

EVALUATION REPORT



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A study of the implementation and impact
of the MYP: Next chapter

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This report is made possible by the many dedicated members of the research team who contributed to this five-year long evaluation. Members of this research team travelled tens of thousands of miles to complete site visits, analyzed data from thousands of teachers and student survey respondents, produced nearly a dozen reports and dissemination materials, and so much more. In particular, without the leadership and brilliance of Dr. Sarah Mason, this report and evaluation would not be possible.

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EXECUTIVE SUMMARY

This executive summary presents the main findings and considerations of the fourth and final phase of the Claremont Evaluation Center's (CEC's) 4.5 year evaluation of the MYP: Next chapter (MYP NC). This phase examined the final performance monitoring of school's implementation of MYP NC strategies identified in the initial phase of this research (that data collected from teachers, students and school visits as well as academic and non-academic outcomes from the evaluation. This executive summary is written to inform the decision makers and other IB stakeholders about the overall approach, main findings and key messages of the final phase of this study¹.

The executive summary is divided into six main sections:

- **Section 1** presents the scope of the current report in relation to the previous studies conducted by CEC under the longitudinal MYP Evaluation
- **Section 2** provides the main methodological approaches, the definitions of the key terms used in the report and the research questions of the outcomes
- **Section 3** describes the findings related to:
 - a. IMPLEMENTATION STRATEGIES and provides a high-level review of the status of implementation performance monitoring from the third round of data collection from teachers, students and school site visits.
 - b. STUDENTS' OUTCOMES assessed for the purposes of this evaluation to provide a high-level first look at the impact of the MYP: Next chapter changes.
- **Section 4** provides the main salient conclusions of the study
- **Section 5** briefly describes key messages of this report, as well as set of considerations for schools
- **Section 6** presents the main limitations of this study and provide recommendations for further research in the area of MYP implementation.

1. THE SCOPE OF THE CURRENT REPORT

Building on findings from the 2016 Implementation Report, the 2017 Performance Monitoring Survey Report, the 2017 MYP Case Study Report, and the 2018 Integrated MYP Evaluation Report, this final report endeavors to:

- Provide an updated snapshot of MYP implementation from the 2018-2019 school year.

¹ This executive summary is published on the IB research public website and includes redundancies to the main body of this report.

- Documents student and teacher perceptions of the programme as it relates to the performance monitoring of nine strategies determined in the first phase of CEC's evaluation as exemplifying the MYP Next Chapter changes from pre-2015 MYP programme.
- Examines, for the first time, student non-academic and academic outcomes.
- Summarizes findings from six case study site visits (undertaken at schools across four countries)
- Analyzes eAssessment results from 15,232 students from approximately 227 schools, and performance monitoring surveys completed by 1,558 teachers and 16,364 students from across 383 IB world schools.

2. METHODOLOGY

This report combines qualitative (case study site visits), quantitative performance monitoring framework (PMF) survey and eAssessment data to report on student outcomes. This practice of merging different data types to answer research questions is broadly known as mixed-methods research.

CEC chose to integrate data sources to: assess the degree to which there is consistency in findings across data sources (i.e., triangulation²) and to draw upon different data sources to explain and elaborate on findings from the other methods (i.e., complementarity³). Where appropriate, CEC compared, contrasted, and extended upon these key findings using data from both sources to present high-level key findings. Detailed information from the quantitative survey and eAssessment data can be found in the appendices of this report.

2.1 OUTCOMES EVALUATION QUESTIONS

A series of evaluation questions guided the data collection, analysis, and reporting for this final round of the CEC longitudinal study. They include:

1. What have been the effects, both intended and unintended, of MYP: Next chapter implementation?
2. Which aspects of MYP: Next chapter appear to have had the greatest effect on students, teachers, and schools?
3. In what ways do outcomes vary for different schools, groups of students, and contexts?
4. What changes do schools perceive to have been most successful?

² Triangulation refers to convergence, corroboration, or correspondence of results from different methods studying the same phenomenon (Greene et al., 1989)

³ Complementarity refers to the elaboration, enhancement, or clarification of the results from one method with the results from the other method (Greene et al., 1989)

5. Does higher implementation of MYP: Next chapter lead to better academic performance?

2.2 DEFINING STUDENT OUTCOMES

Student outcomes are defined in the final phase of the CEC evaluation as being non-academic and academic:

- **Non-Academic outcomes** measured were: (1) active community members, (2) lifelong learning, and (3) international mindedness. Collectively these outcomes are referred to in the report as **'learner profile attributes'** given their link to the IB learner profile⁴ and the IB's commitment to helping young people develop capacity and responsibilities beyond academic success.

These non-academic outcomes were matched to MYP programme strategies (see 2.3) that define implementation in CEC's evaluation as follows; Active community members were measured by survey data that asked about the service as action strategy; lifelong learning survey data relates to the strategies of vertical articulation and approaches to teaching and learning; and finally international mindedness outcomes related to the global contexts strategy.

- **Academic outcomes** examined the extent to which MYP's eAssessment scores from 2019 correlate with the nine implementation strategies.

2.3 DEFINING THE MYP NC THEORY OF CHANGE

Nine areas of the MYP programme were seen to have been **augmented**, **strengthened** or **changed** from the pre-2013 MYP (see **table 1**). These areas, called strategies, fall under two broad categories⁵ as described below: i) pedagogy changes and ii) implementation & recognition changes.

Table 1: MYP NC Theory of Change		
Pedagogy Changes		
Strategy	Description of Change	Purpose of Change
Vertical Articulation	Subject Group overviews and progression indicators.	Explicit support for vertical planning across MYP years 1-5. Explicit reference from PYP and to DP at programme and subject guide levels.
Interdisciplinary Planning	Requirement of (at least) one collaboratively planned interdisciplinary units per year of the MYP. Interdisciplinary is included in e-portfolio external assessment.	To emphasize the importance of interdisciplinary learning and teaching.

⁴ <https://www.ibo.org/benefits/learner-profile/>

⁵ These categories were retrospectively added for clarity in this executive summary.

Concept-driven Teaching	Unit plans include: (1) Key and related concepts and (2) statements of inquiry.	(1) Increased transparency of conceptual understanding in the unit planning process and (2) encourage explicit conceptual understanding in teaching and learning.
Global Contexts	Unit plans include: Global contexts.	Teachers are able to identify relevant contexts for their lesson plans
Approaches to Learning	ATL planning that shows progression of ATL skills.	Assumed better integration and evidencing of ATL in teaching and learning
Service as Action	Criteria added for explicit description of authentic student service projects.	Increased understanding and identification of authentic service experiences.

Implementation & Recognition Changes		
Strategy	Description of Change	Purpose of Change
Subject-group Flexibility	Year 4 and 5 schools and students can have six instead of eight subjects. PHE, Art and Design become optional in these years.	Schools gain flexibility in satisfying local and national requirements.
External Assessments	An optional externally marked (eAssessment) and moderated (ePortfolio) examinations based on MYP years 4 & 5.	(1) Support schools where formal assessment is required for age 16 students. (2) Strengthen evaluative capacity of student & school performance. (3) Data to be used to inform schools of strengths and weaknesses and encourage strategic use of data.
Building Quality Curriculum (BQC)	Requirement of schools to submit unit plans to BQC for schools who do not participate in the optional eAssessments.	(1) Support teaching and learning by providing meaningful feedback to schools on curriculum planning, and (2) ensure that the standards and practices of the MYP are being maintained.

3. MAIN FINDINGS

3.1. IMPLEMENTATION STRATEGIES

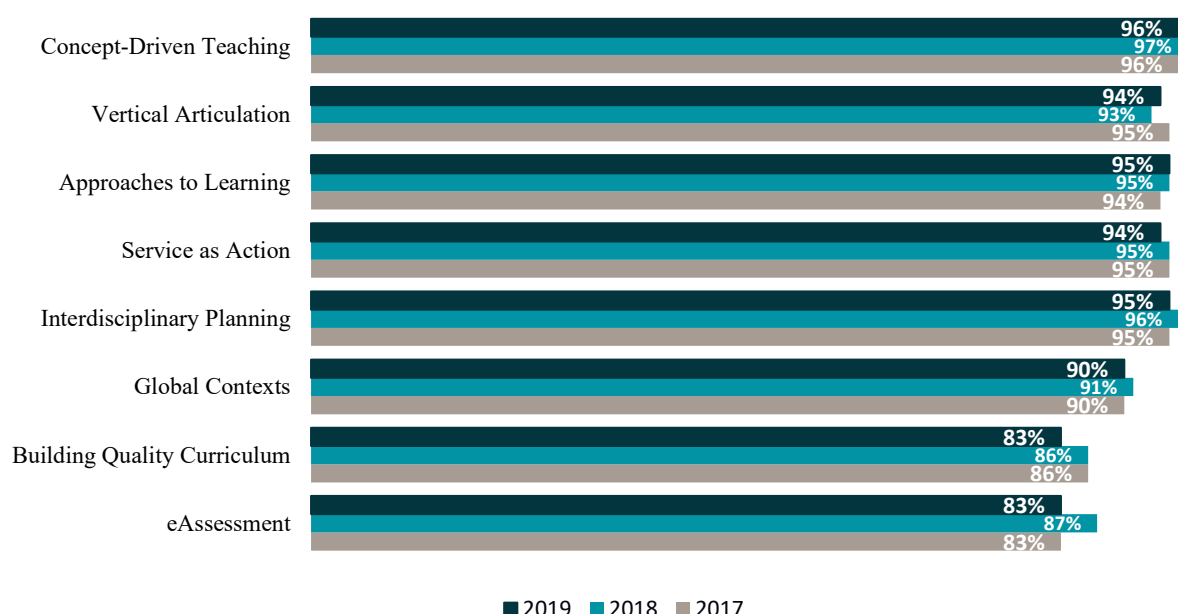
This section summarizes the main findings related to implementation of the nine strategies mentioned in 2.3 above and provides a high-level review of the status of implementation over the last year of this study (2018-2019) as well as the student outcomes evaluation.

Finding 1: Aggregate levels of implementation remained steady over the past three years, such that many schools report implementing MYP in a manner consistent with IB expectations.

For each of the strategies, teachers' self-reports suggest that upwards of 80% of teachers are, overall, meeting IB expectations (see **Figure 1**) across the evaluation years. This was broadly consistent with case study findings, which also found that most schools were implementing MYP in a way that was likely to meet or exceed IB expectations, indicating fidelity of implementation. Over the period of the current

report (2018-2019), teachers reported very little change regarding their practices, knowledge and understanding. This indicates that they have reached a plateau in their implementation of these practices and without further intervention, little additional improvement can be expected.

