

**PELHAM PUBLIC SCHOOLS
BOARD OF EDUCATION WORK SESSION
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**Discussion on the Feasibility of Offering the IB Middle Years Programme at
Pelham Memorial High School**

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DISCUSSION OUTLINE

1. Alignment with Strategic Plan
2. Challenges Associated with MYP Expansion
3. Impact on Student Experience
4. The IB Learner Profile
5. Equity and Access
6. Continuous Improvement
7. Research-Based Best Practices
8. Improving Assessment

Action Steps to Achieve our Strategic Plan

Principles and content of 21st Century learning

- 1. Establish a K-12 Innovation and Creativity Steering Committee**
- 2. Foster a culture where growth is at the center of learning**
- 3. Expand secondary course offerings to include programming and at least one Asian language**
- 4. Promote flexibility among students' academic groupings at the secondary level****
- 5. Investigate IB Program for Middle School**
- 6. Implement 1:1 Chromebook initiative**
- Determine viability of world language studies at the elementary level K-6
- 8. Integrate STEAM strand K-12**
- 9. Provide effective feedback and effective questions to students to foster critical and creative thinking**
- Create an electronic bank of best practices and resources for K-12 educators
- Expand authentic learning experiences
- Create field experiences that are culturally rich and diverse and which open new doors to the practices of 21st Century work and problem solving
- Partner with global organizations
- Create systems and venues for collaborative work for teachers and for students; internally and beyond district borders

- Study/create K-5 learning opportunities available to students across all four elementary schools**
- Develop capstone performance-based assessments for grades 5, 8, and 12
- Implement student mentoring programs
- Design curriculum content that activates an emotional connection and commitment to the use of critical thinking with multiple literacies

Coordinated networks of support and targeted instruction

- 1. Define and align staff members' roles and responsibilities**
- 2. Build strong networks of support for all major points of students' transitions**
- 3. Mobilize and enhance resources to focus on supports for development of early learning (Kindergarten screening through grade 2)**
- 4. Enhance professional expertise in providing effective feedback to learners in order to maximize their engagement and success**
- 5. Provide seamless support systems to meet students' needs****
- Enhance parental partnerships in students' learning**
- Increase partnerships with community organizations and agencies, colleges and universities, and state organizations and agencies in order to maximize services for pupils

Social-emotional development and wellness of the whole child

- 1. Establish a Wellness Committee Task Force that is multi-disciplinary, represents K-12 and focuses on social-emotional wellness**
- 2. Develop systemic and systematic K-12 social-emotional wellness standards and curriculum**
- 3. Promote school environments that are healthy, safe, supportive, engaging and inspiring**
- 4. Host District-wide celebrations which showcase diversity, acceptance, appreciation and understanding of peers****
- Create curriculum-based opportunities that foster relationships beyond the school day and the school boundaries**
- Implement K-12 systemic programs and experiences designed to foster social emotional growth
- Create systems for mentoring of pupils: adult to student and peer to peer; every student to have a trusted adult in the Pelham Public Schools
- Create an electronic resource bank of information, research and services made available for employees and families

Professional culture of learning, effective feedback and growth

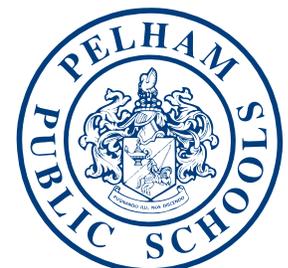
- 1. Define and align staff members' roles and**

responsibilities in order to strengthen K-12 coordination and collaboration

- 2. Form a Professional Learning Advisory Council (PLAC)**
- 3. Adopt principles through which all professional learning in the district will be framed and evaluated; create learning framework for consistency and focus**
- Create and implement feedback loops in order to strengthen quality of learning experiences, foster reflective practice and identify needs for next levels of learning
- Communicate long term plans (annual) for professional learning opportunities
- Develop system for archiving and distributing best resources for all employees to reference/utilize
- Develop alternate and multiple forms of professional development models for employees' learning and growth, including flexible use of school calendar time and extended time
- Customize/personalize job-embedded learning opportunities for professional learning communities and individuals when applicable; choice and differentiation when possible
- Expand the use of technology: Pelham You, webinars, Google groups, on-line learning, tutorials, etc.

