB. Next, is the Intent to Apply which expresses interest to International Baccalaureate (IBO). Application Form A is a time to ready the school personnel and begin to implement certain parts of the IB program to act as a trial

period. Application Form B allows the school time to equip the building with needed materials, train additional teachers, and allow the IB authorization team to visit the school.

- **Feasibility Study** (current phase for NPS) actions include:
 - Contact the IB North America Regional office
 - Identify resources in terms of personnel, building, materials, etc.
 - Designate an IB coordinator
 - Gain support from the entire school community
 - Order IB publication to learn more
 - Send staff to IB professional development
- **Intent to Apply (Interested Schools Form)** (6 mos.) actions include:
 - Submit Intent to Apply (Interested School Form)
 - Continue sending staff to IB professional development. This must include the IB coordinator and the head of the school where the IB program is planned.
 - Develop a five-year strategic plan
 - Organize collaborative planning and teaming times
 - Begin the development of curriculum
 - Prepare for the submission of Application Form, Part A
- **Application A: Candidate Status** (1+ years) actions include:
 - Submit Application Form, Part A
 - Set up teacher accounts to the Online Curriculum Center
 - Meet the IB coordinator assigned to the district to work with the school
 - Continue sending staff to IB professional development
 - Continue to develop curriculum
 - Prepare for the submission of Application Form, Part B (A candidate school must teach the program for a trial period of at least one year, before submission of application Form, Part B.)
- **Application Form, Part B** (1+ years) actions include:
 - Submit Application Form, Part B
 - Prepare for the IB site visit
 - Continue sending staff to IB professional development
 - Continue development of curriculum
- **Authorization**

An authorization visit is intended to ensure that the candidate school is genuinely committed to the pursuit of excellence in international education. The IB visiting team also ascertains the school's preparedness to offer the program and verifies that the school's planning has been both systemic and comprehensive. The district must host the authorization team visit. Evaluation reevaluation occurs every 5 years.

Appendix A

Schools, School Districts and Universities that are members of the International Baccalaureate Schools of Michigan Organization as of 2009

| SCHOOLS | CITY |
|--------------------------------------|-----------------------|
| Adrian High School | Adrian, MI |
| Algonac High School | Algonac, MI |
| Andrew G. Schmidt Middle School | Fenton, MI |
| Baker Middle School | Troy, MI |
| Bates Academy | Detroit, MI |
| Bloomfield Hills Andover High School | Bloomfield Hills , MI |
| Bloomfield Hills Lahser High School | Bloomfield Hills , MI |
| Bloomfield Hills Middle School | Bloomfield Hills , MI |
| Bloomfield Hills School District | Bloomfield Hills, MI |
| Central Middle School | Midland, MI |
| City High Middle School | Grand Rapids , MI |
| Clarkston High School | Clarkston, MI |
| Clio Public Schools | Clio, MI |
| Conant Elementary School | Bloomfield Hills , MI |
| Douglas Elementary School | Douglas, MI |
| Eagle Creek Academy | Oakland, MI |
| East China School District | East China , MI |
| East Kentwood High School | Kentwood, MI |
| Farmington Public School District | Farmington, MI |
| Fenton Area Public Schools | Fenton, MI |
| Fenton Intermediate School | Fenton, MI |

| SCHOOLS | CITY |
|--|-----------------------|
| Fenton Senior High School | Fenton, MI |
| Franklin High School | Livonia, MI |
| Great Lakes Elementary School | Holland, MI |
| H.H. Dow High School | Midland, MI |
| Helen Keller Middle School | Royal Oak , MI |
| Heritage High School | Saginaw, MI |
| Hickory Grove Elementary School | Bloomfield Hills , MI |
| Highmeadow Common Campus School | Farmington, MI |
| Huda School and Montessori | Franklin , MI |
| International Academy | Bloomfield Hills, MI |
| International Academy of Macomb | Clinton Township , MI |
| Jackson ISD | Jackson, MI |
| John Glenn High School | Westland , MI |
| Kingsbury Country Day School | Oxford, MI |
| Lake Orion Community High School | Lake Orion , MI |
| Macomb ISD | Clinton Township, MI |
| Marine City High School | Marine City, MI |
| Mark Twain Elementary School & Academy | Detroit, MI |
| Mary E. Thompson Middle School | Southfield, MI |
| Michigan State University | East Lansing, MI |
| Michigan Virtual University | Lansing , MI |
| Middle School at Parkside | Jackson, MI |
| Midland High School | Midland , MI |

| SCHOOLS | CITY |
|---------------------------------------|----------------------|
| Midland Public Schools | Midland, MI |
| Morse Elementary School | Troy , MI |
| Mt. Clemens Community School District | Mt. Clemens, MI |
| Mt. Clemens Middle School | Mt. Clemens , MI |
| Northville High School | Northville, MI |
| Norup International School | Oak Park , MI |
| Notre Dame Marist Academy | Waterford, MI |
| Notre Dame Preparatory School | Pontiac, MI |
| Novi High School | Novi, MI |
| Oakland Christian School | Auburn Hills, MI |
| Oakland University | Rochester, MI |
| Oberlin City Schools | Oberlin , MI |
| Owosso Public Schools | Owosso, MI |
| Portage Central High School | Portage , MI |
| Portage Northern High School | Portage, MI |
| Portage Public Schools | Portage , MI |
| Royal Oak Middle School | Royal Oak, MI |
| Saugatuck High School | Saugatuck , MI |
| Saugatuck Public Schools | Douglas, MI |
| Siebert School | Midland , MI |
| Southfield High School | Southfield, MI |
| Southfield Public School District | Southfield , MI |
| Southfield-Lathrup High School | Lathrup Villange, MI |

| SCHOOLS | CITY |
|------------------------------------|----------------------|
| St. Clair High School | St. Clair , MI |
| Star International Academy | Dearborn, MI |
| Tecumseh High School | Tecumseh , MI |
| Troy School District | Troy, MI |
| Universal Academy | Dearborn , MI |
| Utica Community Schools | Sterling Heights, MI |
| West Hills Middle School | West Bloomfield , MI |
| West Ottawa Public School District | Holland, MI |

Appendix B

IB Diploma Programs (13)

| | |
|---|--|
| Benjamin Franklin High School | 31000 Joy Rd., Livonia |
| Clarkston High School | 6093 Flemings Lake Road, Clarkston |
| Detroit Country Day School | 22305 West 13 Mile Road, Beverly Hills |
| Fenton High School | 3200 W. Shiawassee Avenue, Fenton |
| Herbert Henry Dow High School | 3901 North Saginaw Road, Midland |
| Heritage High school | 3465 N. Center, Saginaw |
| International Academy | 1020 East Square Lake Road, Bloomfield Hills |
| Lansing Eastern High School | 220 North Pennsylvania Ave, Lansing |
| Midland High School | 1301 Eastlawn Drive, Midland |
| Notre Dame Preparatory and Marist Academy | 1300 Giddings Road, Pontiac |
| Portage Central High School | 8135 South Westnedge Avenue, Portage |
| Portage Northern High School | 1000 Idaho Avenue, Portage |
| Utica Academy for International Studies | 14201 Canal Road, Sterling Heights |

IB Middle Years Programs (5)

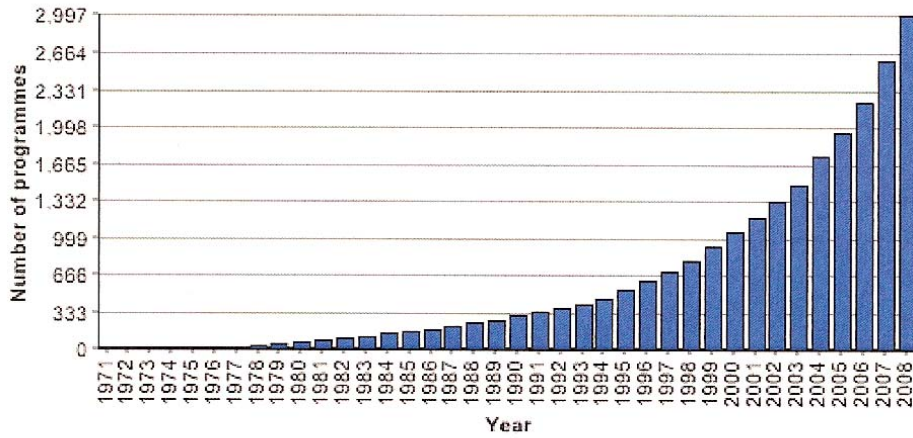
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|---|--------------------------------------|
| Andover High School | 4200 Andover Road, Bloomfield Hills |
| Baker Middle School | 1359 Torpey Rd., Troy |
| Norup International School | 14450 Manhattan Street, Oak Park |
| Notre Dame Preparatory and Marist Academy | 1300 Giddings Road, Pontiac |
| West Hills Middle School | 2601 Lone Pine Road, West Bloomfield |

IB Primary Years Programs (3)

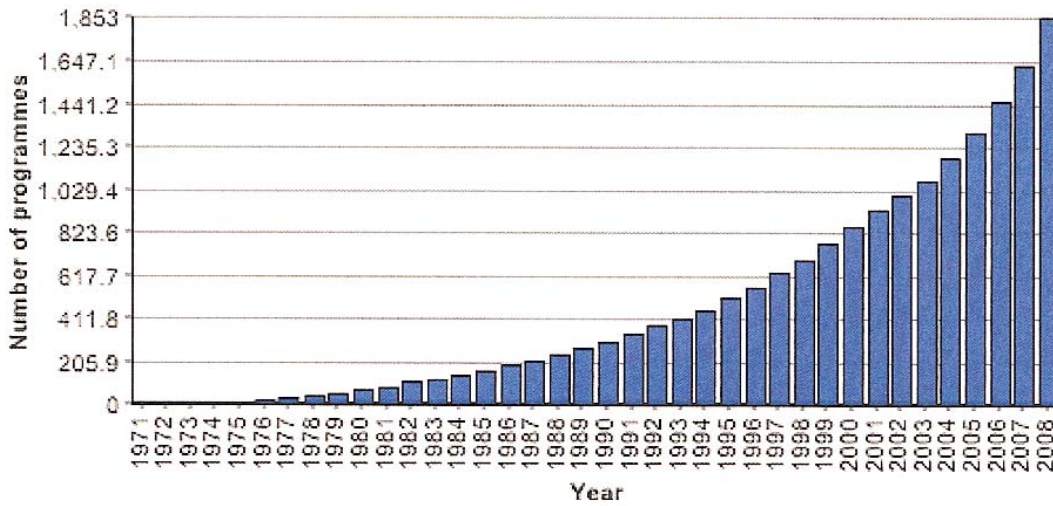
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| Lone Pine Elementary | 3100 Lone Pine Road, Orchard Lake |
| Morse Elementary School | 475 Cherry Avenue, Troy |
| Norup International School | 14450 Manhattan Street, Oak Park |