Figure 1. Over 80% of teachers met IB's expectations for the implementation of each strategy



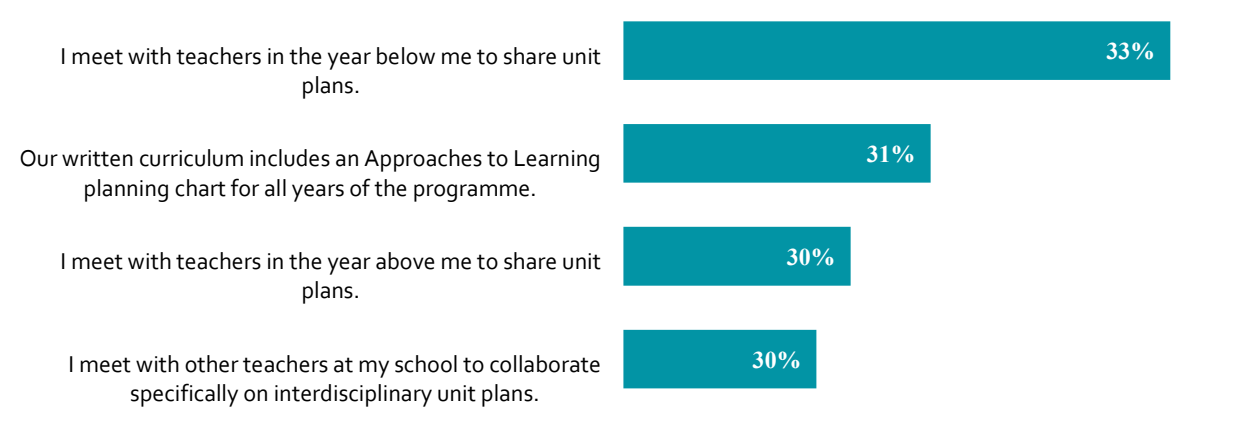
Finding 2: Written curriculum requirements still tend to be prioritized over embedding MYP concepts into everyday teaching practices and learning experiences.

Each year, educators reported a tendency to prioritise written curriculum requirements, such as writing key and related concepts, Approaches to Learning, or Global Contexts into unit plans, over actually embedding these ideas into everyday learning experiences. This was observed in both case study and survey data and across all years of the study's conduction. Considerably more teachers struggled to meet IB expectations for practices related to in-class and collaborative learning experiences.

Finding 3: Practices requiring collaboration with other teachers in terms of vertical articulation and interdisciplinary unit plans remained more challenging to implement than other strategies.

These practices are viewed as critical to the revised MYP curriculum framework, and it appears that schools struggle to implement with these activities. This was reflected in lower rates of implementing collaborative efforts found in the teacher survey data (see **Figure 2**). This was found to be the case for both formal and informal collaborations unless time for vertical articulation and interdisciplinary planning (for example) was built into teachers’ and administrators’ schedules.

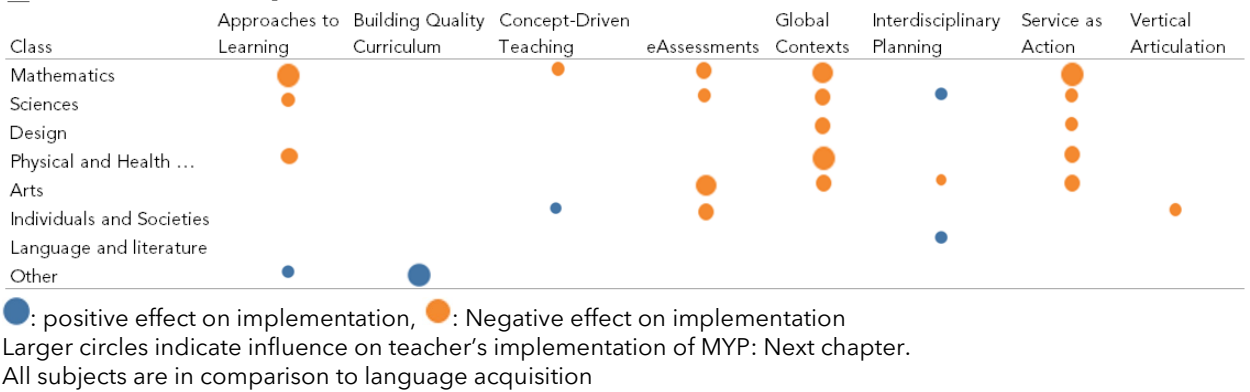
Figure 2. Percentage of teachers not yet meeting collaboration expectations



Finding 4. Overall, context plays a key role in how well schools meet IB expectations of MYP implementation. Additional facilitators and barriers to implementation include length of time implementing MYP, subject area, and resourcing.

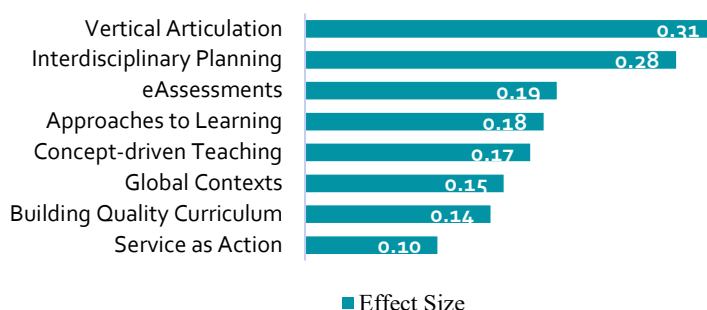
SUBJECTS AREA. Across the board, implementation varied by subject (see **Figure 3**). Specifically, science and math teachers struggled to embed Key / Related Concepts, Global Contexts, and Approaches to Learning into the classroom. Teachers who taught language acquisition were the most likely to report high levels of implementation.

Figure 3. The subject taught is a significant factor in a teachers’ implementation of MYP: Next chapter



RESOURCES. In each year of the study, teachers who reported that their schools had sufficient resources, were more likely to report positive attitudes toward each of the eight strategies (see **Figure 4**). In addition, they were also capable of implementing the strategies more frequently. The extent that resourcing effected teachers' likelihood of implementing MYP: Next chapter differed by strategy. Interdisciplinary planning, and vertical articulation were particularly influenced by their schools' level of resourcing, where higher resources indicated higher implementation and vice versa. Teacher implementation of the other six strategies, although effected, showed a lesser degree of sensitivity to a teachers' report of resourcing.

Figure 4. Effect of school resources on teacher implementation of strategy



Note: Effect sizes: Small = 0.1 - 0.3, Medium = 0.3 - 0.6, Large = 0.6 and greater

TEACHER TRAINING. Teachers and administrators struggle with adequately training teachers. The boundaries for providing adequate training vary, but in one way or another teacher turnover has a negative impact on new and established MYP teachers. Some coordinators hesitate to send new teachers to MYP trainings until teachers have been at the school for a minimum number of years. This is because they fear spending resources on teachers who will not be at the school long enough to make the training worth it. Additionally, schools often have to put resources into basic trainings for new teachers, rather than being able to offer more advanced training for more established teachers. For example, many teachers discussed confusion regarding Approaches to Learning (ATL) and how to implement the ATL skills effectively into their unit plans. This is something teachers would like more professional development on, but often don't have the opportunity to attend additional training for more "advanced" MYP professional development.

TYPE OF SCHOOL. Throughout the study, school level implementation varied according to the type of school that teachers taught at. Teachers who taught at a private school, whether national or international, reported higher levels of implementation than those who taught at public schools (See **Figure 5**). The type of private school, however, did not have an effect on the quality of implementation. Teachers from both national and international private schools had more knowledge

about, and a more positive attitude about the MYP: Next chapter strategies. In addition, they were able to implement these strategies in their classrooms more often. Teaching at a private school particularly influenced teachers' attitude toward Building Quality Curriculum. It, however, did not seem to have any noticeable effect on teachers' implementation of the Service as Action strategy.

Figure 5. Effect attending a private school has on teacher implementation of strategy



Note: Effect sizes: Small = 0.1 - 0.3, Medium = 0.3 - 0.6, Large = 0.6 and greater

LENGTH OF TIME IMPLEMENTING THE MYP: NEXT CHAPTER. Survey data suggests that schools who began implementing the MYP: Next chapter earlier tended to implement the MYP NC with greater adherence than those who began the programme later. However, effect sizes were small (.04 - .17), meaning that length of time implementing the MYP: Next chapter does not explain a large amount of the differences in program adherence. Therefore, other factors must play a role in schools' adherence to the MYP such as professional development, programme structural alignment to other IB programmes or their national context and the year configurations of MYP implementation.

INDIVIDUAL SCHOOL CONTEXT. During site visits teachers indicated that the unique needs of students at their school played an important role in determining the level of implementation possible. The primary concerns of teachers centered around how students differed across school contexts. For example, some students were struggling with living in a new country, starting the MYP program without a PYP background, balancing their schoolwork with all their extra curriculars, or were homeless. The nature of student struggles that predominated in the schools had a notable impact on how schools approached their MYP implementation.

THE ROLE OF THE COORDINATOR. In addition to the student contexts mentioned above, teachers discussed the ways in which school leadership and the site coordinator

impacted the implementation of the MYP. Similar to previous CEC site visit years and data, the role of the coordinator was noted as paramount to good implementation. Schools experiencing turnover of coordinators or coordinators who have multiple roles to fill, struggle more with implementation or continued improvement of implementation. One-way schools cope with this is turning to established MYP teachers or outside resources for help. For example, one school brought in experts to help get teachers more efficient with unit planning while the school coped with a part-time, interim coordinator.

Finding 5. Although over 80% of teachers indicated they believe eAssessment produces credible data on student learning roughly 20% remains unconvinced.

Approximately 1/5th of the teacher survey respondents report not yet being convinced that the eAssessments produce useful data on student learning. There is also a perspective from the case study teacher, coordinator and head of school interviews and focus groups that eAssessments don't match the ethos of the MYP in terms of the conceptual nature of the programme. Data from this evaluation as well as from the 2018⁶ data collection indicates additional factors that impact eAssessment perceptions. Factors such as how their parents and student perceive the value of the MYP eAssessments, schools' national contexts regarding the need for recognized tests at this age group (particularly if they have to prioritize other national tests), and if a school offered the IB Diploma programme.

3.2. STUDENT OUTCOMES

Below is a summary of the main findings related to the students' outcomes, effectively providing a high-level first look at the impact of the MYP: Next chapter.

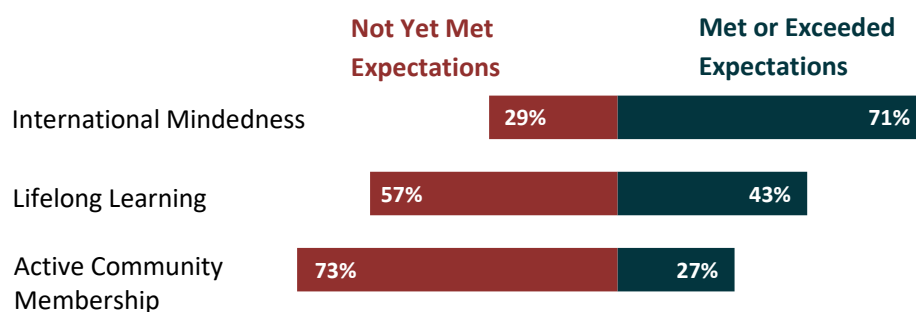
Finding 6. Students consistently report being internationally minded.