** Denotes recommendation also made by Diversity Task Force

Action steps in bold print will be the first priority steps in 2014



MYP in Grades 9 & 10 Discussion Themes

1. Alignment with Strategic Plan (Peter)
 - a. 21st Century Learning
 - i. Moving beyond outdated models
 - ii. Impact of technology
 - iii. Global citizenship
 - b. Networks of Support
 - c. Social-Emotional Development
 - d. Professional Development

2. Challenges Associated with MYP Expansion (Sean & all)
 - a. There are differences between the middle and high school.
 - b. High school teachers would need to work collaboratively to look at curriculum, teaching, and assessment in a new way.
 - c. There is less meeting time available for PMHS teachers.
 - d. PMHS teachers teach a variety of courses.
 - e. Teachers will need to balance MYP expansion with other agendas
 - f. We will need to figure out how to supervise students' Personal Projects in grade 10.
 - g. We will need to expand our current grade reporting process.

3. Impact on Student Experience (Rob & Lynn)
 - a. Inquiry-Based Learning
 - b. Interdisciplinary Learning
 - c. Global Perspective
 - d. Authentic Work
 - e. Real World Connections
 - f. Hands-on Experiences
 - g. Student Engagement

4. Learner Profile (Jeannine & Judd)
 - a. (In addition to Inquirers, Knowledgeable, Thinkers, Communicators . . .)
 - b. Principled, Open-Minded, Caring, Risk-Takers, Balanced, Reflective
 - i. Academic Honesty/ Ethical Behavior
 - c. Social, Emotional, and Physical Well-Being
 - i. Educating the "whole child"
 - d. Responsible Action Within and Beyond School Community
 - e. Emphasis on Language Acquisition
 - f. Ethical Responsibility
 - g. Service and Action
 - i. Connection to community
 - h. Academic Honesty
 - i. Diversity

5. Equity and Access (Jeannine)
 - a. Continuity of Program
 - i. Connecting Middle and High School Curricula and Practice
 - b. Access for All
 - i. “Levels the playing field”
 - c. Shrinking the Gap
 - i. Preparing All Students for Success in Rigorous Classes
 - d. Student Empowerment
 - i. Taking control of their own learning
 - ii. Alleviation of test pressure
 - iii. Fostering passion
 - e. College and Career Readiness

6. Continuous Improvement (Steve)
 - a. Systemic Improvement
 - i. Moving beyond “pockets of excellence”
 - ii. Research-based
 - b. Professional Development
 - c. Reflection
 - i. 5 year renewal process
 - d. Lens for Supervision

7. Research-Based Best Practices (Maria & Tom)
 - a. Differentiated Instruction
 - b. Interdisciplinary Planning and Learning
 - c. Vertical and Horizontal Alignment of Curriculum

8. Assessment Reform (Sean)
 - a. Formative Assessment
 - i. Assessment *for* Learning
 - b. Authentic Assessment
 - c. Performance-Based Assessment
 - d. Backwards Design

Action Plan Addressing Identified Challenges Associated with MYP Expansion into PMHS

Through the following action plan, the administrative team seeks to respond specifically to the anticipated challenges first presented at the January 12, 2016 Board of Education update.

1. There are differences between the middle and high school.

To some extent, Pelham Middle School teachers are more familiar with working collaboratively and with teachers of other disciplines, planning from a student-centered (rather than curriculum-centered) perspective, and thinking in terms of the “whole child.” If we agree that these are desired traits for all teachers, this is all the more reason why it is important that PMHS teachers’ professional development provide opportunities to deal with these in a substantive manner. In addition, a number of “split” PMS/PMHS teachers (in World Languages, art, music, and health) have been experiencing the MYP implementation process this year and are both responding enthusiastically and meeting with great success. In some ways, high school implementation is an easier process, since - unlike at the middle school - no changes in course offerings or student schedules will be needed. In addition, high school implementation will require a significantly smaller group of teachers to be trained. While change is often challenging in education, we have already - at PMHS - committed to MYP aspects such as performance-based assessments (through PADI), differentiated instruction (through our work with Carol Ann Tomlinson), Charlotte Danielson’s Framework for Teaching (in our teacher observation/ APPR process), Understanding by Design, Curriculum Mapping, and Growth Mindset. The difference here is that the MYP would now provide a systemic and ongoing means through which to accomplish the goals we have already set before ourselves.