Appendix C

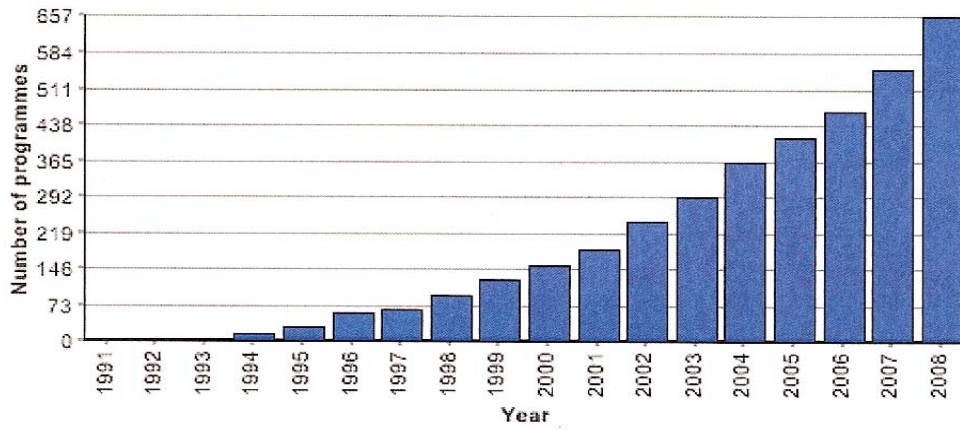
Growth of IB Schools Worldwide



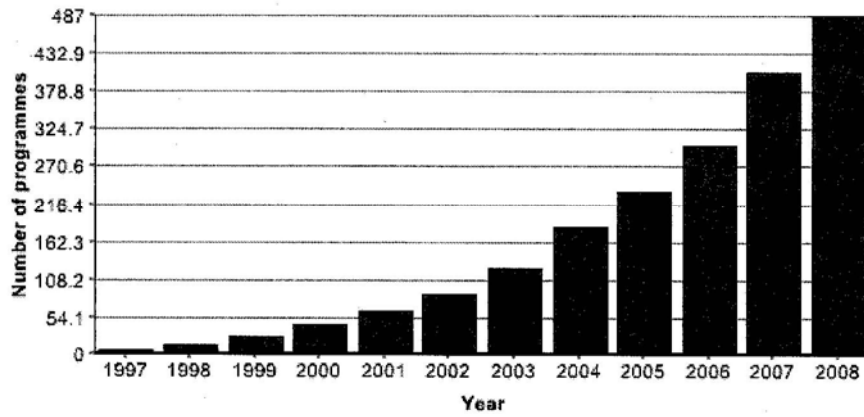
Growth of DP Schools Worldwide



Growth of MYP Schools Worldwide



Growth of PYP Programs Worldwide



2 Research Literature Survey and Bibliography

2.1 Research

Committee members read research articles and visited various districts representing all levels of the IB programs. From this study the committee offers the board the following benefits for the various stakeholders. Research papers on the APID were not available since APID is not a cohesive curricular program, but rather a compilation of existing courses.

Students

- IB shares a school report that gives specific data feedback on each student (Rothman)
- Students studying in IB courses in science disciplines for either one or two years outperformed AP students in the equivalent discipline (Hertberg-Davis et al., 2008)
- IB students achieved better grades and had higher confidence in their academic self-efficacy (Shaunessy et al., 2006)
- College admission offices prefer DP candidates. Marilee Jones, Dean of Admissions at MIT offers: “We would much prefer the IB diploma candidate. It is the ‘best’ high school preparatory curriculum an American school can offer.”

Teachers

- IB demonstrates that a common curriculum can strengthen teaching and improve instruction throughout the school (Rothman, 2002)
- Teachers are trained in regional workshops in order to learn about a holistic approach to education
- IB has developed an online curriculum center that allows teachers across the world to collaboratively learn from each other and to share best practice.

School Environment

- IB students reported more positive perceptions of student-teacher relations and student interpersonal relations than their general education peers (Shaunessy et al., 2006)
- The IBO provides systematic professional development to implement throughout the curriculum
- Qualitative feedback by the IBO provides an excellent source of data for continuous school improvement

Community

- Public school districts with an IB program have seen an increase in student enrollment
- Former education secretary Rod Paige stated, “a rigorous K-12 education must include a solid grounding in other cultures, other languages and other histories.” (Conner, 2008)
- A comprehensive curriculum that produces internationally minded graduates
- “IB students usually show a great deal of maturity, high intellect, and willingness to challenge ideas. These students are usually leaders locally, nationally, and internationally.” Angie Nelson, Washington State University Honors Program
- Community service is embedded in the curriculum

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International Baccalaureate Organizations

www.ibo.org The International Baccalaureate Program's website

www.ibsom.org The International Baccalaureate Schools of Michigan's website

College Board AP Websites

http://www.collegeboard.com/student/testing/ap/exgrd_intl.html

http://www.collegeboard.com/student/testing/ap/exgrd_intl.html

http://www.collegeboard.com/student/testing/ap/intad/intad_germany.html

http://www.collegeboard.com/student/testing/ap/exgrd_intl.html

http://www.collegeboard.com/student/testing/ap/intad/intad_france.html

http://www.collegeboard.com/student/testing/ap/intad/intad_uk.html

http://www.collegeboard.com/student/testing/ap/intad/intad_germany.html

Language Requirements Technical University of Munich

<http://portal.mytum.de/studium/sprachenzentrum/deutschkenntnisse>

DAAD (German Academic Exchange Service)

<http://www.daad.de/deutschland/wege-durchs-studium/zulassung/06550.en.html?id=75&ebene=3>

AP/IB Recognition at the University of Michigan, Michigan State University and Grand Valley State University

<http://www.che.sc.gov/AcademicAffairs/EEDA/Files/Legislation.pdf>

http://admissions.msu.edu/documents/MSU_AP_Equivalencies.pdfhttp://admissions.msu.edu/documents/MSU_IB_Equivalencies.pdf

<http://www.gvsu.edu/credbyexam.pdf>http://www.gvsu.edu/images/intl_bac.pdf

http://www.admissions.umich.edu/admitted/freshmen/adv_credit/ap_guidelines.php

http://www.admissions.umich.edu/admitted/freshmen/adv_credit/ib_guidelines.php

<http://www.portageps.org/departments/curriculum/ib/IBBoardupdate2007-04-23.pdf>

3 Advanced Placement International Diploma (APID)

3.1 Profile

The College Board describes the “Advanced Placement International Diploma (APID)¹² as a globally recognized certificate for students with an international outlook. The APID challenges a student to display exceptional achievement on AP Exams across several disciplines.” According to the College Board’s website¹³, on the one hand, universities worldwide utilize the APID in admissions. On the other hand, the APID is only available to students attending secondary schools outside the United States and to U.S. resident students applying to universities outside the country.

This seems contrary to actual findings and research. First, the APID is not a substitute for a high school diploma. Indeed, one might consider it a marketing scheme since it merely combines existing AP courses¹⁴ without modifying instructional and/or assessment practices. Second, the only nod to the aforementioned “international outlook” is the foreign language requirement. A closer examination of the list reveals that the APID does not play any role in university admissions. Certainly, admission officers at foreign universities take AP results into account, but the APID is not mentioned once as an identifiable criterion. Typically, AP exams are purely ‘acknowledged’ in the admission process, as in the case of France’s two universities that accept AP exams.¹⁵

The information concerning the case of Germany is rather incomplete and at times even misleading.¹⁶ As documented in Appendix B, the prerequisites for admission to German universities are much more complex than the College Board’s own website indicates. One can indeed be admitted to a German university without ever having taken one AP course. In the case of the level of German language skills required to gain admittance to a German university, the College Board’s information is downright wrong when it states that “all institutions within the German University System accept a grade of 3 or higher on the AP German Language Exam as sufficient proof of knowledge of German for admission to a course of study.” The German language exam every German university requires by far exceeds any AP German standard.¹⁷

Based on our investigation, it seems that the APID is neither a viable alternative to the IB Program nor is it in itself a significant improvement over existing practices. The APID does hardly address instructional and assessment practices that are integral to the IB Program nor does it promote intercultural understanding as its central mission.

3.2 Cost

After initially charging \$675 for the APID, the College Board has dropped this fee altogether. The students still have to pay \$86 per AP Exam.

¹² See Appendix A for Advanced Placement International Diploma Criteria, p. 23.

http://www.collegeboard.com/student/testing/ap/exgrd_intl.html

¹³ http://www.collegeboard.com/student/testing/ap/exgrd_intl.html

¹⁴ See Appendix A, p. 23.

¹⁵ See Appendix B, p. 25.

¹⁶ http://www.collegeboard.com/student/testing/ap/intad/intad_germany.html

¹⁷ See for example the requirements of the Technical University of Munich.

<http://portal.mytum.de/studium/sprachenzentrum/deutschkenntnisse>

3.3 Staffing and Training Costs

NPS has already invested in training AP teachers. Cost of new teacher training: \$200-630+ and accommodation and travel expenses.

3.4 Facility Impact

Students currently take AP courses, hence no changes.

3.5 Impact on Current Programs Across the District

Students currently take AP courses, hence no changes.

3.6 Appendices

Appendix A

The Advanced Placement International Diploma (APID) is a globally recognized certificate for students with an international outlook. The APID challenges a student to display exceptional achievement on AP Exams across several disciplines.

Universities worldwide utilize the APID in admissions. Students may search [AP International Recognition](#) for universities outside the U.S. that acknowledge AP achievement.

The APID is available to students attending secondary schools outside the United States and to U.S. resident students applying to universities outside the country. The APID is not a substitute for a high school diploma, but rather provides additional certification of outstanding academic excellence.

To earn an APID, a student attending school within the United States must indicate on at least one AP Exam answer sheet that the results should be sent to a university outside the United States. Please see [AP International Recognition](#) for a list of universities outside the U.S. that use AP in admissions.

Advanced Placement International Diploma Criteria¹⁸

To earn an APID, students must earn grades of three or higher on at least **five** AP Exams in the following content areas:

1. Exams from two different languages selected from English and/or World Languages:

| |
|--|
| English |
| English Language and Composition |
| English Literature and Composition |
| World Languages |
| French Language |
| French Literature |
| German Language |
| Spanish Language |
| Spanish Literature |
| Italian Language and Culture |
| Chinese Language and Culture |
| Japanese Language and Culture |

2. One AP Exam designated as offering a global perspective:

World History, Human Geography, and Government and Politics: Comparative.

¹⁸ http://www.collegeboard.com/student/testing/ap/exgrd_intl.html

3. One exam from the sciences and mathematics content areas:

| |
|---|
| Mathematics |
| <u>Calculus AB*</u> |
| <u>Calculus BC*</u> |
| <u>Computer Science A*</u> |
| <u>Computer Science AB*</u> |
| <u>Statistics</u> |
| Sciences |
| <u>Biology</u> |
| <u>Chemistry</u> |
| <u>Environmental Science</u> |
| <u>Physics B</u> |
| <u>Physics C: Mechanics</u> |
| <u>Physics C: Electricity and Magnetism</u> |

***Note:** Calculus and Computer Science courses may each count only once toward the APID.

4. One (or two) additional exam(s) from among any content areas except English and world languages. These include the content areas already described as well as history and social sciences and arts:

| |
|---|
| History and Social Sciences |
| <u>Macroeconomics</u> |
| <u>Microeconomics</u> |
| <u>U.S. History</u> |
| <u>European History</u> |
| <u>Government and Politics: U.S.</u> |
| <u>Psychology</u> |
| <u>World History</u> |
| <u>Human Geography</u> |
| <u>Government and Politics: Comparative</u> |
| Arts |
| <u>Art History</u> |
| <u>Latin Literature</u> |
| <u>Latin: Vergil</u> |
| <u>Music Theory</u> |
| <u>Studio Art: Drawing</u> |
| <u>Studio Art: 2-D Design</u> |
| <u>Studio Art: 3-D Design</u> |

Appendix B

APID University Recognition Abroad

The language concerning the value of AP exams is rather neutral. The APID is not mentioned in one case. We are provided three examples, France, United Kingdom and Germany.