Over 70% of students either meet or exceed the expectations set by IB (see **Figure 6**). Roughly half of students indicated that they Strongly Agreed with the statements, "I feel very concerned about the lives of people who live in countries where human rights are not respected," and "There is more than one way to approach a problem." Despite the generally positive trend, there is still room for improvement. Roughly half of students (49%) were not yet meeting IB's expectations when answering the question "I think of myself as not only a citizen of my country but also a responsible member of the global community."⁷

⁶ Azzam, T., Mason, S. Beckman, B., & Larson, D. (2018) *The 2018 MYP Evaluation Report*. Internal IB Report: Unpublished.

⁷ For more information see documentation of responses to PMF survey excel document

Figure 6. Students largely met expectations related to International Mindedness



Finding 7. Roughly half as many students reported meeting as struggling to meet the MYP's expectations regarding Lifelong Learning.

Over a third of students indicated that they believed "Others are in a better position that I am to evaluate my success as a student" and as many disagreed with the statement "I can solve problems when they arise." Many of the rest of the students gave neutral responses neither agreeing nor disagreeing with these statements. Despite feeling as if others are more capable of evaluating their success, students generally claim that they carry the responsibility of making sense of what they learn at school. This can indicate the MYP's goal of producing lifelong learners is beginning to be reached as student learn to take ownership with the learning process⁸.

Finding 8. Students generally meet or exceed IBs expectations for active community membership.

The IB has indicated that they expect students to both believe in their ability to productively engage in active community membership but also begin to take action. Students generally agree that they can "affect what happens on a global level by what I do in my own community" and "apply the things I learn in school to the activities I do in the community," but they are not yet taking action. Most students do not believe they will "write to a newspaper about political or social issues" or "join an organization for a political or social issue." However, roughly 70% of students do indicate an intention to volunteer time to help their local or international community. Students seem to be choosing one or two things they feel comfortable doing to engage actively in their community. It may be that, given time, they will consider expanding this active participation in their community⁹.

Finding 9. Students' learner profile attribute outcomes are impacted by implementation of Global Context and Service as Action strategies.

⁸ For more information see documentation of responses to PMF survey excel document

⁹ For more information see documentation of responses to PMF survey excel document

Both teacher and student responses to the survey indicate that better implementation of the Global Context strategy is associated with an increase in student outcomes related to the student learner profile. Students' survey responses indicated that in schools where teachers report more knowledge, a positive attitude, and frequent inclusion of practices related to the Global Context strategy, students are more likely to report being Active Community Members and lifelong learners as well as having an international mindset (see Appendix 4, Tables 1-3).

Schools in which teacher data indicates a high amount of knowledge and a positive attitude towards the Global Context strategy produced students who indicated being active community members. Perhaps unsurprisingly, schools in which teachers emphasize practices related to the Service as Action strategy also have students who report a strong tendency toward active community membership. This means that teachers who discuss service with their students in such a way as to "encourage them to think of service in terms of the quality of their interactions," have students who report that they are likely to volunteer their time to help individuals in their local or international communities. This was also supported by observations and experiences documented during site visits. Schools that demonstrated a strong sense of active community membership did so at all levels (from heads of schools to students). Likewise, the teachers' implementation of the Global Context strategy appears to be predictive of whether students become lifelong learners. These teachers are likely to indicate that they often draw on real-world examples and require their students to understand class material from multiple perspectives¹⁰.

Finding 10. Schools in which teachers emphasize Concept Driven Teaching are more likely to have students who report that they are becoming lifelong learners.

These teachers are more likely to believe that using key concepts in unit planning creates personal relevance and greater creativity for their students. In addition, they are likely to ask students broad conceptual questions and have them relate the key concepts to information they've learned in other classes or at other times in the school year. Students who are in these classes in turn indicate that they are more likely to "love learning for its own sake" and to feel that it is their "responsibility to make sense of what I learn at school." Concept Driven Teaching is an important strategy that teachers can use as they guide students toward a belief that they are able to take charge of their own learning and are capable of solving problems that arise in their life.

¹⁰ For more information see documentation of responses to PMF survey excel document

Finding 11. Students who have a positive attitude about their school are more likely to be internationally minded, active community members and lifelong learners.

Students who described their school as being relatively valuable, interesting or good were more likely to be internationally minded, lifelong learners, and active community members than those that described it as relatively worthless, boring, or bad. Interestingly, those who indicated that their school was relatively easy were more likely to be lifelong learners and active community members than those who described it as relatively hard but were unlikely to be more internationally minded (see **Appendix 4**).¹¹ This indicates that MYP: Next chapter is more effective at increasing the student learner profile outcomes when students positively rate their school than when they find it overly difficult, uninteresting or worthless.

Finding 12. Although students generally think they are prepared for future learning, teachers are uncertain about how to prepare students for the DP.

During the final round of site visits, the CEC asked members of the school communities about how prepared students are for the next step in their education (after completing the MYP). For many, but not all, this means continuing to the IB's Diploma Program (DP). Although these findings only represent the experiences of six MYP schools, there were consistent patterns of responses. Overall, students had mostly positive things to say about what they are learning as a function of being MYP students.

Teachers, on the other hand, are concerned about preparing students for the content-focused nature of the DP. More specifically, teachers expressed difficulty with vertical articulation in terms of preparing students for the DP. They perceive the DP as being very content-driven, which is seen as the antithesis of the MYP concept-driven teaching. As a result, the MYP teachers interviewed are concerned about covering the content their students need to be successful in the DP.

Finding 13. Teachers and students see the benefits of the MYP but they come at a cost.

Generally, students believe anyone can benefit from being an MYP/IB student. But they acknowledge that it is a lot of work and may be different from other school programs. So, students that do not have an IB background might struggle a bit

¹¹ Note these questions were asked on a sliding likert scale (see appendix 4 for details)

more, relative to students who have an IB background. At some schools, teachers and administrators expressed concern with how students are brought into their school and thus the MYP. At some schools' students must apply and there is concern that some of the inclusion criteria are limiting opportunities to students who would still benefit from the program.

Teachers believe that the MYP pushes them to think more critically about how they engage with students and create lessons that are more valuable to students.

They think that this is a result of the concept-driven teaching. However, the trade-off with this flexibility is that teachers often don't feel like they can ever just "phone it in". They are constantly having to recreate/change lesson plans, which contributes to this notion of "MYP = Many Years of Paperwork". Teachers are often stressed by the amount of work they have to do to create and recreate lesson plans and may not have the resources they need to implement the program well. This may provide some insight into the difficulties that teachers face with aspects of the MYP that require collaboration. Teachers struggle to implement all aspects of the MYP in just their own classrooms, let alone in collaboration with others. Additionally, when schools experience turnover or changes in leadership, it seems that it often falls to the more experienced teachers to take on additional responsibilities in order to keep the program running in times of transition.

4. MAIN CONCLUSIONS

A set of evaluation questions guided the data collection, analysis, and reporting for this final round of the evaluation. They include:

- *What have been the effects, both intended and unintended, of MYP: Next chapter implementation?*
- *Which aspects of MYP: Next chapter appear to have had the greatest effect on students, teachers, and schools?*
- *In what ways do outcomes vary for different schools, groups of students, and contexts?*
- *What changes do schools perceive to have been most successful?*
- *Does higher implementation of MYP: Next chapter lead to better academic performance?*

Below is a summary of the main conclusions to these questions based on the data collected for the final phase of the CEC evaluation study (i.e., site visit case studies, PMF survey responses from teachers and students, and eAssessments).

Evaluation Question	Summary of Results
What have been the effects of MYP implementation?	High levels of MYP implementation are associated with better outcome performance, but there are many potential moderator variables which include school resourcing and time implementing the MYP.

Which aspects of MYP appear to have had the greatest effect on students, teachers, and schools?	Global Context and Approaches to Learning seem to have notable effects on student outcomes. However, teachers speak very highly of the impact of concept-driven teaching and learning.
In what ways do outcomes vary for different schools, groups of students, and contexts?	The type of school, the subject taught and the level or resources available to the teachers all have a positive impact on the level of implementation. This in turn influences student outcomes. In addition to this, students' attitude toward their schools has a strong impact on their learning outcomes.
What changes do schools perceive to have been most successful?	Schools found varying success in implementation different MYP: Next chapter strategies. Consistently, strategies that require collaboration with other teachers require overcoming more challenges and written requirements are prioritized.
Does higher implementation of MYP lead to better academic performance?	There was not enough evidence to determine if increased implementation led to a change in students' academic performance. This is due to the fact that few schools completed both the survey and the eAssessment in 2019. The lack of a larger dataset hindered the evaluation from examining the relationship between implementation and academic outcomes with a strong degree of confidence in the findings. Further research is recommended.

5. KEY MESSAGES

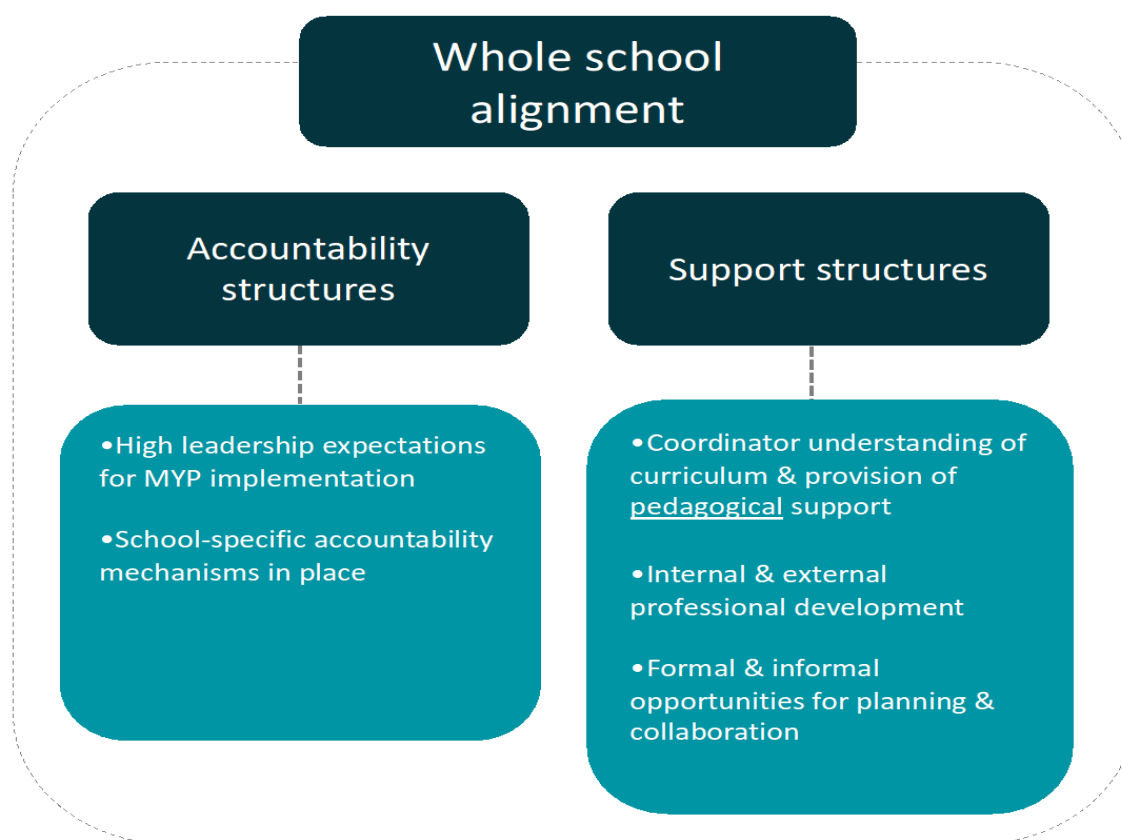
This study suggests a number of **key messages** for a variety of different MYP: Next chapter stakeholders.