2. High school teachers would need to work collaboratively to look at curriculum, teaching, and assessment in a new way.

Most worthwhile outcomes require some challenge. While some teachers find change inspiring and rejuvenating, others have the tendency - once they are secure in their daily practice - to stick with “tried and true” methods and materials. The problem with this latter tendency is that it fails to account for changes - social, political, economic, environmental, and technological - occurring in the world outside. One only need look as far as the daily news to get a sense of how quickly the world is changing, and we as educators must change with it. Since we can’t know what will exist at the end of this road, we need to prepare students who can be innovative, resilient in the face of change, and willing to grow, with initiative, critical thinking, and intellectual curiosity and enthusiasm. MYP implementation will require teachers to work hard, but this is rewarding work, as the middle school teachers can already attest to. Implementing the MYP will be an ambitious undertaking, but one that has immense value not only for the students, but for the teaching staff as well. As teachers begin the process of unit planning and start to focus their teaching on an inquiry-based model where they are exploring essential questions, making interdisciplinary connections, examining a global context, and creating culminating authentic assessments, they will hopefully see the intrinsic and extrinsic value in these endeavors. Since many of the teachers already incorporate elements of this model into their lessons, it is unlikely they will see the IB as an overhaul of their craft. Key to a successful process will be pacing the professional development so that teachers have the time to master each element of the MYP and apply it in their classrooms in the midst of competing initiatives.

3. There is less meeting time available for PMHS teachers.

During the 2015-16 school year, Pelham Middle School teachers met about three times per month for professional development related to the MYP. This has been possible since most faculty, department, and curriculum meetings were given up to this purpose. We know this will not be possible at PMHS, due to other responsibilities and initiatives teachers will be pursuing. However, this need not be an impediment to our pursuing an authorization process. First, the process at PMS has resulted in teacher progress far beyond what most candidate schools accomplish in a similar timeframe, PMHS need not be as ambitious; applying for authorization requires much less work than we are currently undertaking at the middle school. Second, while we will most likely be ready to apply for middle school authorization in October of this year - within about a year of the beginning of candidacy - the candidacy process can, and usually does, take longer. Therefore, if we want to take two or three years to get ready to apply for authorization to offer MYP in grades nine and ten, there is no reason why we can't. What is important is for us to submit our application to be a candidate school, and therefore be able to receive the access to materials, consultation with the IB, support, and training we will need to begin the process. Initial estimates indicate that the IB Supervisor will be able to meet with teachers for one or two professional development sessions each month. In addition, as with any school improvement, a few staff members must also serve as "change agents" in this process, with an eye toward engaging and motivating the rest of our professional staff. Since the fall our Directors have been looking at ways of creating teachers' schedules that would facilitate the success of the MYP if the authorization process moves forward in the high school. The Directors and Principal have selected potential staff members who would be both willing to be trained in MYP: Category 1 and could teach predominantly ninth and tenth grade classes. These teachers could serve as turn-key facilitators, helping the ninth and tenth grade teachers develop their units and assessments.

4. PMHS teachers teach a variety of courses.

Currently, there are many teachers at PMHS who teach one or two ninth or tenth grade classes, while some do have ninth and tenth grade classes making up a majority of their schedule. It would be beneficial for teachers who will be involved with MYP to have a more "pure" schedule, with at least 60% of their schedule consisting of ninth or tenth grade classes. This is possible, especially now that - contractually - teachers can teach two AP classes without it counting as an additional .2 FTE. More consistent schedules, when feasible, will have the added benefit of allowing teachers to teach fewer "preps" and be able to concentrate with more focus on a smaller number of different lessons per day. That being said, even if individual teachers do have one or two classes outside grades nine and ten, split teachers teaching at PMS have already demonstrated that a mixed MYP/ non-MYP program is possible, and that - in fact - MYP training can have a positive impact upon teachers' approach to the rest of their courses. Directors have already started examining schedules to see if the variety of courses can be reduced and staff can be assigned to fewer grade levels. This would facilitate the "turn-key" process and allow for more collaboration between ninth and tenth grade teachers. It is also important, during this process, that we preserve our robust elective program at PMHS so that the ninth and tenth grade teachers can continue to teach the electives about which they are very passionate.