France¹⁹

The university below has informed the College Board that it acknowledges qualifying AP Exam grades in the admissions process. Click on the university for its AP policy information, including the name of a person at the institution who can assist you.

- [Universite Rene Descartes - Paris 5](#)
- [Management Institute of Paris](#)

In addition to this institution, other international higher education institutions use AP Exam grades in the admissions process. However, these institutions may not yet have contacted the College Board.

United Kingdom²⁰

In the case of the United Kingdom, the Oxford and Cambridge Universities are notably absent from the list of universities that 'acknowledge qualifying AP Exam grades. The following example is rather typical:

London School of Economics and Political Science, University of London

The London School of Economics and Political Science, University of London, recognizes AP Exam grades within its admissions process. The London School of Economics and Political Science, University of London, recommends that international applicants submit 3 or more (with a high preference given to 4 or 5) AP Exams with grades of 4 or higher.

London School of Economics and Political Science does not accept US high school transcripts as fulfilling entry requirements unless submitted in conjunction with AP Exam grades. SAT[®] grades are not considered.

Germany²¹

While the College Board rather dramatically asserts that "every institution within the German University System recognizes AP Exam grades in the admissions process"; it is indeed the German Academic Exchange Service (DAAD) that sets these policies. Furthermore, the College Board asserts that "institutions within the Federal Republic of Germany will grant admission to any candidate with a high school diploma who also submits four or five AP Exams in specified subjects, each with a grade of 3 or higher. The candidate's high school diploma must contain at least 16 academic units including English, second language studies, social studies, mathematics, and science. The course of study for which the candidate applies determines the AP Exams required." German universities, like American universities, do not automatically grant admission based on diplomas and/or grades, but base their decisions on a rather deliberate admission process that takes various matters into account.

Admission Process in Germany

The admission data base of the German Academic Exchange Service (DAAD)²² gives a far more comprehensive picture than the College Board's information. American applicants to German universities need to meet the following conditions to be considered a viable candidate for admission:

¹⁹ http://www.collegeboard.com/student/testing/ap/intad/intad_france.html

²⁰ http://www.collegeboard.com/student/testing/ap/intad/intad_uk.html

²¹ http://www.collegeboard.com/student/testing/ap/intad/intad_germany.html

²² <http://www.daad.de/deutschland/wege-durchs-studium/zulassung/06550.en.html?id=75&ebene=3>

- High School Diploma plus two years of successful university/college studies
- High School Diploma plus ACT scores of 28 or higher or SAT scores of 13000 or higher
- High School Diploma plus Advanced Placement Tests in Humanities, Social Sciences, Jurisprudence, Economics

Your possibility of admission: Providing your AP tests cover the compulsory subjects specified above, you qualify for **“direct subject-restricted admission”**. This allows you to apply directly to a German higher education institution for **Humanities, Social Sciences, Jurisprudence or Economics**.

- Advanced Placement Tests in Mathematics, Natural Sciences, Technology, Medicine, Pharmacy

Your possibility of admission: Providing your AP tests cover the compulsory subjects specified above, you qualify for **“direct subject-restricted admission”**. This allows you to apply directly to a German higher education institution for **Mathematical subjects, Technology, Natural Sciences, Medicine or Pharmacy**.

The **High School Diploma** must be comprised of a total of 16 academic units in the grades 9 to 12:

- 4 units (3 units are sufficient for 11 grades) English with a minimum grade C: English IV or Honors or AP English,
- 2 units 2nd Language,
- 3 units Social Studies,
- Altogether 5 units Mathematics and Science:
 - or 3 units Mathematics with a minimum grade C: Algebra II or III, Trigonometry or Pre-calculus,
 - or 3 units Science with a minimum grade C: Biology, Chemistry or Physics,
- 2 optional academic units.

4 International Baccalaureate Diploma Program (IBDP)

4.1 The International Baccalaureate Diploma Program (IBDP) is an internationally recognized program of studies which is available to highly motivated 11th and 12th grade students. The program offers the rigor, the structure, and the experiences necessary to challenge academically talented students. Students in IB classes complete a series of examinations based on internationally established syllabi. The IB program comprises a holistic philosophy of learning that seeks to address the intellectual, philosophical and social development of the student. The IBDP is a two-year program of studies across disciplines, the components of which are:

- *Successful completion of courses in six different subject areas*
- *External assessments and examinations in each area*
- *Participation in the CAS (Creativity, Action and Service) Program*
- *Completion of the Theory of Knowledge course*
- *The writing and submission of an Extended Essay in an area of interest to the student*

The International Baccalaureate Organization of Geneva awards an IB Diploma to students who complete all of the above and perform successfully on the six external examinations. Frequently, this diploma serves as an academic passport to universities around the world. Over 800 North American colleges and universities have extended official recognition to the diploma and/or to the subject certificates earned in partial fulfillment of it.

There are numerous advantages to taking the IB curriculum. First, the IB curriculum was originally designed to insure a cohesive, comprehensive education for students, no matter where they lived in the world. Today, that goal is still at the forefront of the IB mission. Students who complete this program are preparing, not only for success in college, but for success in life. Students gain a broader world view; follow in-depth approaches to the academic disciplines; and develop time management, problem-solving, research, and organizational skills that will remain with them long after the IB experience is over. CAS activities provide opportunities for student involvement in the larger community beyond classroom walls. An additional benefit is that student work is assessed over a two-year period using internationally accepted performance standards. Student achievement is assessed in a variety of ways: on examinations that are developed and scored by international examiners; on oral language demonstrations in both the student's native language and a modern second language; and on science laboratory notebooks, art portfolios, computer science dossiers, essays, and other projects. These activities all count for a percentage of the student's final score in each subject and allow the classroom teacher to have input to the student's scores. The IB Program also allows for student and school flexibility in choosing areas of academic interest for student research. The IB offers such unique courses as Information Technology in a Global Society and Environmental Systems.

4.1 Curriculum

The International Baccalaureate Diploma Program (IBDP) is an academic curriculum for the 11th and 12th grades. To receive an IB Diploma, a student entering in the junior year commits to a two-year program that culminates in examinations. The Full Diploma program includes:

- **CAS Program**

The IB curriculum offers a complete educational experience in which the traditional academic subjects and the less formal experiential parts are of comparable significance. IB Diploma candidates are required to complete 150 hours in the areas of creativity, action and service (a minimum of 50 hours in each). These hours may be completed independently or as part of the

extracurricular activities offered by the school. Students must submit CAS plans and documentation to the CAS coordinator for approval.

- **Theory of Knowledge**

Theory of Knowledge (TOK) is a year-long course most often taken during the second semester of junior year the first semester of the senior year. TOK student examine the philosophical framework of each academic discipline while learning to reflect critically and logically on ideas originating in the other courses. Essays written in Theory of Knowledge are submitted to external examiners for assessment and may contribute points toward a candidate's diploma total.

- **Extended Essay**

The extended essay is a 4,000-word research paper in which the student explores in depth a topic chosen from one of the subjects studied at the IB level. It is an opportunity for students to pursue an area of special interest to them. In the second semester of the junior year, the student selects a topic and seeks the sponsorship of a faculty mentor. The mentor and student create a timetable for the essay's completion which takes into account the rising senior's academic load, college application process and other time constraints. A substantial amount of the research and writing is completed in the summer following the junior year. The extended essay is submitted at the end of the first semester of the senior year to be assessed by an external examiner. Points may be awarded toward the diploma for exceptional extended essays.

- **Course Selection**

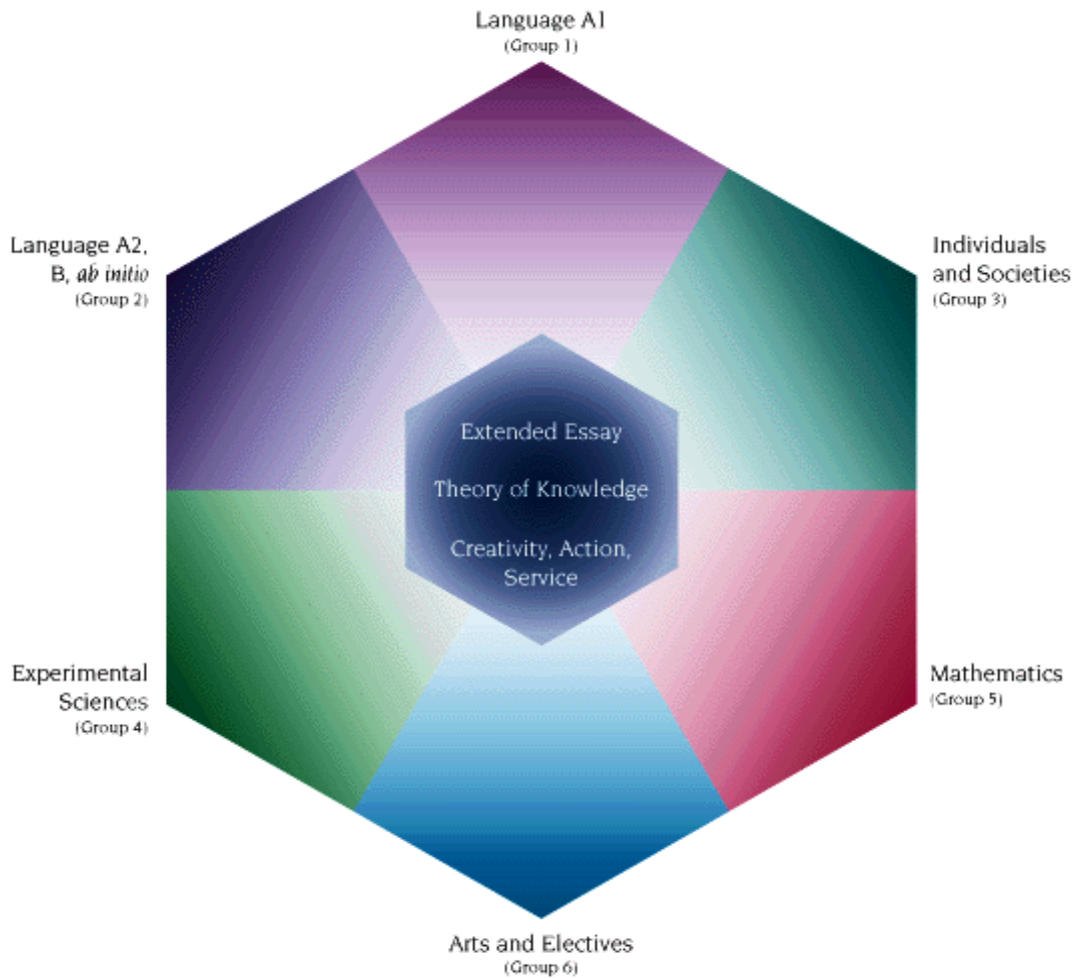
Students generally begin in eighth grade to complete the advanced and pre-IB courses which serve as preparation for the IB courses. Each student's IB sequence is planned individually based on the student's interests and areas of strength. Well in advance of the junior year, students and parents should work with the counselors and IB coordinator to plan a sequence of courses. Students may also choose to earn an IB Certificate by taking IB courses without fulfilling all of the requirements for the IB Diploma. (Universities treat individual IB courses very much like AP courses and grant credit hours according to pre-establish procedures.²³) In addition, any student may select an IB level course without earning an IB certificate or diploma.