KEY MESSAGE 1. STRENGTHEN WHOLE SCHOOL ALIGNMENT OF MYP IMPLEMENTATION

Schools and the IB should find ways to strengthen the connections between specific elements of the programme and the important in-classroom teaching and learning experience such that all elements of the MYP work together to benefit students. Key facilitators of developing a whole school alignment of the MYP include accountability and support structures (see **Figure 7**).

Figure 7. Whole school alignment through accountability and support

These include high expectations from school leaders regarding implementation, with built in accountability mechanisms (e.g., regular progress meetings); in addition to consistent provisions of support from these school leaders and particularly the MYP



coordinator. Supports include pedagogical understanding, formal and informal opportunities for planning and collaboration, and ongoing opportunity for professional development.

KEY MESSAGE 2. MYP AND DP ALIGNMENT IS THE KEY TO ENSURE A GOOD PREPARATION FOR THE FUTURE

In order to prepare students for their future learning MYP teachers do need to make sure their students are getting the content necessary to be successful in DP, if their school offers the Diploma. Although many MYP schools globally do not offer the DP, where students are moving on to the DP from the MYP many teachers feel there is a troubling inconsistency between the programs. Although the researchers do not have specific comments on how to better align these two programs, we suggest the IB consider the alignment and areas for improving it between the MYP and DP.

KEY MESSAGE 3: CONSIDERATIONS FOR SCHOOLS AND TEACHERS

This study suggests a set of key messages directed to MYP school leaders and teachers. More details related to those messages may be found in the main body of the report. We present below the main messages addressed to IB schools' stakeholders:

- Continue to foster a positive climate at the school level when various changes are implemented. Students attitudes toward their school is an important predictor of their success in terms of the learner profile outcomes examined in this study.
- Pair a focus on approaches to learning with an emphasis on service as action. Those strategies are the drivers for multiple student learner profile outcomes and foster the lifelong learner attributes.
- Work on enhancing the well-being of students, teachers, and programme coordinators. Any school change strategy comes with a cost in challenging the existing routine and classroom practices. The well-being approach may support all the stakeholders to mindfully attend to the change process.
- Scheduling collaboration and planning days throughout the school year that occur during regular workdays and times. Collaboration is the key in ensuring interdisciplinary approach and vertical articulation of the IB programmes.
- Selecting a particular component(s) (e.g., unit planning) that the entire school works on mastering with help from experts. Distributing the workload by assigning different people to becoming experts in particular programme components may create a supportive network of resources at the school level.
- Establishing clear plans, agendas, and goals for collaborative components (e.g., vertical articulation, interdisciplinary units).

6. LIMITATIONS & FUTURE RESEARCH

The research team acknowledges a number of limitations to this study that should be taken into account when interpreting findings.

SELF-REPORT

Findings from the survey component of this research are based on self-report and should therefore be interpreted with caution, as they reflect teacher and student perceptions of implementation rather than external, objective assessments of the curriculum framework.

NON-LONGITUDINAL

Even though this evaluation has been conducted over many years and has detected stable and consistent findings, data collected each year was not always collected from the same educators, students, or schools. With the exception of the case study schools, CEC did not track information from teachers and students over time. Therefore, it is difficult to make confident claims about change over time or how these changes impact outcomes.

NON-REPRESENTATIVE

Although a large number of MYP teachers, coordinators, and students completed the surveys and participated in site visits, they represent a minority of MYP schools. The findings are nevertheless reflective of a large portion of MYP schools, especially given that the same schools did not participate every year, it is possible that those who took part in this study differ in some substantial ways to those who did not take part.

ATTRIBUTING IMPLEMENTATION TO OUTCOME DATA

Due to concerns about the confidentiality of both student and teacher data, there was not enough identifying information to connect students to their teachers. Both the level of implementation and the strength of the student outcomes was aggregated at the school level before a relationship was analyzed. This reduced the power and accuracy of any statistical tests potentially obscuring some interesting findings. In addition, because there were so few schools in which teachers filled out the survey and students completed eAssessments, there was not enough data to find any but a very strong relationship between academic performance and MYP implementation. This likely led to the inconclusive results regarding the effectiveness of the MYP: Next chapter's effect on student academic performance.

FUTURE RESEARCH SUGGESTIONS

Taking into account the above limitations of the current study, we summarize below a number of potential directions for future research:

- **Undertake a study that explores learner profile outcomes further into and beyond student IB careers,** this may shed more light on the impact of the MYP on the development of students who are internationally minded, active community members, lifelong learners, and prepared for their future education. In particular, based on the results of this research, we recommend a focus on Approaches to Learning and students' experiences with this strategy.
- **Further investigate the impact of flexible implementation of the MYP.** Although the MYP is designed and recommended for a full five-years of implementations, schools may opt to implement the MYP in different configuration of years (i.e. 1-3,

or only years 4 and 5). This aspect of flexibility may influence adherence, but it was out of scope of this evaluation and warrants further investigation.

- **Additional research is necessary to establish the relationship between the implementation of MYP and the eAssessment outcome results.** Future research, for example, may include requesting a small random sample of schools to participate in the eAssessments (for free) while collecting implementation data, and other assessment tools.

CHAPTER 1: IMPLEMENTATION



CHAPTER 1 KEY POINTS

- ❖ Many schools appear to be implementing MYP consistent with IB expectations and aggregate level implementation has remained steady over the past three years.
- ❖ Written curriculum requirements still tend to be prioritized over embedding MYP strategies into everyday learning experiences. Practices requiring collaboration with other teachers also remain more challenging.
- ❖ Additional facilitators and barriers to implementation include length of time implementing the MYP, subject area, and resourcing.

1.1 BACKGROUND

Performance Monitoring Surveys (PMF)

Between March of 2017 and May of 2019 - **6,818** MYP teachers and **51,481**¹² MYP students completed online performance monitoring surveys (see **Table 1.1**). These surveys were designed to capture implementation and outcomes related to the MYP: Next chapter Performance Monitoring Framework (PMF).

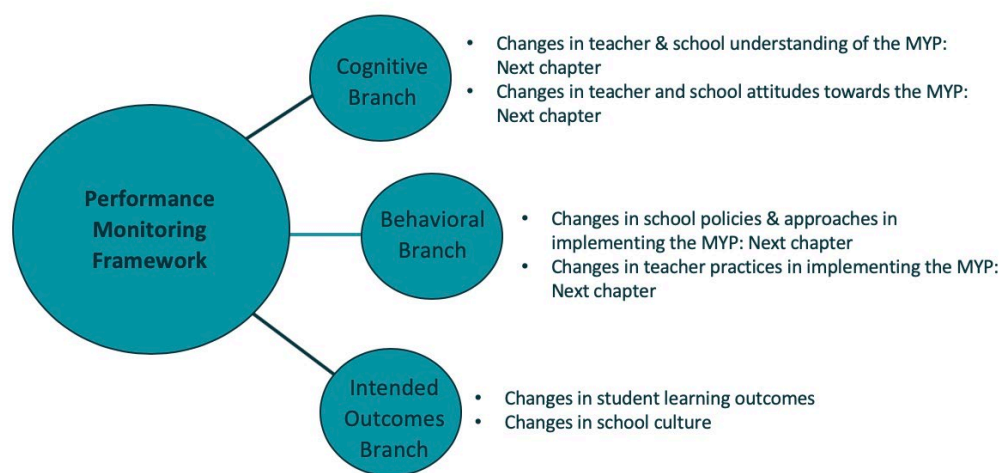
Table 1.1 PMF survey participants 2017-2019

Year	Teacher Participants	Student Participants
2017	2,672	17,572
2018	2,588	17,545
2019	1,558	16,364
Total	6,818	51,481

The Performance Monitoring Framework (PMF) identified critical areas of MYP: Next chapter implementation, along with intended outcomes, across three core “branches” (see **Figure 1.1**):

1. A **cognitive branch** that focuses on changes in teacher attitudes and understanding.
2. A **behavioral branch** that focuses on changes in school policies and teacher practices.
3. An **outcomes branch** that focuses on changes in student learning and school culture.

Figure 1.1. Branches of the Performance Monitoring Framework



¹² There was no identifying information kept for either teachers or students. CEC is unable to determine if students retook the survey in more than one year.

The PMF was developed in 2017, in collaboration with the MYP Research Advisory Committee¹³ and a group of MYP representatives who were significantly involved in the MYP: Next chapter re-design process. The group assisted in generating survey items and participated in a standard setting exercise that provided an understanding of the expected level of performance with regards to implementation and outcomes (see **Appendix 2** for the 2019 survey instruments). Identifying standards is a critical stage in the performance monitoring process, as it allows for clearer interpretation of findings, and helps prioritize next steps by highlighting gaps between actual and expected performance.

Standard Setting Procedures. Poister and colleagues (2015) note that a critical step when building a performance management system is setting standards to define what results are expected. Although there is no set procedure for setting standards, Poister and colleagues advise that this process be guided by the following principles:

- That it be inclusive and captures the perspective of all key stakeholders.
- That it be comprehensive and address all indicators.
- When disagreement occurs, discussions should be held to clarify and understand the disagreements until resolved.
- That it differentiates service standards (which define implementation processes) and performance standards (which define outcomes).