5. Teachers will need to balance MYP expansion with other agendas.

English, Social Studies, and Math teachers will all be dealing with curricular changes related to the Common Core, and science teachers will be dealing with new standards. This means that they will not be able to concentrate exclusively on the MYP in upcoming years. As was mentioned earlier, if PMHS needs a longer candidacy period in order to meet the IB's requirements, this is not a problem. High school teachers will - by necessity - receive less IB training and work time than middle school teachers have within the same period of time. It should be possible at times, however, to combine initiatives. For example, if teachers need to create new units to respond to Common Core changes, they can still do so using the MYP Unit Planner once they have been trained in its use. High school teachers often feel especially passionate towards and protective of their course content, and it is important that they understand that, under the MYP, content will not be sacrificed. The more they see the MYP in action, the more confident they will feel in this regard. The Principal and Directors have already expressed a willingness to be flexible when it comes to Wednesday meetings, so that teachers can have time both for professional development and IB-related work. In addition, while teachers should still have the option to choose the topics they will address in their Professional Learning Communities (PLCs), many middle school teachers chose to focus on MYP initiatives during their PLC sessions, and some high school teachers might be interested in following suit.

6. We will need to figure out how to supervise students' Personal Projects in grade 10.

For the capstone project MYP students complete during grade 10, each student will need to have a "supervisor" to support him or her, provide guidance, and assess the finished project. With over 200 students in grade 10, either a small group of teachers will be responsible for large numbers of students, or a large percentage (perhaps all) of the faculty will need to provide this service for students. This is similar to the situation we will eventually face regarding the Community Project in grade 8, but, in that case, students can work in groups of up to three with one supervisor, mitigating the issue somewhat. While this is not an issue we would need to deal with at PMHS for a few years, it behooves us to begin to consider it now. Some possibilities that could provide room for this contact time:

- Teachers could meet with students during Academy Period. If necessary, one Academy Period a week could be freed for Personal Project consultation
- The Personal Project could be tied to a 10th grade course, with room allotted in the curriculum for support and supervision
- Teachers could be freed from part of a duty period (every other day, once a week) dependent upon the number of students he or she was supervising.
- The IB Coordinator could, as part of his responsibilities, act as supervisor for a number of students' Personal Projects

7. *We will need to expand our current grade reporting process.*

Schools offering the MYP are required to communicate student achievement in each subject group to parents at regular intervals, usually during, and at the end of each school year. Each subject group assesses students in four criteria, and students receive a score from 0-8 in each of the four. These scores are added together to make a score from 0-32, which is then converted into a grade from 1-7. These 1-7 grades need to be communicated to parents. Schools can either report grades in a parallel format (MYP grade and traditional grade out of 100%), or they can use a formula to convert the MYP grade to a percentage. At PMHS, it would make the most sense to report parallel grades. MYP schools report that the communication of MYP grades is not an arduous process; in fact, it actually makes the assessment process easier. We could either report MYP levels on our usual report cards (through the “comments” function, for example), or we could use another software solution. Many IB schools use the ManageBac system, which handles IB grading in addition to curriculum planning and mapping, community service, virtual classrooms, community and personal projects, and other functions. We could consider using this product in the future, although it might overlap with a number of other products (Rubicon, eChalk), which we already use. As a start, reporting IB grades once per year, at the end of the year, would be sufficient and would not need to be considered until two or three years down the line.

Summary of Research Relating to the International Baccalaureate: Middle Years Programme

Below is a summary, for your convenience, of research pertinent to quantitative and qualitative effects attributed to student participation in the International Baccalaureate: Middle Years Programme. If you are interested in reading further, full studies are available via the Weebly site, at:

<http://ibpelham.weebly.com/links.html>, Password: pelhammyp

A Comparison of MYP and Non-MYP Students' Participation and Performance in High School

In a 2015 study of a large, socioeconomically diverse district of rural, urban, and suburban communities, outcomes of high school students who attended an MYP school were compared with those who had not. Higher percentages of students who previously attended MYP schools participated in AP exams compared with students who attended non-MYP schools. Furthermore, higher percentages of students who previously attended MYP schools achieved at least one college-ready score on AP exams as compared with students who attended non-MYP schools. Among the students who took at least one AP exam, MYP students took significantly more exams than their non-MYP counterparts. This study suggests students may have gained skills in MYP that prepared them for success in advanced courses such as AP (Wade, 2015).

An Evaluation of the International Baccalaureate Middle Years Programme in a High School Setting

In a 2015 study of a high school in a suburban school district in North Carolina, after three years of MYP implementation in grades nine and ten the school experienced a decline in suspension rates and an improvement in students' academic and self-perceptions. Students reported that they enjoyed being in school at more than double the national frequency. In surveys, students shared the positive impact of the MYP service learning requirement and indicated that the Personal Project was "a benefit, a significant learning experience, a challenge . . . and . . . the context in which . . . they had gained knowledge about the world and other cultures." Students also cited additional benefits including oral presentation skills, responsibility, independence, and time management (Cook, 2015).