IB courses are offered at either higher level or standard level. Higher level courses are taken over two years (both the junior and senior years) and standard level courses over one year (during either the junior or senior years). At least 3 and not more than 4 subjects must be taken at the higher level, the others at standard level. Juniors are permitted to take up to two standard level exams as part of their IB diploma requirements. The IB program is a rigorous course of study that requires a strong commitment on the part of the student. Effective time management is an essential component of this commitment.

The curriculum is displayed in the **shape of a hexagon** with six academic areas surrounding the core. Subjects are studied concurrently and students are exposed to the two great traditions of learning: **the humanities and the sciences**.

²³ See 4.4.1, p. 32.

The IBDP Curriculum Model



The following table shows NPS's current requirements for the last two years of high school and what IB requires:

| NPS Current High School Practice (Would need to be in grades 11-12) | IBDP Requirements ²⁴ |
|--|-----------------------------------|
| English Language Arts: yearly | Language A (ELA): yearly |
| World History | Individuals and Societies: yearly |
| Mathematics: various courses | Mathematics: yearly |
| Arts: no additional required | Arts and Electives: yearly |
| Science: Chemistry, Physics, 3 rd Science credit | Experimental Sciences: yearly |
| World Languages: none required | Language B: yearly |

²⁴ DP students have to take 3 higher level classes (HL) and 3 standard level classes (SL). HL classes require 250 contact hours, SL classes 150 hours. Currently, each NHS course provides 127 contact hours over one year or 254 contact hours over two years.

4.2 Standards, Assessment and Accountability in the IB Program

State and federal government have launched an ambitious attempt to measure student performance in public schools. The states responded with standards-based education reform programs in order to prepare and test their students. Whether one agrees with these measures or not, testing in one way or another will not cease to exist. However, these tests, as the **Standard for Success** study asserts, are rarely able to assess a student's readiness for university studies – presumably the ultimate goal of a successful high school education. These newly established standard-based curricula are only marginally aligned with the “What-it-takes” to succeed in college – a category that is arguably hard to define. Assessment and accountability are important parameters of success in the field of education. A recent study on assessment and curriculum reports affirmatively on the IB program's assessment and feedback strategies for students and teachers.

“The IB uses a variety of assessment strategies for summative purposes. For example, students **must complete an extended essay** on a topic of their own choosing at the end of the program, which is scored centrally. Examinations may include tasks ranging from multiple-choice questions to full-length essays, as appropriate for each subject. **Oral presentations** are also required in language subjects, and these are **scored by teachers using criteria supplied by the IB program**. All of the results are reported in terms of a seven-point scale that is **linked to defined levels of performance that program administrators try to keep consistent from year to year as well as across participating schools around the world**, who of course work in different languages. The points on the scales describe content and skills, and the scoring is intended only to indicate how well students have mastered them, not to spread students out for comparative purposes. Internal, teacher-generated assessments play a significant role in the program for both formative and summative purposes. Teacher-generated assessments address a different range of subject matter and skills than the IB-generated assessments do. **The two types [of assessment] are intended to complement one another** in creating an overall measure of a student's achievement. Teachers' ongoing formative assessments are viewed as opportunities for students to see how they are progressing along the criteria defined in the seven-point scale. Released test questions, rubrics, and student work are all used to provide this feedback. **Many IB teachers serve as external assessors for other schools, and also have opportunities to review and revise the curricula in their disciplines. All IB teachers receive support in the form of resource materials, workshops, and an online curriculum center. Moderators are available to give teachers feedback on their internal assessment methods, as well as their assignments and their grading.**”²⁵

The IB curriculum with its focus on science and the humanities, on analysis and research oriented writing is widely regarded as a premier educational tool to prepare high school students for college. Furthermore, the IB curriculum fully integrates the classroom teachers into a continuous feedback loop of instruction and assessment with internally and externally established measures for success.²⁶

4.3 Professional Development

The International Baccalaureate (IB) is committed to supporting the ongoing development of a worldwide professional learning community comprising internationally minded teachers, school leaders and school administrators. To that end all regional offices conduct comprehensive annual programs of workshops and conferences designed to help teachers and schools to better understand and deliver the three IB programs. Through the provision of a wide variety of resources and development opportunities IB educators are challenged to constantly reflect upon and improve their practice. In addition, all teachers

²⁵ *Assessment in Support of Instruction and Learning: Bridging the Gap Between Large-Scale and Classroom Assessment - Workshop Report*. Committee on Assessment in Support of Instruction and Learning, Committee on Science Education K-12, National Research Council. National Academies Press, 2003, p. 23. (highlights are mine, HR)

²⁶ See Appendix A for a sample grading matrix for IB English, p. 38.

at IB World Schools have access to the online curriculum center.²⁷ This website aims to develop and nurture an international online community, which in turn fosters a culture of collaborative learning and exchange—all to reflect the IB’s overall mission. The site is organized by curriculum area, with additional areas relating to librarians, special educational needs, calculators, academic honesty and the work of the IB research unit.²⁸ Each area contains content-specific news and information, relevant IB publications and documentation (including teacher support materials) and, where appropriate, a teacher resource exchange and dedicated discussion forum.

The amount of feedback alone distinctively distinguishes the IB procedure from the AP practice to merely respond with a numerical grade. In our view, many highly qualified and confident teachers at Northville High School will welcome the opportunity to review and reassess their own teaching. The IB Program feedback loop will assure that the students **and** the teachers will continuously reevaluate their own practices. The combination of these factors will assure that we are able to deliver an exceptional educational product that will do justice to our own, our students’ and our community’s aspirations. **The committee believes that the IB Program is the best school improvement and teacher development program that exists out there.**

4.4 Recognition of IBDP

The Educational Policy Improvement Center (EPIC) recently announced the results from their report “International Baccalaureate Standards Development and Alignment Project.”

The report, which analyzes the alignment of the IB Diploma Program standards and the Knowledge and Skills for University Success (KSUS) college-ready standards, found IB standards to be “highly aligned with the KSUS standards.” In particular, the key cognitive strategies emphasized in the Diploma—critical thinking skills, intellectual inquisitiveness and interpretation—were found to be fully aligned with the expectations of university faculty.

The study, led by David Conley, confirmed that IB Diploma Program standards demonstrate a very high degree of alignment with the KSUS standards in all subject areas. In math, complete alignment was found between the IB Diploma’s mathematical studies and the KSUS’ algebra, trigonometry and statistics standards. In science, the 47 IB chemistry standards, 19 biology standards and the concepts of environmental science embedded in all three IB science courses aligned completely with KSUS.

“What is perhaps most notable about our findings is the degree to which IB standards were found to be related to the kinds of key cognitive strategies that our previous research points to as being so important for success in colleges and universities,” added David Conley, CEO of EPIC. “We have learned that it’s not enough for students to study content in isolation; they must use their content knowledge to solve problems, make conjectures and inferences, and think deeply about the big questions of the disciplines. The IB standards seem to be particularly well suited to achieving these aims.”

The goal of the project was to develop a set of standards that represented the knowledge and skills students learn in the curriculum of the IB Diploma Program by reviewing course documents for Language A1, Theory of Knowledge, Extended Essay, Math Studies, Math SL, Math HL, Biology, Chemistry and Physics. The study utilized a criterion-based expert judgment decision-making model that employed successive reviews by experts to reach findings on the relationship of the IB standards to the Knowledge and Skills for University Success.

4.4.1 University Credit

Both AP and IB courses receive credit from many US universities and college; in general, one can say that the more selective the university is the less credit they award for high school courses. While students and parents often argue that success in AP Exams significantly lowers the cost of a college education (as does

²⁷ <http://occ.ibo.org/ibis/occ/guest/home.cfm>

²⁸ <http://ibo.org/programmes/research/index.cfm>

success in the IB Program), many educators and university professors stress preparedness for university studies. Brian Wallace from the University of Michigan's Psychology Department makes this point succinctly:

“Let me suggest that the challenging curriculum offered by the IB Diploma Program provides strong preparation for post-secondary study for motivated students. But for students with a genuine interest in studying psychology, testing out of courses beyond the broad introductory survey doesn't offer any benefit and may be detrimental. This is one of the premier psychology faculties in the country because they are leading researchers in their areas of study; new knowledge is being created in our laboratories and imparted in our classrooms, and that is the real value we can offer to the well-prepared IB student.”²⁹

While credit for IB and AP courses is awarded and handled individually by most universities, some states, including Minnesota, Florida, Colorado and Texas, award by law a certain number of credit hours for IB courses and the IB Diploma. In Texas, for example, every higher education institution grants 24 hours of credit to students with IB diplomas.³⁰ Locally, Michigan State University³¹ as well as Grand Valley State University³² tend to award slightly more credit hours for AP Exams, especially in foreign languages. The University of Michigan, the state's flagship university, by contrast, reverses this trend by awarding generally more credits hours for IB courses.

²⁹ Brian Wallace, email communication to Dr. Rast.

³⁰ <http://www.che.sc.gov/AcademicAffairs/EEDA/Files/Legislation.pdf>

³¹ http://admissions.msu.edu/documents/MSU_AP_Equivalencies.pdf

http://admissions.msu.edu/documents/MSU_IB_Equivalencies.pdf

³² <http://www.gvsu.edu/credbyexam.pdf>

http://www.gvsu.edu/images/intl_bac.pdf

UNIVERSITY of MICHIGAN

| SUBJECT | AP score ³³ | Credit hours | IB score ³⁴ | Credit hours |
|--------------------|-------------------------------------|--|------------------------|--------------|
| Chemistry | 3 or above | 5 | 4 | 5 |
| | | | 5 or above | 8 |
| Computer Science | A, score 4 or 5 AB, score 4 or 5 | 2 | 4 | 4 |
| | | 6 | 5 or above | 8 |
| English Literature | 4 or 5 | 3 | 5 | 3 |
| | | | 6 or 7 | 6 |
| French | 4 or 5 | 3 | 5 or above | 8 |
| German | 4 or 5 | 8 | 4 or above | 7 |
| Spanish | 4 or 5 | 3 | 4 or above | 6 |
| Geography | 4 or 5 | 3 | 5 or above | 4 |
| History | 4 or 5 | 4 | 5 or above | 4 |
| | | AP credits can not be used as part of History concentration or minor | | |
| Mathematics | Calc AB, 4 or 5 Calc BC, 4 or 5 | 2 | 4 or above | 8 |
| | | 4 | | |
| Psychology | 4 or 5 | 4 | 5 or above | 8 |
| Music Theory | 5 | 3 | 5 or above | 4 |

4.4.2 Testimony about the IB Program³⁵

We would much prefer the IB diploma candidate. It is the "best" high school preparatory curriculum an American school can offer.