Across each of these branches the performance monitoring surveys examined nine MYP strategies, that operationalize MYP implementation. These strategies, as MYP programme elements, were developed from a logic model (see **Appendix 1**) of what had changed at the programme level for the MYP Next chapter as compared to the previous MYP programme implemented in schools prior to 2015. The strategies are:

1. Global Contexts
2. Concept-driven Teaching
3. Vertical Articulation
4. Service as Action
5. Interdisciplinary Planning
6. Approaches to Learning
7. eAssessments
8. Building Quality Curriculum
9. Subject Group Flexibility

¹³ The current committee includes members from MYP Development, the IB Research Department, Assessment, Professional Development, School Services, and representatives from two IB World Schools (Head of School and MYP Programme Coordinators).

2019 Survey Response Rates

In 2019, the CEC invited **1,826** schools to participate in two performance monitoring surveys, with **1,558** teachers and **16,364** students fully completing the surveys. Participating teachers and students represented **245** schools, approximately **13%** of those invited to take part.

The majority of participating teachers worked at private international schools (52.9%) and one quarter of the teachers worked at public state schools (27.0%). The remaining teachers indicated that they taught at private national (16.5%) or “other” types of schools, such as non-profits and religiously affiliated schools.

1.2 IMPLEMENTATION MAIN FINDINGS

This section is a high-level summary of findings from all three years of the Claremont Evaluation Center’s study into the implementation and impact of the MYP: Next chapter. This report describes findings from teacher performance monitoring surveys undertaken during 2017 through 2019 and focuses primarily on understanding the nature and quality of MYP: Next chapter implementation.

Finding 1.1. Aggregate levels of implementation have remained steady over the past three years, such that many schools report implementing MYP in a manner consistent with IB expectations.

For each of the curriculum components, teachers’ self-reports suggest that upwards of 80% of teachers are, overall,¹⁴ meeting IB expectations (see **Figure 1.2.**). This was broadly consistent with case study findings, which also found that most schools were implementing MYP in a way that was likely to meet or exceed IB expectations which indicates fidelity of implementation.

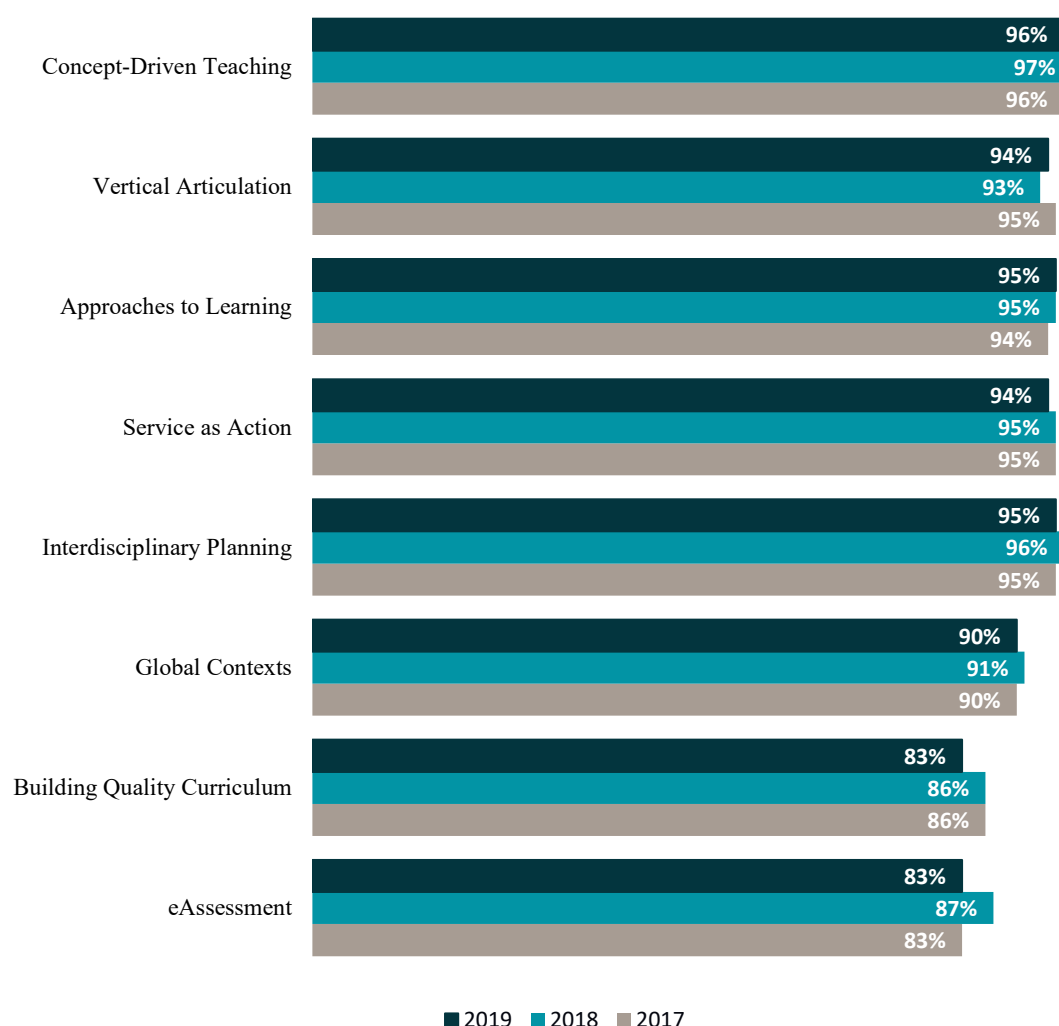
Teachers were most likely to report struggling with the Building Quality Curriculum strategy and negative attitudes about eAssessments. With regards to eAssessments

¹⁴ Percentages are reported based on an overall aggregate of teachers’ responses to items relevant to each curriculum component. It is therefore possible for a teacher to “exceed” expectations overall, but still fall below expectations on some items.

although over 80% of teachers indicated that they believe eAssessments produce credible data on student learning and just under 80% indicated that they believe that monitoring unit plans (building quality curriculum) is a good use of funds, roughly 20% remain unconvinced. Thus approximately 1/5th of the survey respondents report not yet being convinced that the eAssessments produce useful data on student learning. There is also a perspective from the case study teacher, coordinator and head of school interviews and focus groups that eAssessments don't match the ethos of the MYP.

Teachers have reported very little change regarding their practices, knowledge and understanding toward elements related to the nine key strategies since 2017. This indicates that they have reached a plateau in their implementation of these practices and without further intervention, little additional improvement can be expected.

Figure 1.2. Over 80% of teachers met IB's expectations for the implementation of each strategy

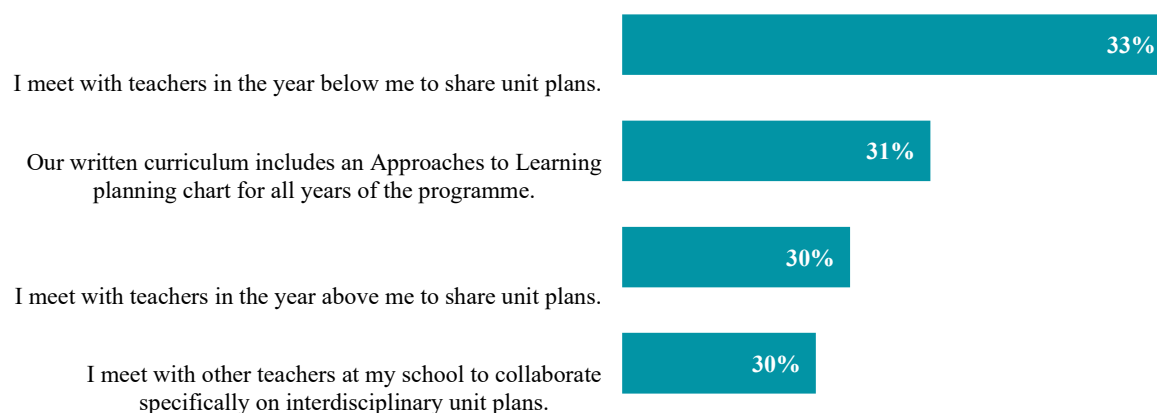


Finding 1.2. Written curriculum requirements still tend to be prioritized over embedding MYP concepts into everyday learning experiences. Practices requiring collaboration with other teachers remain more challenging.

Each year, educators reported a tendency to prioritise written curriculum requirements, such as writing key and related concepts, Approaches to Learning, or Global Contexts into unit plans, over actually embedding these ideas into everyday learning experiences. This was observed in both case study and survey data. Considerably more teachers struggled to meet IB expectations for practices related to in-class learning experiences. For example, teachers at multiple schools expressed a desire for more information or support on the correct implementation of ATL skills in their classroom. Comparatively, various school representatives mention some administrative attempts at facilitating teacher collaboration (e.g., scheduling of breaks) with varying success and enthusiasm.

This was reflected in lower Approaches to Learning and teacher collaboration (see **Figure 1.3**) implementation, where tasks that required teachers to collaborate with others—either through formal or informal collaboration, or through whole-school planning—tended to occur less frequently (see **Figure 1.3**). These practices are viewed as critical to the revised MYP curriculum framework, and it appears that schools are struggling with these activities. Case study findings from 2017 and 2019 suggest this is largely because it is difficult to find the time to meet with others unless it is formally built into their timetable.

Figure 1.3. Percentage of teachers not yet meeting collaboration expectations



Finding 1.3. Additional facilitators and barriers to implementation include length of time implementing MYP, subject area, and resourcing.

Overall, context plays a key role in how well schools meet IB expectations of MYP implementation. In both the surveys, and during this year's site visits these contextual factors were explored.