A Case Study of How an International Baccalaureate Middle Years Programme and Leadership Synergistically Promoted Student Learning and School Success

A 2014 study of a Georgia middle school found that the IB: MYP had a positive impact upon students' academic performance by delivering an interdisciplinary curriculum, inquiry-based approaches to learning, real-world experiential activities, coaching and mentoring, and individual student responsibility and accountability. As stated in the study, "It is . . . through the application of content and concepts that learners not only learn new knowledge, but more importantly, they develop the capabilities to process and apply that knowledge to real-world situations" (Johnson, 2014).

Continuation Study of Student Performance and Engagement in the Middle Years Programme

In a 2013 study, previous enrollment in the MYP appeared to have a positive impact on students' global mindedness (Wade, 2013).

The International Baccalaureate Middle Years Programme and Its Effect on Students in Poverty

As part of a 2013 study focused on the impact of the MYP on students in poverty, teachers reported that the MYP helped students "see the bigger picture," "make connections between the mathematics curriculum and real world applications," and "think critically and reflect." Through the MYP, teachers worked together to create interdisciplinary lessons, they incorporated real-world events, experienced increased collegiality, built more creative lessons, moved beyond memorization, planned higher-level lessons, and taught "beyond what is tested." Teachers reported that on the whole the MYP benefitted students by encouraging higher order thinking and educating the whole child. They also suggested that the MYP improved teacher pedagogy by encouraging collaboration and teaching beyond tested material (Kobylnski-Fehrman, 2013).

A Quasi-Experimental Quantitative Study of the Effect of IB on Science Performance

A 2013 study compared science performance of MYP students with their non-IB peers and found that MYP students outperformed the non-IB students on the Colorado Student Assessment Program across all grade levels (Healer, 2013).

Observing Classroom Instruction in Schools Implementing the International Baccalaureate Programme

A 2013 study of Texas MYP schools reported that IB students were on-task 87% of the time, as opposed to 73% of non-IB students (Alford, 2013).

Student Performance and Student Engagement in the International Baccalaureate Middle Years Programme

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

High School Student Engagement Among IB and non-IB Students in the United States: A Comparison Study

In 2009, in an analysis of High School Survey of Student Engagement (HSSSE) results, IB students rated their levels of academic, social, and emotional engagement significantly higher than non-IB students. In the national sample, 63% of IB students had written papers of five pages or more on a regular basis, whereas only 49% of non-IB students had done so. 53% of IB students had discussed ideas from readings or classes with teachers outside of class, compared to 39% of non-IB students. 43% of IB students believed that their school had contributed very much to their ability to think critically, while 35% of non-IB students believed the same about their schools. 26% of IB students strongly agreed that they felt academically challenged by their coursework, whereas 19% of non-IB students strongly agreed that they felt challenged (Shah, 2010).

An Educational Evaluation of the International Baccalaureate Middle Years Program

In a 2005 study of the impact of IB: MYP at a Southern California middle school, students who had received two years of MYP demonstrated significantly greater improvement in mathematics and English-language arts (as measured by the California Standards Tests) as compared to students in the same district who had not experienced the program. According to the study, “This finding is consistent with the literature [in showing] that innovative, comprehensive school programs with rigorous standards appear to be more effective than conventional education in meeting the academic needs of public school students.” The study also demonstrated that the IB: MYP better prepared students for higher level math, as significantly more students in the IB school took the more advanced course option. In addition, according to this study, “These findings provide evidence that academic programs like the International Baccalaureate are effective in meeting the academic needs of students from diverse social, ethnic, and economic backgrounds” (Willcoxon, 2005).

The International Baccalaureate Middle Years Programme: A Model of Program Implementation and School Reform

In a 2002 study examining the development and implementation process of the IB: MYP in a suburban western Pennsylvania school district in grades six through ten, during the first year of MYP implementation, teachers demonstrated an increase in interdisciplinary connections and collegial work. Teachers reported that the program encouraged independent and global thinking. Administrators reported regret at not involving ninth and tenth grade teachers more intimately with program implementation from the beginning (Powell, 2002).

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