Marilee Jones, Dean of Admissions, Massachusetts Institute of Technology

IB students have a stronger background in every academic area. Students who participate in IB are overall better prepared for the academic load in college, plus they have the confidence to participate actively in class discussions. They have the skills to write well and present orally in a sophisticated manner. They are already critical thinkers. IB students usually show a great deal of maturity, high intellect, and willingness to challenge ideas. These students are usually leaders locally, nationally, and internationally.

Angie Nelson, Washington State University Honors Program

³³ http://www.admissions.umich.edu/admitted/freshmen/adv_credit/ap_guidelines.php

³⁴ http://www.admissions.umich.edu/admitted/freshmen/adv_credit/ib_guidelines.php

³⁵ See <http://www.portageps.org/departments/curriculum/ib/IBBoardupdate2007-04-23.pdf>

IB is the best secondary curriculum in the world--bar none.

Elizabeth Vermey, former president of the Ivy League Coalition of Colleges

One of the advantages of an IB curriculum is its structure and quality. It's a coordinated program, well established, well known, and well respected. We know the quality of IB courses, and we think the IB curriculum is terrific.

Christoph Guttentag, Director of Admissions, Duke University

IB is well known to us as excellent preparation. Success in an IB program correlates well with success at Harvard. We are pleased to see the credentials of the IB Diploma Program on the transcript.

Marilyn McGrath Lewis, Asst. Dean of Admissions, Harvard University

"My eyes light up when I see 'International Baccalaureate Diploma Programme' on a transcript. Students who apply to Michigan State University with IB credentials are assumed to be mature, curious, and creative. They have proven to be successful in a rigorous program that is both broad and deep in its content and intellectual challenge. On campus, IB graduates move with ease in a diverse and global university that demands intercultural skill and adaptability. The challenge of completing an IB diploma means that a student has engaged in the kind of rigorous work that is likely to help them become not just an outstanding college student and citizen of the world, but an exceptional one."

Pamela Horne, Assistant to the Provost for Enrollment Management and Director of Admissions, Michigan State University

4.5 Collegial Planning Time

Since IB is based upon an integrated course of studies, collegial planning time is instrumental to the success of the program. The high school's Seminar will be an ideal venue for the IB teachers to meet, discuss, align and integrate their instruction. Furthermore, it was mentioned a couple times during our school visits that the IB program and its concomitant teacher training will have a positive influence on even those teachers who did not receive IB training since IB teachers tend to raise the level of instruction.

4.6 Material Requirements

Textbooks and other equipment and resources that are currently used to meet the Michigan High School Content Expectations (HSCE's) can continue to be used. The only possible additional expense would be in the media center since materials need to be stocked that are representative of the various world languages taught. This includes reading books, periodicals, videos, etc.

4.7 Cost

4.7.1 Projections for the First Year Study

| Description | Cost |
|---------------------------------|-------------|
| Application Fees | 8,500 |
| Staff Development ³⁶ | 3,200 |
| Materials | 2,000 |
| Coordinator (.4 FTE) | TBD |

³⁶ At least the principal and the IB-coordinator should attend training sessions. However, it would be preferable if some teachers would start their training as well. The cost is around \$ 1,600 per person. The cost might be reduced significantly if IBO opens up a staff development center in Dearborn.

4.7.2 Planning and Site Visitation (second year)

| Description | Cost |
|---------------------------------|--------|
| Application Fees | 8,500 |
| Staff Development ³⁷ | 19,200 |
| Materials | 1,000 |
| Coordinator (.4 FTE) | TBD |

4.7.3 Implementation (third year) and every subsequent year

The following budget funds will have to be covered on an ongoing basis:

- Continued IB professional development
- Regular collaborative planning time
- Additional planning time for implementation phases
- IB publications
- IB coordinator position
- CAS supervision and coordination
- Extended Essay supervision
- Resources (int'l library books/textbooks/ict)
- Postage for examination mailings

The committee projects the following costs for the first year of implementation and every subsequent year (with the understanding that costs rise):

| Description | Cost |
|------------------------------------|---------------------|
| Program Fees ³⁸ | 9,600 |
| Staff Development ³⁹ | 6,400 |
| Materials | 2,000 |
| Coordinator (.5 FTE) ⁴⁰ | TBD |
| Postage | 2,000 ⁴¹ |

4.8 School Visits

The committee attended an information session and visited a number of classes at the International Academy (IA) in Bloomfield Hills as a whole, while Mr. Watson and Dr. Rast spent a day at H.H. Dow High School in Midland. The International Academy is a public, tuition-free magnet high school of choice for students of 20 Oakland County school districts. The school in Bloomfield Hills was founded in 1996 and

³⁷ 2 English teachers, 2 math teachers, 2 science teachers, 2 social science teachers, 1 art/music teacher, 3 world language teachers.

³⁸ The program fees will have to be paid on a yearly basis. They tend to increase over time.

³⁹ Staff development is an ongoing process. We would assume that three to four teachers will have to go to training sessions. As mentioned before, these costs would be reduced significantly if the IB will create a local training center. The chances are good since IB is generating a huge interest in Michigan.

⁴⁰ CAS supervision and coordination and Extended Essay supervision may be added to the coordinator position.

⁴¹ This budget item might decrease soon since IB will send exams/papers electronically.

opened its doors as the first all IB Diploma public high school in North America, graduating its first class in 2000. Due to its overwhelming success and parent demands, the International Academy in the meantime opened two more campuses: IA West (White Lake) and IA East (Troy). We were particularly impressed by the

- Sense of community among the students, staff and parents
- Excitement for learning
- Display of trust among students and teachers⁴²
- Seamless integration of classroom and library/media center

The students we met were articulate, hard working, and for the most part excited about their participation in the Diploma Program. Most of the seniors we encountered were headed to some of the best universities in the country. One student's comment about the lack of preparation for standardized tests, raised some committee members' concern. I (Dr. Rast) forwarded this comment to the IB coordinator at the Portage High Schools and received the following answer:

"No, we haven't found that at all, and I can't imagine to what standardized tests they might be referring. I'm sorry to hear that some students have experienced that, but I cannot believe that it is a result of the IB curriculum. We hear every year from our graduates that they were well prepared for college, that they had a depth of background that puts them ahead of their friends from non-IB schools, and that they are often the ones the professors point to as being appropriately prepared for college-level papers and discussion. The IB assessments are much more focused on extended response, analysis, and critical thinking than some standardized tests, but a student accustomed to such assessments should certainly be prepared for the less demanding multiple-choice, objective-style responses required in many standardized tests."⁴³

4.9 IBDP Summary

The DP Program is designed for students in 11th and 12th grades. The program is designed to work with state and national standards and provide a framework of academic challenge that encourages students to embrace and understand the connections between traditional subjects and the real world to become critical and reflective thinkers in a global world and economy. Any eleventh or twelfth grader can enroll in an IB level course. Some may strive to earn the IB diploma, others the certificate and still others just to successfully complete the course.

IBDP began in North America in the early 1970's and has grown continuously ever since. There are about 760 schools that have registered with IB North America in 2008. Thirteen of those schools are in Michigan. Many more are in the various stages of the application process.

Both the Midland and Portage coordinators when interviewed said their districts experienced a growth in enrollment when they achieved IB status, drawing students from private schools. They expect to continue to grow as more people became aware of the opportunity.

The International Academy and H.H. Dow High School in Midland granted us on-site visits. The Dow High program coordinator expressed a positive change in building culture. She noted a shift in instructional strategies, greater collaboration between teams, grade levels and departments. Students became more aware of the learning targets, the responsibilities they had in their own learning and began to ask questions that showed higher level thinking skills. Students became key players in their educational experience. Self-evaluation practices and understanding metacognitive strategies are the norm.

⁴² We attended a library session at the IA. The students were working on digital stories and it was a given that the students had full access of the internet. When asked whether students don't ever abuse their privileges, the head librarian answered almost indignantly that students have to learn responsible behavior somewhere – and, by the way, she would be able to see which page they are on ...

⁴³ Linda H. Trepanier, IP/AP Coordinator & World Languages, Portage Public School. Email communication with Dr. Rast.

IBDP curriculum embodies best practices and pushes all teachers to excellence with a common basis of understanding. IB combines Lynn Erikson's study on concept development; strategizing, analysis, and collaboration afforded through professional learning communities; unit development using the Understanding by Design model; problem based learning implementation; and Marzano's research.

IB assessments focus on all types of strategies. There are *assessments FOR learning*, *assessments OF learning*, as well as criteria reference standards that are common throughout the discipline. Common assessments are developed by teachers and the data is analyzed to drive instruction.

Research shows that one of the best strategies to increase student learning is professional development. Although only a minimal number of teachers need to be IB trained including the head of the school and IB coordinator, IB encourages training for all. This could utilize the *trainer of trainers* model where a small group of teachers are sent to IB training and then they return to the district to train others. Additional staff could be sent to the IB training sites across the United States, or an IB presenter could be contracted to come to the district and present to that district or to a collaboration of districts to share the cost. Overall, the cost would have to be balanced against the benefits.

The mission of IB is to encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. IB aims to develop inquiring, knowledgeable and caring young people who can help to create a better and more peaceful world through intercultural understanding and respect. It does this through the students and staff each playing an important part in the educational process with the same common understandings.

Appendix A

Sample Grading Matrix for IB English (as opposed to AP which only assigns a number as a grade without any additional feedback)

- 2 World Literature papers (1200-1500 words.) Each is worth 10% of IB grade. The classroom teacher may only give very general feedback (i.e. "You need to work on your transitions." "Paragraph 3 needs to be expanded.") 2nd version is turned in. Externally graded. Feedback for students.
- 1 major oral presentation, 15 minutes, on literature studied. Worth 15%. Internally graded by classroom teacher.
- 1 15-minute extemporaneous taped oral commentary on a passage/poem studied during the semester. Students prepare for 20 minutes, then talk. Worth 15%. Internally graded and externally moderated (i.e. IB checks random sample work and can adjust students' grades if necessary).
- 1 two-hour test--written commentary on an unseen passage (students choose the poem or the prose passage presented.) Worth 25%. Externally graded. Feedback for students and teachers.
- 1 two-hour test--student chooses 1 of 6 essay questions on the pieces of literature studied that semester. Worth 25%. Externally graded. Extensive feedback for students and teachers.

5 International Baccalaureate Middle Years Program (IBMYP)

“We begin with where the child is, and go the distance with his or her style, energies and abilities. And, the quality and quantity of student participation goes up.” -IB World

5.1 The International Baccalaureate Middle Years Program (IBMYP)

The IBMYP program is for students aged 11-16. These students would be in grades 6 – 10, so the program spans both the middle school and early high school years. It could be adopted at one level and not necessarily at the other especially during its beginning stages.

Students at this stage – early puberty to mid-adolescence- are in a particularly critical phase of personal and intellectual development. This is a time of uncertainty, sensitivity, resistance and questioning. An educational program needs to provide them with discipline, skills and challenging standards, but also with creativity and flexibility.