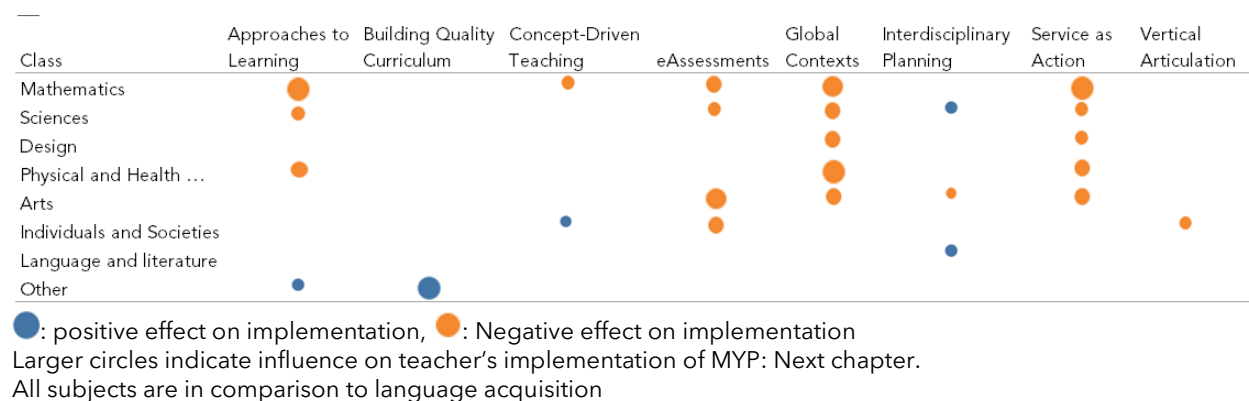
Length of Time Implementing MYP: Next chapter

Survey findings suggest that schools who began implementing the MYP: Next chapter earlier tended to implement with greater adherence than those who began later. However, effect sizes were small (.04 - .17), meaning that length of time implementing the MYP: Next chapter does not explain a large amount of the differences in program adherence. Therefore, other factors must play a role in schools' adherence to the MYP such as professional development, programme structural alignment to other IB programmes or their national context and flexibility in the year configurations of implementation. One such factor is that the MYP Next chapter provides for flexible implementation within a school's context. Although the MYP is designed and recommended for a full five-year implementation, schools may opt to implement the MYP in different configuration of years (i.e. 1-3, or only years 4 and 5). This aspect of flexibility may influence both adherence and student outcomes, but it was out of scope of this evaluation and warrants further investigation. The small effect size helps to explain why levels of implementation have remained so steady over the three years of the study, indicating that giving schools additional time to experiment with MYP: Next chapter may not provide the improvement that many of these schools need. Additional examination is likely needed to understand this phenomenon.

Subject area

Across the board, implementation varied by subject (see **Figure 1.4.**). Specifically, science and math teachers struggled to embed Key / Related Concepts, Global Contexts, and Approaches to Learning into the classroom. Teachers who taught language acquisition were the most likely to report high levels of implementation.

Figure 1.4. The subject taught is a significant factor in a teachers' implementation of MYP: Next chapter



Resources

In each year of the study, teachers who reported that their schools had sufficient resources relative to other schools in their country, were more likely to report positive attitudes toward each of the eight strategies (see **Figure 1.5**). In addition, they were also capable of implementing the strategies more frequently. The extent that resourcing effected teachers' likelihood of implementing MYP: Next chapter differed by strategy. Interdisciplinary Planning, and Vertical Articulation were particularly influenced by their schools' level of resourcing, where higher resources indicated higher implementation and vice versa. Teacher implementation of the other six strategies, although effected, showed a lesser degree of sensitivity to a teachers' report of resourcing.

Figure 1.5. Effect of school resources on teacher implementation of strategy



Note: Effect sizes: Small = 0.1 - 0.3, Medium = 0.3 - 0.6, Large = 0.6 and greater¹⁵

¹⁵ For a further exploration of effect sizes in the MYP Evaluation studies, refer to Azzam and colleagues, 2018 p. 156.

During visits to schools, teachers and administrators discussed struggling with adequately training teachers. The boundaries to providing adequate training vary, but in one way or another teacher turnover has a negative impact on new and established MYP teachers. Some coordinators hesitate to send new teachers to MYP trainings until teachers have been at the school for a minimum amount of time. This is because they fear spending resources on teachers who will not be at the school long enough to make the training worth it. Additionally, schools often have to put training resources into basic trainings for new teachers, rather than advanced training for more established teachers. For example, many teachers discussed confusion regarding Approaches to Learning (ATL) and how to implement the ATL skills affectively into their unit plans as they have not received consistent information on how to do so. This is something teachers would like more training on but often don't have the opportunity to attend additional trainings on "advanced" subjects like these.

Across all schools it is acknowledged that implementing the MYP requires a lot of work. More than once we heard the phrase "MYP means Many Years of Paperwork". At some schools this is okay because the teachers see the value of the program and appreciate the flexibility that the program gives them. Teachers therefore develop mechanisms for coping with the workload. One MYP teacher commented:

It definitely takes longer to plan a lesson and there's not really many days where you can just phone it in...It's a very active job...But it does make me find ways that it's going to be more meaningful for [students] and it's going to stick with them. And so, it may be more work in the long run, but I feel like it's more valuable to them as a student. They remember the lessons longer or they just kind of remember the atmosphere.

However, at other schools, teachers are very stressed and may not have the resources they need to successfully implement the program and cope with all its demands. Often these teachers do not feel supported by their school, show little evidence of collaboration with other teachers, and less accurate understandings of MYP curriculum components. An MYP coordinator expressed the experiences of some teachers, such that:

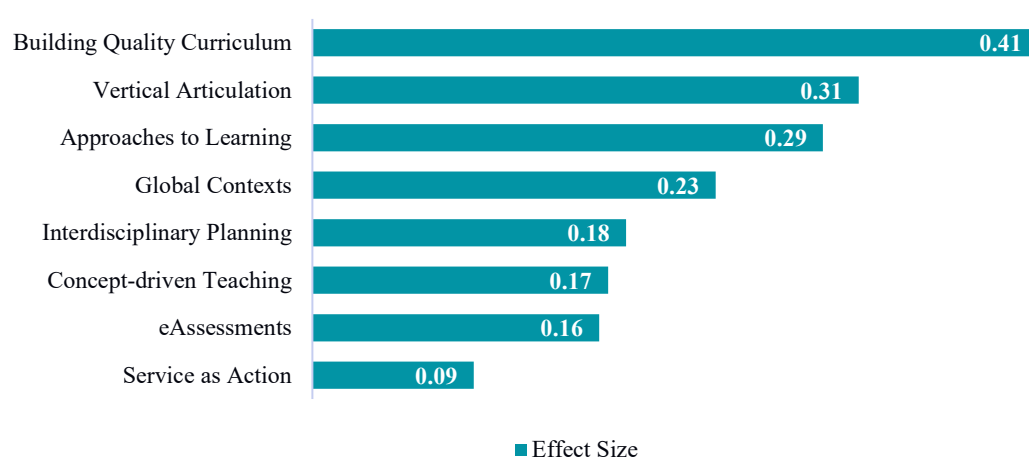
The negativity sometimes comes not from students about the program, it would be more about teachers not having enough time to do this piece or that piece, or those types of things because sometimes some of them look at it as an additional piece of work.

Type of School

Throughout the study, school level implementation varied according to the type of school that teachers taught at. Teachers who taught at a private school, whether national or international, reported higher levels of implementation than those who

taught at public schools (See **Figure 1.6**). The type of private school, however, did not have an effect on the quality of implementation. Teachers from both national and international private schools had more knowledge about, and a more positive attitude about the MYP: Next chapter strategies. In addition, they were able to implement these strategies in their classrooms more often. Teaching at a private school particularly influenced teachers' attitude toward Building Quality Curriculum. It, however, did not seem to have any noticeable effect on teachers' implementation of the Service as Action strategy.

Figure 1.6. Effect attending a private school has on teacher implementation of strategy



Note: Effect sizes: Small = 0.1 - 0.3, Medium = 0.3 - 0.6, Large = 0.6 and greater

Individual School Context

During site visits teachers also indicated that the unique needs of students at their school played an important role in determining the level of implementation that was possible. The primary concerns of students differed across school contexts. For example, some students were struggling with living in a new country, starting the MYP program without a PYP background, balancing their schoolwork with all their extra curriculars, or being homeless. The nature of the student struggles that predominated the schools had a notable impact on how schools approached their MYP implementation. One MYP coordinator commented:

... If a student is already open minded and engaged in learning, and liking to learn I'm sure [IB MYP] probably more beneficial to them than a student who's maybe worrying a lot about, am I going to get a meal? Am I going to be sleeping in my car tonight because we have homeless students... So when you have those things in your way all you can do is do your best to let them have as much access and opportunity to engage while they're here.

In addition to the context of the students' lives, teachers discussed the ways in which school leadership and the site coordinator impacted the implementation of MYP. Similar to previous years of site visits, the role of the coordinator was noted as paramount to good implementation. Schools experiencing turnover of coordinators or coordinators who have multiple roles to fill, struggle more with implementation or continued improvement of implementation. One-way schools cope with this is turning to established MYP teachers or other outside resources for help. For example, at one school operating with a part-time, interim coordinator, who has no formal training in the role, they have decided to focus on unit planning this year and brought in an expert to help teachers get more efficient at unit planning. One of the teachers at this school described the support:

One of our former teachers actually does a lot of IB training and so she works with us a lot on our unit planners, and so she has helped us dive into some of the newer documentation for evaluating the MYP unit planner...She's very specific to our needs so she can kind of meet with us individually and give us feedback and then later on in the day she'll meet as a whole group and remind us of the tasks that we need to complete. We just started or we finished up our ATL section and making sure that we're teaching them explicitly and we're listing out kind of what we're doing and which categories it falls under, thinking and critical thinking, rather than just saying, well, I'm just going to work on note taking, but no, explicitly am I teaching this skill or not.

1.3 IMPLEMENTATION SUMMARY

The findings from the most recent implementation data are consistent with findings from previous years. It appears that, on average, MYP implementation has reached a plateau and it is unlikely that implementation will improve unless the IB addresses issues such as contextual constraints (e.g., administrative and leadership support, formal and informal opportunities for collaboration, professional development opportunities) that have been explored in this study since 2017. Based on the three years of site visits it seems that the keys to implementing the MYP well include:

- Whole school alignment
- Support for the MYP by school leaders and governing bodies (e.g., PTAs, school districts)
- An active and engaged coordinator
- Plenty of opportunities (formal and informal) for collaboration and planning
- Ongoing opportunities for professional development

Fortunately, teachers generally report high levels of implementation of the MYP: Next chapter program. This level of implementation is likely to continue as it has remained relatively stable across the three years of the study. Research on the implementation of

education innovations suggests that implementation does not follow a linear pattern of continuous progression (Fullan, 2004). Rather, research suggests that in implementing these educational innovations, there may be times of dips (declines in implementation) and plateaus (staying the same). These findings are positive in that we are not finding evidence of declining MYP: Next chapter implementation, but the findings do suggest plateauing.

CHAPTER 2: OUTCOMES



CHAPTER 2 KEY POINTS

- ❖ Students consistently report being internationally minded but there is opportunity for improving their active community membership.
- ❖ Students' learner profile outcomes are significantly impacted by implementation of Global Context and Approaches to Learning strategies, as well as their attitudes about their school.
- ❖ Students generally think they are prepared for future learning, teachers are uncertain about how to prepare students.
- ❖ Teachers and students see the benefits of the MYP but note that it comes at a cost.
- ❖ Currently there is not enough evidence to determine if the MYP: Next chapter program influences student academic performance.