IBMYP provides a framework of academic challenge that encourages all students to embrace and understand the connections between traditional subjects and the real world and become critical, and reflective thinkers. Learning how to learn and how to evaluate information critically is as important as learning facts. It is not a selective program for a limited number of students: all young people can benefit in different ways from the IBMYP’s holistic, integrative approach to teaching, learning and thinking. MYP can be configured to be a school within a school or involve the entire building including the special education students, regular education students, and gifted learners. The latter option - to involve the entire school is preferred by IBO.

The program:

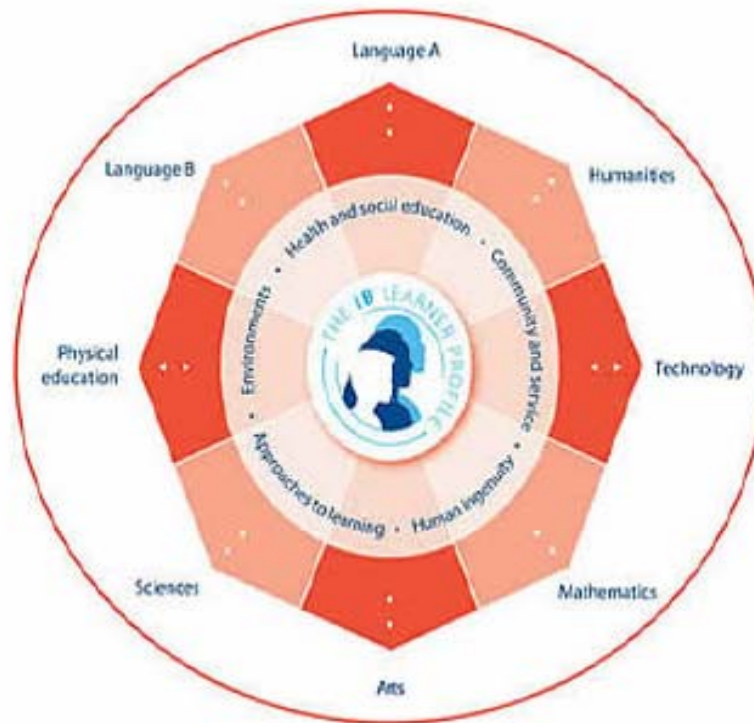
- Encourages international mindedness in IB students starting with a foundation in their own language and culture
- Encourages a positive attitude to learning by challenging students to solve problems, show creativity and resourcefulness and participate actively in their communities
- Reflects real life by providing a framework that allows students to see the connections among the subjects themselves, and between the subjects and real issues.
- Supports the development of communication skills to encourage inquiry, understanding, and language acquisition, and allows for student reflections and expressions.
- Emphasizes through the learner profile, the development of the whole student- physically, intellectually, emotionally and ethically.
- Is flexible enough to accommodate the demands of state and national standards.

5.2 Curriculum

IBMYP consists of eight subject groups integrated through five areas of interaction that provide a framework for learning within and across the subjects. Students are required to study the eight subjects: English (Language A), a second language (Language B), humanities (social studies), science, mathematics, arts, physical education and technology. Each subject must be taught yearly with at least 50 hours of instruction in each of the subjects. In the final year of the program (grade 10), students also engage in a personal project which demonstrates their understandings and skills they have developed throughout the program.⁴⁴

⁴⁴ See unit planer, appendix B, p. 46.

The IBMYP Curriculum Model



- **Areas of Interaction (AOI)**

The AOI are the contexts through which the curriculum content interacts with the real world. They are common interactive themes embedded in the subject groups, but they are not subject disciplines in their own right. They are common to all disciplines and require all teachers to teach their subject content in a way that encourages students to become increasingly aware of the connections between their learning and the real world. They are interdisciplinary.

The five AOI's are:

- **Approaches to learning** is concerned with developing the intellectual discipline, attitudes, strategies and skills that will result in critical, coherent and independent thought and the capacity for problem solving and decision-making. Sample questions include:
 - How do I learn best?
 - How do I know?
 - How do I communicate?
- **Community and Service** starts in the classroom and extends beyond it requiring students to participate at least 50 hours in their own communities and be effective contributors to society. Sample questions include:
 - How do we live in relation to one another?
 - How can I contribute to the community?
 - How can I help others?
- **Human ingenuity** allows students to focus on the evolution, processes and products of human creativity. Students learn to appreciate the human capacity to influence, transform, enjoy and improve the quality of life. Students explore the relationships between science, aesthetics, technology and ethics. Sample questions include;

- Why and how do we create?
 - What are the consequences?
- **Environment** aims to make students aware of their interdependence with the environment so that they become aware of their responsibility, and may take positive, responsible action for maintaining an environment fit for the future. Sample questions include:
 - What resources do we have?
 - What are my responsibilities?
- **Health and social education** prepares students for a physically and mentally healthy life, aware of potential hazards and able to make informed choices. It develops in students a sense of responsibility for their own well-being and for the physical and social environment. Each student must participate in 50 hours of physical activity per year. Sample questions include:
 - How do I think and act?
 - How can I look after myself and others?
 - How am I changing?

The following table shows NPS's current requirements for all three years of middle school and what IB requires:

| NPS Current Middle School Practice Grades 6-8 | IBMYP Requirements⁴⁵ |
|---|---|
| Math, science, social studies, ELA: yearly | Math, science, humanities, ELA: yearly |
| Technology: 1 semester in grade 6 | Technology: can be a stand-alone course or be integrated in other courses |
| World Language: 1 semester, grade 6 | World Language: 3 semesters; one each year |
| Physical Ed.: 2 semesters, gr. 6 (band 1 sem.) 1 semester grades 7 & 8 | Physical Education: 3 semesters; one each year |
| Arts: 1 semester, grade 6 | Arts: 3 semesters; one each year |

The following table shows NPS's current requirements for all the first two years of high school and what IB requires:

| NPS Current High School Practice (Would need to be in grades 9-10) | IBMYP Requirements⁴⁶ |
|---|---|
| Math, science, social studies, ELA: yearly | Math, science, humanities, ELA: yearly |
| Technology: an on-line learning experience | Technology: can be a stand-alone course or be integrated in other courses |
| World Language: N.A. | World Language: yearly |
| Physical Education: 1 semester | Physical Education: yearly |
| Arts: 2 semesters | Arts: yearly |

⁴⁵ The schedule for the core academic areas currently meets the MYP requirements. The elective schedule currently has 36 hours of instructional time which is short of the 50 hour IB requirement. See sample of Norup International School 6th grade team schedule that meets the 50 hour requirement. Appendix A, p. 45.

⁴⁶ The current NHS schedule meets the MYP requirements.

5.3 Standards, Assessment and Accountability in the IBMYP Program

IBMYP has certain **standards** that students must meet during their course of study. The benchmarks are more defined at grades 8 and 10, since students usually transition between levels or IB programs following those years. Though there are IB benchmarks, they are flexible enough, so districts could include their own state GLCE's and HSCE's within the IB benchmarks. These IB benchmarks were written for every subject.⁴⁷

Assessment can be formative, summative, or criterion referenced and can be reviewed by IB if the school exercises this additional cost option.

Assessment is formative, so teachers and students will know what the targets are, where the students are in the learning ladder, and what it will take to move forward. This is assessment FOR learning. It helps the teacher determine how to best help the students and identify their strengths and weaknesses.

Assessment is summative, so students can be measured according to the course benchmarks. This is assessment OF learning. This encourages the teachers and students to be reflective of the assessment process and test their knowledge of the benchmarks.

It is criterion referenced, so students around the world are measured against pre-specified criteria for each subject group. Teachers may modify these criteria to be age-appropriate in the earlier years of the MYP program. The assessment tasks are written for grade 10 students and can be adapted to meet the needs of younger learners. Teachers set assessment tasks that are assessed internally in the school. MYP schools organize their own student assessment and reporting procedures, in accordance with the objectives of the program. Teachers assess student work with guidance from the IB. Prescribed, published criteria for final levels of achievement are written for each discipline.⁴⁸ IB offers an optional external review of student work leading to a record of achievement and certificate. (MYP **certificates** are formal documents limited to schools that elect to have their own assessment of their students validated by the IB.)

At the end of grade 10, students complete an independent piece of work which shows the student's involvement with the five areas of interaction. It can focus on any of the subject areas and must be the student's own work. This project is done in consultation with the supervising teacher and occurs during the course of one year. A topic is submitted; a plan of action is developed; evidence of research is documented; a product is developed; a draft of personal statement is written; a final draft is formed; the final project is presented and displayed at an open house. Some districts are allowing students the option of doing a final project. Those students who request an IB certificate must complete a final project.

5.4 Professional Development

This is a challenging program that demands the best from both motivated students and teachers. Schools can access an extensive package of IB professional development for teachers and administrators and commit to ongoing professional development. Teams from the organization will visit IB World Schools from time to time in order to support an ongoing process of review and development, using standards and practices that apply to all IB World Schools. IB teachers are challenged to constantly reflect upon and improve their practice. All teachers in the IB World Schools have access to the online curriculum center, which provides program documentation, examples of student work, and also acts as the hub of an international online community. Teachers can talk to other teachers in IB schools, give and receive advice, and post their own example resources for other teachers to share.

Level 1 trainings happen at regional workshops throughout the United States and at contracted workshops. At the MYP level, a minimum of one teacher from each of the eight subjects must receive this training. This teacher is expected to practice and share the information with others in the department. Although one teacher is required, many districts send one or two per grade level. Other districts have

⁴⁷ See Appendix C, MYP Objectives, p. 49.

⁴⁸ See Appendix D, Criterion, p. 51.

begun to implement a plan to have a few teachers trained per year and eventually have all their teachers trained. The designated coordinator and head of each school must also attend the Level 1, 2 and 3.

Currently professional development is offered in various states outside Michigan. The southeast Michigan IB consortium has put in an application to become a national training site. They have also sent their personnel to learn to be trainers should their application be accepted. This consortium is currently awaiting a decision from the IB Board. If accepted, the training site would be in Dearborn, MI.

5.5 Additional Requirements

5.5.1 Collegial Planning Time

Grade level teams must have common planning time to discuss the implementation of the curriculum and assessment data. Teachers who teach the same subjects within the same grade also need to collaborate. The common planning time is already imbedded within the middle school schedule. Departments meet on a regular basis to review concerns, information, etc. Common planning time would need to be implemented for physical education teachers and the arts.

Since IB is based upon an integrated course of study, collegial planning time is instrumental to the success of the program. The high school's Seminar will be an ideal venue for the IB teachers to meet, discuss, align and integrate their instruction. Furthermore, it was mentioned a couple times during our school visits that the IB program and its concomitant teacher training will have a positive influence on even those teachers who did not receive IB training since IB teachers tend to raise the level of instruction.

5.5.2 Material Requirements

Textbooks and other equipment and resources that are currently used to meet the Michigan GLCE's and HSCE's can continue to be used. The only possible additional expense would be in the media center since materials need to be stocked that are representative of the various world languages taught. This includes reading books, periodicals, videos, etc.

5.5.3 Overall Cost

The following chart details the cost of the IBMYP program:

| Description | | Amount |
|--|--|----------|
| IBNA/IBO fees: | Application Form Part A (takes one year) | \$8,500 |
| | Application Form Part B (takes one year) | \$8,500 |
| | Annual fee for MYP (paid after authorization) | \$8,000 |
| | Materials that must be purchased from IB (many can be downloaded after candidate status) | \$ 250 |
| | Total fees for authorization (paid over the 2.5 year application process) | \$25,250 |
| Training fees Application Part A: | One teacher in each subject area for Level 1 (8 X \$595) | \$4,760 |
| | Coordinator | \$595 |
| | Principal | \$595 |
| | Other (flight, meals, lodging, subs, transfers, etc.) per person | \$1,400 |
| Training fees Application Part B: | Optional: Per teacher in core subject classes for Level 1 continued | \$595 |
| | Coordinator, Level 2 training | \$595 |
| | Team leaders Level 2 training | \$595 |
| | Other (flight, meals, lodging, subs, transfers, etc.) per person | \$1,400 |
| This does not include the cost of the .25 coordinator's salary | | |

5.6 IB MYP Summary

The Middle Years Program is designed for students ages 11- 16. It can span middle school and freshman, and sophomore high school years. It is designed to work with state and national standards and provide a framework of academic challenge that encourages all students to embrace and understand the connections between traditional subjects and the real world and to become critical and reflective thinkers in a global world and economy.

It began in North America in the early 1990's and has grown continuously ever since. There are about 400 schools that have registered with IB North America in 2008. Five of those schools are in southeast Michigan. Many more are in the various stages of the application process.

Both Berkley and Troy coordinators when interviewed said their districts experienced a growth in enrollment when they achieved IB status. They each grew by about 15 students over the course of the second year of implementation, drawing students from private schools. They expect to continue to grow as more people became aware of the opportunity.

The above districts granted us on-site visits. Both program coordinators expressed a positive change in building culture. They noted a shift in instructional strategies, greater collaboration between teams, grade levels and departments. Students became more aware of the learning targets, the responsibilities they had in their own learning and began to ask questions that showed higher level thinking skills. Students became key players in their educational experience. Self-evaluation practices and understanding metacognitive strategies are the norm.

IBMYP curriculum embodies best practices and pushes all teachers to excellence with a common basis of understanding. IB combines Lynn Erikson's study on concept development; strategizing, analysis, and collaboration afforded through professional learning communities; unit development using the Understanding by Design model; problem based learning implementation; and Marzano's three basic questions to encourage student success:

- What do we want the student to know and be able to do?
- How do we know if they've learned it?
- What do we do if they haven't (or already knew it)?

IB assessments focus on all types of strategies. There are *assessments FOR learning*, *assessments OF learning*, as well as criteria reference standards that are common throughout the discipline. Common assessments are developed by teachers and the data is analyzed to drive instruction. These assessments are compatible with the CLASS A initiative.

Research shows that one of the best strategies to increase student learning is professional development. Although only a minimal number of teachers need to be IB trained including the head of the school and IB coordinator, IB encourages training for all. This could utilize the *trainer of trainers* model where a small group of teachers are sent to IB training and then they return to the district to train others. Additional staff could be sent to the IB training sites across the United States, or an IB presenter could be contracted to come to the district and present to that district or to a collaboration of districts to share the cost.

Some changes in student schedules and requirements would need to be addressed to accommodate the required 50 hours of curriculum instruction in all eight subject areas each year. Within the subjects, the Areas of Interaction would need to be included in both the middle and high school curriculum.

Overall, the cost would have to be balanced against the benefits. The mission of IB is to encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. IB aims to develop inquiring, knowledgeable and caring young people who can help to create a better and more peaceful world through intercultural understanding and respect. It does this through the students and staff each playing an important part in the educational process with the same common understandings.

Appendix A

Norup International School

6th Grade Team

Curriculum Mapping

Team Members: S. LaRaia, V. Brooks, B. LaFranboise, J. Kettner, V. Kennedy, T. Whinham, R. Shaw, M. Jackson

| Math | September | October | November | December | January | February | March | April | May | June |
|--------------------|---|--|--|--|--|--|--|----------------|----------------------|---------|
| Course I | number sense | decimal addition and subtraction | decimal multiplication and division | number patterns and fractions | addition and subtraction of fractions | multiplication and division of fractions | | | | |
| Course II | number sense, patterns and algebraic thinking | rational number operations | integers | equations and inequalities | ratios and proportions | percents | geometric figures | measurement | | |
| Course III | number and operations | data and probability | algebraic reasoning | algebra | geometric reasoning, similar figures | geometry | | | | |
| Language A | Writing Process Review "Roll of Thunder" | 6+1 - Ideas Folk Tales | 6+1 - Word Choice | 6+1 - Voice "The Cay" | 6+1 - Organization Persuasive Writing | 6+1 - Sentence Fluency Adventure | 6+1 - Conventions Fantasy | | | |
| Language B | Introductions basic review, abc's, colors, maps | Weather, numbers, math, time & clothing | More vocabulary, description, adj. agreement | subject pronouns, verbs, holiday, culture, professions | questions, culture, regions | Spanish is a 20 week course divided into two (2) ten week sessions. Students will alternate 10 weeks of Spanish with 10 weeks of Physical Education and repeat the cycle in second semester. | | | | |
| Humanities | Preview US Five themes of geography | Canada | Latin America Mexico | Latin America Central America | Latin America Caribbean Islands | Latin America South America | Western Europe | | | |
| Science | | Process Skills | Cells | Genetics | Matter | | | | | |
| Technology | Biography Trading Cards/Internet Research/ Design Cycle | All About Me/Power Point | Technology is part of a four class rotation. The other classes in this rotation include writing, art and active participation. | | | | | | | |
| Physical Education | Initial fitness testing | Instruction includes: softball, flag football, volleyball, paddle sports, basketball, soccer and others as time and weather permit | Final fitness testing | Spanish is a 20 week course divided into two (2) ten week sessions. Students will alternate 10 weeks of Spanish with 10 weeks of Physical Education and repeat the cycle in second semester. | | | | | | |
| Fine Arts | Sketchbooks Part I in art | texture tiles (clay) | Jackson Pollock - action painting | Jackson Pollock - action painting | primarking elements and principles of design | Specialized Art is a 20 week course that alternates at the semester with a performance-based class that focuses on communication and presentation skills. | | | | |
| Visual | Developmental Worksheets | students will demonstrate growth, organization, evaluation and reflection in the DV | Winter Concert with Choir | Reading Rhythm | reflection | Band Jam Concert | reflection | Spring concert | Transition to Book 2 | Project |
| Band | Fundamentals - Book 1 | Halloween concert | Winter Concert | Reading Rhythm | reflection | Band Jam Concert | reflection | Spring concert | Transition to Book 2 | Project |
| Orchestra | | | | | | | | | | |
| Choir | review basic skills - philosophy of the voice | reading rhythms | pitch singing and sight reading | posture and hand position | music in black history | choral festival and competition | popular music - sharing and discussion | spring concert | | |

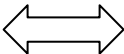


Notice how Norup International School accommodated the 50 hour requirement.

Appendix B

MYP unit planner

| | |
|-------------------------|--|
| Unit title | |
| Teacher(s) | |
| Subject and grade level | |
| Time frame and duration | |

Stage 1: Integrate significant concept, area of interaction and unit question

| | | | | |
|--|---|---|--|---|
| <p>Area of Interaction focus</p> <p>Which area of interaction will be our focus? Why have we chosen this?</p> |  | <p>Significant concept(s)</p> <p>What are the big ideas? What do we want our students to retain for years into the future?</p> | | |
| | | | | |
|  | <table border="1" style="width: 100%;"> <tr> <td style="background-color: #cccccc;">MYP unit question</td> </tr> <tr> <td style="height: 60px;"></td> </tr> </table> | MYP unit question | |  |
| MYP unit question | | | | |
| | | | | |

| |
|---|
| Assessment |
| What task(s) will allow students the opportunity to respond to the unit question? What will constitute acceptable evidence of understanding? How will students show what they have understood? |
| |
| Which specific MYP objectives will be addressed during this unit? |
| |
| Which MYP assessment criteria will be used? |
| |

Stage 2: Backward planning: from the assessment to the learning activities through inquiry

| | |
|---|---|
| <p>Content</p> <p>What knowledge and/or skills (from the course overview) are going to be used to enable the student to respond to the unit question?</p> <p>What (if any) state, provincial, district, or local standards/skills are to be addressed? How can they be unpacked to develop the significant concept(s) for stage 1?</p> | |
| <p>Approaches to learning</p> <p>How will this unit contribute to the overall development of subject-specific and general approaches to learning skills?</p> | |
| <p>Learning experiences</p> <p>How will students know what is expected of them? Will they see examples, rubrics, and templates?</p> <p>How will students acquire the knowledge and practice the skill required? How will they practice applying these?</p> <p>Do the students have enough prior knowledge? How will we know?</p> | <p>Teaching Strategies</p> <p>How will we use formative assessment to give students feedback during the unit?</p> <p>What different teaching methodologies will we employ?</p> <p>How are we differentiating teaching and learning for all? How have we made provision for those learning in a language other than their mother tongue? How have we considered those with special educational needs?</p> |
| <p>Resources</p> <p>What resources are available to us?</p> <p>How will our classroom environment, local environment and/or the community be used to facilitate students' experiences during the unit?</p> | |

Ongoing reflections and evaluation

In keeping an ongoing record, consider the following questions. There are further stimulus questions at the end of the “Planning for teaching and learning” section of *MYP: From principals into practice*.

Students and teachers

What did we find compelling? Were our disciplinary knowledge/skills challenged in any way?

What inquiries arose during the learning? What, if any, extension activities arose?

How did we reflect- both on the unit and on our own learning?

Which attributes of the learning profile were encouraged through this unit? What opportunities were there for student-initiated action?

Possible connections

How successful was the collaboration with other teachers within my subject group and from other subject groups?

What interdisciplinary understandings were or could be forged through collaboration with other subjects?

Assessment

Were students able to demonstrate their learning?

How did the assessment tasks allow students to demonstrate the learning objectives identified for this unit? How did I make sure students were invited to achieve at all levels of the criteria descriptors?

Are we prepared for the next stage?

Data collection

How did we decide on the data to collect? Was it useful?

Appendix C

IBMYP Objectives

(The following objectives represent a partial list of IBMYP science expectations. It is meant to show how flexible the IB expectations are and that the MI GLCE's and HSCE's can be embedded within them. Students would learn the content expectations for both the state and IB assessments.)

The objectives of an IB subject and of the personal project state the specific targets set for learning in the subject. They define what the learner will be able to do, or do better, as a result of studying the subject.

The objectives of sciences listed below are final objectives and they describe what students should be able to do by the end of the course. These objectives have a direct correspondence with the final assessment criteria, A-F (see "Science assessment criteria").

A One World

This objective refers to enabling students to understand the interdependence between science and society. Students should be aware of the global dimension of science, as a universal activity with consequences for our lives and subject to social, economic, political, environmental, cultural and ethical factors.