2.1 BACKGROUND

Outcomes Measured

An understanding of the MYP: Next chapter's influence on students involved exploring non-academic impacts in addition to academic impacts. IB aims to "help all members of the school community learn to respect themselves, others and the world around them."¹⁶ In this way the IB programme and curriculum frameworks attempt to develop the IB learner profile. For the purposes of this evaluation, we examined three attributes that follow from the programme logic model (**Appendix 1**), PMF (**Appendix 2**), and the IB learner profile. Each year, since 2017, the CEC has collected information about some of these attributes. In particular, the CEC asked students questions to assess if they are **Active Community Members**, **Lifelong Learners**, and **Internationally Minded**. Additionally, the site visits examined their **preparedness for future learning**.

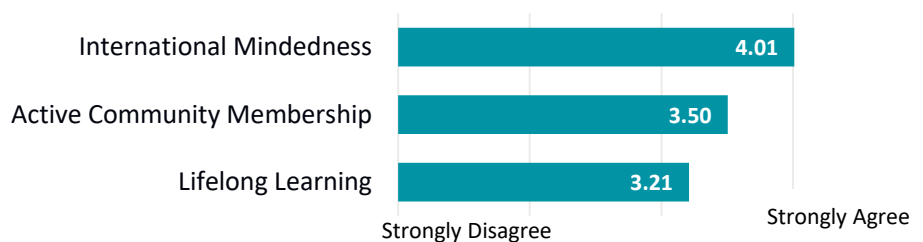
Active Community Members: The MYP is designed to help students become active community members primarily through the MYP projects and the augmentation of service as learning in the MYP Next Chapter from the pre-2012 MYP. Students who are active community members understand what it means to live life as an active and responsible citizen of their local and global communities. They also attempt to contribute to the creation of a better and more peaceful world. Across the six schools visited in the final year of this evaluation there was notable variance in the extent to which schools embraced and embodied active community membership. Students' self-report of their own active community membership was also varied.

To assess for active community membership, students who participated in the survey were asked to indicate their level of agreement with statements such as "I feel an obligation to speak out when I see my government doing something, I consider to be wrong." In general students tended to agree with these statements (see **Appendix 4**). Students were also asked to indicate how likely they were to do various activities ranging from volunteering to helping people in their local and international communities to talking to others about political and social issues. Students were as likely to indicate that they would "probably do this" (21% - 48% of students) as "probably not do this" (17% - 46% of students) (see **Appendix 4**). Promisingly a higher percentage of students reported they would volunteer to help people in the local and international communities over contributing to political organizations, participating in online discussions or writing about political and social issues. This indicates that students are beginning to understand the need for active community membership and to feel some responsibility however they also feel hindered by logistical constraints (access to sites, the need for parental support), and some hesitation about what to invest their time and effort into.

¹⁶ <https://www.ibo.org/benefits/learner-profile/>

International Mindedness: The MYP is also designed to help students develop an international mindset. An internationally minded student is one who cultivates a deep understanding of the complexity, diversity and motives that underpin human actions and interactions¹⁷. These students develop an attitude of openness and curiosity about cultures and the world. The program is designed to instill an appreciation for multilingualism, intercultural understanding, and global engagement. Students who have developed an international mindset are likely to agree with statements such as “I enjoy trying to understand other people’s perspectives,” and “everyone can learn something of value from all different cultures.” When asked these and other similar statements, in the survey, students often agreed indicating that they have an international mindset (see **Figure 2.1**). In fact, of the three non-academic outcomes measured by the CEC, students were more likely to report high levels of an international mindset than active community membership or lifelong learning. This may indicate that an international mindset is the first of the three outcomes students develop. However, because schools offering the MYP globally may attract students from international families, immigrants, diplomats, etc. many students may come into the programme with a high degree of international mindedness already. Family backgrounds of the students who participated in the survey was not collected, therefore this cannot be ruled out as an alternative explanation.

Figure 2.1. MYP Students are more likely to agree with items representing outcomes related to International Mindedness than other non-academic outcomes (N = 50,531; scale 1-5)



Lifelong Learners: The final outcome related to the learner profile that the CEC attempted to measure through student surveys is Lifelong Learning. Students who are lifelong learners develop a love of learning and several strategies for learning. These students become individuals who continuously pursue self-directed growth. Lifelong learners will likely agree with statements such as “I love learning for its own sake,” and “It is my responsibility to make sense of what I learn at school.” When students were asked these types of questions, they indicated a slight tendency to agree with these statements (see **Figure 2.1**). Students were less likely to display attributes of lifelong

¹⁷ International Baccalaureate Organization (2019) What is an IB Education? Support Material. Cardiff, United Kingdom.

learners than either of the other learner profile outcomes, which was consistent with results from the student focus groups conducted during the site visits. During the focus groups, students often discussed how they know that they are not interested in “everything” and that they would not be happy to continue learning about all subjects for the rest of their lives. This may be due to the age of the students and the distal nature of this outcome. Teachers and administrators who were interviewed often expressed that they do not believe students were lifelong learners yet. They felt that students may be too young to understand or embody this outcome but expressed hope that they, as a function of implementing the MYP, are providing students with the foundation to become lifelong learners in the future. In the few instances when students identified as lifelong learners, they expressed that they would always want to improve themselves and that they are learning skills now that will help them with that.

Outcome Standard Setting Process

The CEC approached members of the MYP community to aid in a standard setting process for the outcomes measured in the survey. This process, which was also completed for the teacher survey in 2017¹⁸, was used to determine whether students were achieving the anticipated outcomes at the levels expected by the MYP community. Throughout the standard setting process, the CEC drew heavily on the work of Poister and colleagues (2015) to guide the identification of expected standards on each survey item related to the student learner profile.

WHAT ARE STANDARDS?

In the context of evaluation, standards refer to a level of performance. For the purposes of this evaluation the term refers to expected levels of student learner profile development under MYP: Next chapter.

HOW WERE STANDARDS USED IN THIS STUDY?

For each survey item the CEC identified the range of survey responses that: (1) exceed collective IB expectations, (2) meet collective expectations, and (3) don't yet meet collective expectations.

According to Poister and colleagues (2015) identifying standards is a critical step, as it allows for clearer interpretation of findings, and also helps prioritize next steps by highlighting gaps between actual and expected performance. Consistent with Poister and colleagues' (2015) advice on setting standards, the CEC undertook the following standard setting exercise.

The CEC invited all members of the MYP Advisory Committee and select members of the MYP community to complete an online exercise in which they were shown items

¹⁸ See *A Study of the Implementation & Impact of the MYP: Next chapter: Summary Report* (February 2017).

from the online student survey then asked to respond to the following prompt: “How should students respond if the MYP: Next chapter is being delivered as envisioned?”

Given the diversity of the roles in the Advisory Committee and across the members selected from the community, this exercise was designed to capture their collective viewpoints on student responses to the questions measuring the learner profile outcomes of interest (i.e., active community membership, international mindedness, and lifelong learning). Responses of the committee members were analyzed, and the average response was used as a reference point such that responses from students that were within two points of this average response were considered to have met expectations. Comparatively, anything above this value exceeded expectations and anything below was categorized as not yet meeting expectations. For example, if the collective viewpoint of student responses was four, anything between two and six would count as having met expectations. Anything above six would be considered exceeding expectations and anything below two would be categorized as not yet meeting expectations.

2.2 STUDENT OUTCOMES MAIN FINDINGS

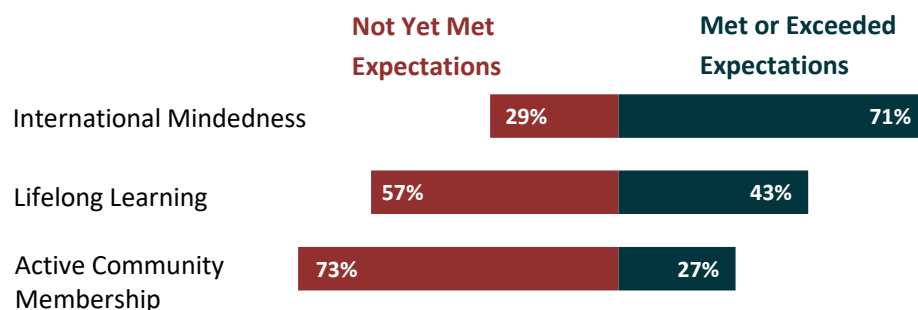
This section is a summary of findings from the Claremont Evaluation Center’s study into the outcomes associated with MYP: Next chapter. This section describes findings from student surveys administered during the spring of 2019 and the final round of case study site visits conducted at six schools. It focuses primarily on understanding the student learner profile outcomes and academic outcomes associated with the MYP: Next chapter.

Finding 2.1. Students consistently report being internationally minded but there is opportunity for improving their lifelong learning and active community membership.

International Mindedness: Many MYP students are internationally minded. In fact, over 70% of students either meet or exceed the expectations set by IB (see **Figure 2.2**). Roughly half of students indicated that they Strongly Agreed with the statements, “I feel very concerned about the lives of people who live in countries where human rights are not respected,” and “There is more than one way to approach a problem.” Despite the generally positive trend, there is still room for improvement. Approximately half of students (49%) were not yet meeting IB’s expectations when answering the question “I

think of myself as not only a citizen of my country but also a responsible member of the global community.”¹⁹

Figure 2.2. Students largely met expectations related to International Mindedness and struggled to meet those related to Active Community Membership



Lifelong Learners: Nearly two-thirds of students reported struggling to meet expectations regarding Lifelong Learning. Over a third of students indicated that they believed “Others are in a better position that I am to evaluate my success as a student” and as many disagreed with the statement “I can solve problems when they arise.” The remaining third of students gave neutral responses neither agreeing nor disagreeing with these statements. The MYP: Next Chapter is intended to produce lifelong learners and therefore the IB has high expectations for students. Despite feeling as if others are more capable of evaluating their success, students generally claim that they carry the responsibility of making sense of what they learn at school. They are beginning to take ownership with the learning process²⁰.

During site visit focus groups, it sometimes appeared that student responses to lifelong learning questions were biased by their general negative attitudes toward school or learning. For example, when students were asked if they were lifelong learners, they would respond with something like **“No, I don’t like learning”**. School context seemed to have an impact on the freedom of what is discussed at school, which may have implications for students expressing their curiosity or other characteristics related to lifelong learning. At some schools there are certain subjects considered inappropriate for discussion at school. For example it’s challenging in some contexts to discuss issues such as religion, history, health education and conflicting societal issues due to cultural sensitivity teachers feel that this restricts the otherwise flexible characteristics of the MYP and limits their ability to bring current events or social issues into the classroom with their students. Teachers expressed concern that this may be associated with feelings of being a lifelong learner.

¹⁹ For more information see documentation of responses to PMF survey excel document

²⁰ For more information see documentation of responses to PMF survey excel document

Despite often not outright identifying as lifelong learners, students still describe taking time outside of school and their homework to research topics or questions they are intrinsically interested in. Students also mentioned how their teachers help them in pursuing their interests, even if they are beyond the scope of the class. One MYP student commented that:

It depends on what it is. I'm not going to go off and study something I'm not interested in. Like I wouldn't go and study art, I wouldn't study history because I'm not that big of a history person. But I might, sometimes, if I'm interested, I'll just get a news article about space, or science, or physics, and I'll read that. So, I will still study stuff that I'm interested in, like math and science, but I don't study stuff that I don't actively enjoy, or am interested in.