At the end of the course, and within local and global contexts, students should be able to:

- Describe and discuss ways in which science is applied and used to solve local and global problems
- Describe and evaluate the benefits and limitations of science and scientific applications as well as their effect on life and society
- Discuss how science and technology are interdependent and assist each other in the development of knowledge and technological applications
- Discuss how science and its applications interact with social, economic, political, environmental, cultural and ethical factors.

B Knowledge and understanding of science

This objective refers to enabling students to understand the main ideas and concepts of science and to apply them to solve problems in familiar and unfamiliar situations. Students are expected to develop critical and reflective thinking and judge the credibility of scientific information when presented to them.

At the end of the course, students should be able to:

- Recognize and recall scientific information
- Explain and apply scientific information to solve problems in familiar and unfamiliar situations
- Analyze scientific information by identifying components, relationships and patterns, both in experimental data and ideas
- Discuss and evaluate scientific information from different sources (Internet, newspaper articles, television, scientific texts and publications, and assess the credibility

C Processing Data

This objective refers to enabling students to record, organize and process data. Students should be able to collect and transform data by numerical calculations into diagrammatic form. Students should be able to analyze and interpret data and explain appropriate conclusions.

At the end of the course, students should be able to:

- Collect and record data using appropriate units of measurement
- Organize and transform data into numerical and diagrammatic forms, including mathematical calculations and visual representation (tables, graphs and charts)
- Present data in a variety of ways using appropriate communication modes and conventions (units of measurement)
- Analyze and interpret data by identifying trends, patterns and relationships
- Draw conclusions supported by scientific explanations and a reasoned interpretation of the analysis of the data.

Appendix D

Criterion A: one world

Maximum 6

Students should understand the interdependence of science and society. Students are expected to discuss how science is applied and used to solve specific problems in life and society. Students should be given the opportunity to explore local and global scientific issues and evaluate the interaction between science and scientific developments with social, economic, political, environmental, cultural and ethical factors.

Assessment tasks should allow students to demonstrate their understanding of the role of science and society through the development of analysis and critical thinking. Suitable assessment tasks to assess this criterion include essays, case studies and research projects, but also debates and oral presentations.

| Achievement Level | Descriptor |
|-------------------|--|
| 0 | The student does not reach a standard described by any of the descriptors given below. |
| 1- 2 | The student describes how science is applied to addressing a specific local or global issue. The student states some of the benefits or limitations of science in addressing the issue. |
| 3- 4 | The student describes how science is applied to addressing a specific local or global issue. The student describes some of the benefits or limitations of science in addressing the issue. The student describes how science and its application interact with at least one of the following factors: social, economic, political, environmental, cultural and ethical. |
| 5- 6 | The student explains how science is applied to addressing a specific local or global issue. The student explains some of the benefits and limitations of science in solving the issue. The student discusses how science and its application interact with some of the following factors: social, economic, political, environmental, cultural and ethical. |

(Levels 1-2 could correspond to grade 6 expectations; levels 3-4 could correspond to grade 8; levels 5-6 correspond to grade 10.)

Criterion B: Knowledge and understanding of science

Maximum 6

Students should show their understanding of the main scientific ideas and concepts of science, by applying these to solve problems in familiar and unfamiliar situations. Students should develop critical-thinking skills to analyze and evaluate scientific information.

Suitable assessment tasks to assess this criterion include complex questions in tests, critical analysis of case studies, research projects or media articles on scientific issues. Assessment tasks should provide opportunities for students to demonstrate their understanding by solving problems in familiar and unfamiliar situations, and by analyzing and evaluating scientific information presented to them.

| Achievement Level | Descriptor |
|-------------------|---|
| 0 | The student does not reach a standard described by any of the descriptors given below. |
| 1- 2 | The student recalls some scientific ideas and concepts and applies these to solve simple problems . |
| 3- 4 | The student explains scientific ideas and concepts and applies scientific understanding to solve problems in familiar situations . The student analyzes scientific information by identifying parts, relationships or causes. The student provides an explanation that shows understanding. |
| 5- 6 | The student explains how scientific ideas and concepts and applies scientific understanding to solve problems in familiar and unfamiliar situations . The student analyzes and evaluates scientific information by making scientifically supported judgments about the information, the validity of the ideas or the quality of the work. |

Unfamiliar situation: Refers to a problem/situation where the context or the application is modified to be considered unfamiliar for the student.

(Note: Levels 1-2 could correspond to the highest expectation level in grade 6 and the lowest expectation level in grade 10; levels 3-4 could correspond to the highest expectation level in grade 8 and the middle expectation level in grade 10; and levels 5-6 correspond to the highest level in grade 10.)

6 International Baccalaureate Primary Years Program (IBPYP)

“A PYP school is a school which regardless of location, size or constitution, strives towards the development international-mindedness.”
IB World

6.1.1 The International Baccalaureate Primary Years Program (IBPYP)

IBPYP is a transdisciplinary program of international education designed to foster the development of the whole child as an inquirer, both in the classroom and in the world outside.

The International Baccalaureate® Primary Years Program (PYP) is designed for students aged 3 to 12. This could include pre-school through fifth grade. The program focuses on the total growth of the developing child, touching hearts as well as minds and encompassing social, physical, emotional and cultural needs in addition to academic development.

The PYP draws on research and best practice from a range of national systems with a wealth of knowledge and experience from international schools to create a relevant, engaging, challenging and significant educational framework for all children.

6.2 Curriculum

The PYP promotes inquiry as a pedagogical approach.

- The PYP develops a concept-driven framework.
- *Concepts vs. Content*
- The PYP strikes a balance between the transdisciplinary program of inquiry, traditional disciplines and standards.

The PYP curriculum is a framework guided by six transdisciplinary themes of global significance. These themes span all content areas, are determined by IB and form the interconnectedness of subjects. Each theme is explored for a certain time during the year, so students can make connections and understand the “big picture”. The themes, which can be found on the outer ring in the hexagon, are explored using knowledge and skills derived from six subject areas, with a powerful emphasis on inquiry-based learning.

The six subject areas are: language, social studies, mathematics, the arts, science, and personal, social, and physical education. These subjects are already part of the NPS elementary school curriculum. The curriculum framework consists of five essential elements: concepts, knowledge, skills, attitudes, action. The knowledge component is developed through inquiries into six transdisciplinary themes of global significance, supported and balanced by six subject areas.

The curriculum framework is further structured around three interrelated questions:

- What do we want students to learn? (The written curriculum)
- How best will students learn? (The taught curriculum)
- How will we know if they have learned it? (The assessed curriculum)

Themes, subject areas, curriculum framework, curriculum cycle and learner profile are illustrated by the hexagon below:

IBPYP Curriculum Model



The following table shows NPS's current requirements for elementary school and what IB requires:

| NPS Current Elementary School Practice ⁵⁰ | IBPYP Requirements ⁴⁹ |
|--|---|
| Reading and Writing: yearly | Language: yearly |
| Social Studies: yearly | Social Studies: yearly |
| Mathematics: yearly | Mathematics: yearly |
| Humanities: yearly | Arts: yearly |
| Science: yearly | Science: yearly |
| Physical Education: yearly | Personal, social and physical education: yearly |

⁴⁹ The current NHS schedule meets the IB PYP requirements.

⁵⁰ See Appendix A for comparison between Amerman and IB, p.57.

6.3 Standards, Assessment and Accountability in the IB MYP Program

Teachers assess students by selecting or designing methods of assessment appropriate to the learning outcomes they intend to capture.

Teachers also take into account the diverse, complicated and sophisticated ways that individual students use to develop and demonstrate their understanding.

The prime objective of assessing students' learning and performance is to give feedback to:

- Students- to encourage the start of lifelong learning
- teachers- to support their reflection on what to teach and how to teach it
- Parents- to highlight their child's learning and development.

The PYP requires valid and varied assessment which:

- drives instruction
- recognizes the importance of the process and product
- utilizes differentiation (through summative and formative models)

6.4 Professional Development

Teachers receive training before and after a school becomes authorized to teach the program.

Before a school becomes authorized to teach the program, the principal, coordinator and teachers involved are required to undergo training; either by attending IB workshops or by participating in school-based training organized by the IB. An IB presenter can do the training at the school site for the entire staff.

6.5 Additional Requirements

6.5.1 Collegial Planning Time

Grade level teams must have common planning time to discuss the implementation of the curriculum and assessment data. The common planning time is already imbedded within the schedule.

6.5.2 Material Requirements

No additional materials would need to be purchased.

6.5.3 Application Process and Cost

| Description | Number and Unit Cost | Total Cost |
|---|----------------------|----------------------|
| Training Initial Level 1 Training- 1 teacher per grade level, 1 humanities teacher, 1 coordinator/principal Remainder of training could be offered on site. Fee unknown. Schedule during a PD Day for cost saver. Coordinator- minimum 25% FTE. Cost unknown. | 9 staff X \$1400 | \$12,600 |
| Additional Level 1 training for remainder of faculty: Consultant \$300 X 4 days | \$250/person | TBD |
| Registration fees for remaining faculty | \$250/person | TBD |
| Fees Authorization fee Annual fee | | \$8500 \$6600 USD |

Plus the cost of a .25 Coordinator

5.6 Summary

The IBPYP program spans both preschool and the elementary years. Each level could be a separate decision and one does not hinge upon the other. In PYP, students learn through a thematic approach that integrates the subjects. State GLCE's can still be taught and assessed within the thematic units.

Besides the attention to academics, IB places importance on the whole child. PYP emphasizes the intellectual, personal, emotional and social growth through all areas of knowledge. The learner profile and PYP attitudes aim at developing an inquiring mind and caring young people who are international minded. They will help to create a better world by cultural understanding and respect for others.

The IBPYP program most closely aligns with NPS current scheduling and has fewest IB requirements.

Appendix A

Possible Benefits

- Provides systematic professional development
- Although many of the components are in place at Amerman, IB provides a systematic way to implement throughout the curriculum.

| Component | International Baccalaureate-Primary Years Programme | Amerman Elementary School |
|------------------------|---|--|
| Curriculum | Michigan GLCE's | Michigan GLCE's |
| Approach | Inquiry, Thematic (Who we are; Where we are in time and place; How we express ourselves; How we share the planet; How the world works; How we organize ourselves), Big 6 research model. | Bloom's, Three dimensions of curriculum (appendix), metacognition in ELA, media class. |
| Affective | Learner Profile; <ul style="list-style-type: none"> • Inquirers • Thinkers • Communicators • Risk Takers • Knowledgeable • Principled • Caring • Open-minded • Well-balanced • Reflective | Graduate Profile: <ul style="list-style-type: none"> • Analytic thinker • Effective communicator • Quality contributor • Continuous learner • World class citizen |
| Teachers | Collaboration | Collegial meetings |
| Assessment | MEAP, formative and summative assessment, authentic assessments with rubrics-student portfolios | MEAP, formative and summative assessment, writing portfolios |
| Culminating Projects | Fifth grade | Learning Fair |
| International emphasis | PYP Attitudes (International Mindedness), exploration of cultures | 3 rd grade analysis of Japan, US, and France; Partnership with Roberto Clemente and Kids4AfghanKids. |
| Accountability | International Baccalaureate and NCA | NCA |
| Learner | Holistic approach | Holistic approach |
| Art | Content-based | Discipline-based |