Active Community Members: The IB has indicated that they expect students to both believe in their ability to productively engage in active community membership but also to begin to take action. Students generally meet or exceed IBs expectations for their feelings toward community membership. Students generally agree that they can “affect what happens on a global level by what I do in my own community” and “apply the things I learn in school to the activities I do in the community,” but they are not yet taking action. Most students do not believe they will “write to a newspaper about political or social issues” or “join an organization for a political or social issue.” However, roughly 70% of students do indicate an intention to volunteer time to help their local or international community. Students seem to be choosing one or two things they feel comfortable doing to engage actively in their community. It may be that, given time, they will consider expanding this active participation in their community²¹.

Based on site visit data, there appears to be factors, in addition to MYP implementation, that impacted the feasibility of students demonstrating active community membership. Students often discussed limitations in their ability to be present in the community. Some examples from MYP students include:

Well, we do have the freedom to help, although it honestly depends on our parents. Because we still can't go out of their watch so.

It's just here you don't have much time. So, if I had a chance to go abroad and help, I'll probably be part of a lot more things than I am here. Because there's so many more chances outside than here.

It is possible that these other factors, beyond MYP implementation, may also have an impact on implementation itself. For example, one of the schools visited employed a handful of teachers who attended the school as students in their youth. And the values and mission of the school have been consistent throughout their time as students

²¹ For more information see documentation of responses to PMF survey excel document

(when the school was not an IB school) and teachers (now, when the school is an IB school). Therefore, regardless of the implementation of the MYP, this school was always going to have strong community engagement, because that is a key component of the culture of the school and the history of the context within which this school exists. One MYP student commented:

Our school is really big on that, on community service. We are actually one of the constant supporters for the cancer uh. Every year um student council they have a box which we raise the money and donate it to. And uh we actually that's one of things I really like about the school is that we do a lot of community service, constantly we have uh monthly things to do.

And one MYP teacher at this same school stated:

No, this school they are known for that [community engagement] even before the IB. Community service, action service all the time. So yeah, it's imbedded within us.

Finding 2.2. Students' learner profile attribute outcomes are significantly impacted by implementation of global context and approaches to learning strategies.

Global Context

As with each of the strategies, teachers were asked questions related to both their knowledge of and attitude toward the Global Context strategy as well as their specific behaviors related to the Strategy²². Students answered questions related to the student learner profile which includes active community membership, lifelong learning and an international mindset. Both teacher and student responses to these questions indicate that better implementation of the Global Context strategy is associated with an increase in student outcomes related to the student learner profile. Students' survey responses indicated that in schools where teachers report more knowledge, a positive attitude, and frequent inclusion of practices related to the Global Context strategy, students are more likely to report being active community members and lifelong learners as well as having an international mindset (see **Appendix 4, Tables 4.1-4.7**).

Active Community Members: Schools in which teachers report a high amount of knowledge and a positive attitude toward the Global Context strategy produced students who indicated being active community members. Teachers who agreed with statements such as, "Contextual learning helps students understand why the

²² For a detailed examination of the Global Context strategy please refer to *A Study of the Implementation & Impact of the MYP: Next chapter: Summary Report* (February 2017) and *A Study of the Implementation & Impact of the MYP: Next chapter: Summary Report II* (February 2018)

information they are learning is important", and "Using classroom activities that incorporate global contexts enhances student learning,"²³ work at schools which produce students more likely to indicate that they are becoming active community members. These students indicated that they "feel an obligation to speak out when I see my government doing something, I consider to be wrong," or that they are likely to volunteer their time to help their local or international community (see **Appendix 4**). Teachers who understand and value the Global Context strategy when planning their lessons are better able to promote active community membership in their students.

Lifelong Learner: Similarly, the teachers' implementation of the Global Context strategy is predictive of whether students are becoming lifelong learners. These teachers are likely to indicate that they often draw on real-world examples and require their students to understand class material from multiple perspectives²⁴. Students at these schools indicate that they "love learning for its own sake", and that they are able to "solve problems when they arise" (see **Appendix 4**). Teachers who bring the Global Context into their classroom are more likely to aid students in developing into lifelong learners.

International Mindedness: Likewise, in schools where teachers report frequently using the Global Context strategy in their classrooms, students display International Mindedness. These students are more likely to indicate that they "enjoy trying to understand people's behavior in the context of their culture," and "enjoy trying to understand other people's perspectives" (see **Appendix 4**). When attempting to promote an openness and curiosity about other cultures across the world, it is important to employ the Global Context strategy.

This is consistent with observations from the school site visits, wherein it seemed that high implementing schools demonstrated a better understanding and were able to provide good examples of International Mindedness, as compared to schools with lower levels of implementation. The students who "get it" - or understand what International Mindedness is and how it connects to the MYP curriculum - see a lot of value in International Mindedness. For example, they think it provides valuable perspectives and is important to apply when thinking about social issues or working with other people. They think being internationally minded will serve them well in the future. However, these results may be confounded with geography and local connections with international communities.

²³ For more information see documentation of responses to PMF survey excel document

²⁴ For more information see documentation of responses to PMF survey excel document

Approaches to learning

Unlike the Global Context strategy, students' survey responses indicate that in schools where teachers report meeting or exceeding IBs standards related to their knowledge about, attitude towards, and frequent inclusion of practices related to the Approaches to Learning strategy, students are less likely to report being active community members or having an international mindset.

Teachers were asked questions related to both their knowledge and attitude toward the Approaches to Learning strategy as well as their specific behaviors related to the strategy. Understanding both teachers' attitudes and knowledge about the strategy, as well as their behavior related to the strategy are important in understanding its relationship to students' learner profile outcomes²⁵.

Active Community Members: Schools in which teachers reported positive attitudes and knowledge about Approaches to Learning, as well as those in which teachers frequently apply this strategy in the classroom, are less likely to have students who indicate that they are active community members. In addition, of the eight strategies related to MYP: Next chapter, the Approaches to Learning strategy is the most related to the Active Community Membership learner profile outcome (see **Appendix 4**). As students are given more responsibility for their own learning, they are less likely to report that they can "apply things I learn in school to the activities I do in the community" or other activities related to being an active community member (see **Appendix 4**).

Students with International Mindedness: Additionally, in schools which teachers reported a higher frequency of behaviors related to the Approaches to Learning strategy, students reported having less of an international mindset. Students were less likely to report that they "find it generally interesting to spend time talking with people from another culture," or "feel very concerned about the lives of people who live in countries where human rights are not respected" when the teachers at their schools reported frequently implementing the Approaches to Learning strategy (see **Appendix 4**).

Students who attend schools in which Approaches to Learning are emphasized do not differ from other students with regards to age, gender, or the region of the world in which they live. They are, however, more likely to attend a private school that reports greater access to resources relative to other schools in the same region.

²⁵ For a detailed examination of the Approaches to Learning strategy please refer to *A Study of the Implementation & Impact of the MYP: Next chapter: Summary Report* (February 2017) and *A Study of the Implementation & Impact of the MYP: Next chapter: Summary Report II* (February 2018)

Students also report a more negative attitude toward their schools when teachers report high implementation of the Approaches to Learning strategy. These students are more likely to indicate that school is hard (see **Appendix 4**). The Approaches to Learning strategy emphasizes the role students have in their own learning process. It is possible that shifting the responsibility of learning from parents and teachers to students requires a period of adjustment. It is reasonable to expect that, given time, the relationship between a student's experience with the Approaches to Learning strategy and their tendency toward active community membership or international mindedness may change. Although data were collected from many individuals between 2017 and 2019, individual students were not followed across the years. A study exploring the Student Learner Profile and students experience with Approaches to Learning overtime, into the IB Diploma Program (DP) program may add greater clarity to this relationship.

Although the implementation of the Approaches to Learning strategy coincides with lower reported levels of some elements of the student learner profile, we do not know why. There may be additional factors, that were beyond the scope of this study, that explain this negative relationship. It is possible that students who are focused on approaches to their own learning are more internally focused and therefore less concerned, for a time, with the global community. It is also possible that some students are feeling anxious about additional responsibility related to their learning and that concern over their own intellectual journey causes them to focus less on others for a time. Additional research is needed to better understand this relationship.

Additional Factors

The Global Context and Approaches to Learning strategies are related to multiple student learner profile outcomes. They are not, however, the only strategies correlated with the student learner profile outcomes. Service as Action, Concept Driven Teaching, and Interdisciplinary Planning also play an important role.

Service as Action and Active Community Membership: Schools in which teachers emphasize practices related to the Service as Action strategy also have students who report a strong tendency toward active community membership. This means that teachers who discuss service with their students in such a way as to "encourage them to think of service in terms of the quality of their interactions," have students who report that they are likely to volunteer their time to help individuals in their local or international communities.

This was also supported by observations and experiences documented during site visits. Schools that demonstrated a strong sense of active community membership did so at all levels (from heads of schools to students). This may, at times, be demonstrated by the integration of the Service as Action strategy into the student learning experience. At the schools that embodied active community membership, all

members of the school identified the importance of community engagement in terms of giving back to the community and helping others, as well as in terms of benefits for the students themselves. For example, students expressed how volunteering gives them the opportunity to figure out what they are passionate about. This is consistent with research on volunteering motivations, which argues that motivations to volunteer are neither singular nor static and, at times, the presence of self-oriented motivations can facilitate better volunteering persistence (Clary et al., 1998; Omoto & Snyder, 2009; Omoto et al., 2000).

At the schools that offer the DP in addition to the MYP that demonstrated less active community membership, members of the school often conflated this outcome with the DP CAS (Creativity, Action, Service) requirement²⁶. Teachers and students alike, when asked about active community membership, would discuss CAS activities or their CAS coordinator. Students also discussed how they felt like the service they did was more about the writing they had to do to meet requirements, than the service itself. This may indicate that students are perceiving their service work as something that must be completed, because it's a requirement, rather than something done for its own sake – even if, in actuality, that is not how it works at their school. Previous research on mandated volunteering has found that perceived external constraints on volunteering behaviors, in the form of requirements or rewards, may reduce interest in the activity (Batson et al., 198; Kunda & Schwartz, 1983; Stukas et al., 1999). Therefore, exerting too many external constraints on students may undermine their intrinsic, inherent inclinations toward service and community engagement. However, all schools visited had at least one example of quality community engagement. For example, nearly everyone at one of the schools visited talked about the red hat, self-directed volunteer efforts of one student:

I forget what the cause is, but one of the girls here on her own account was collecting red hats... and she encouraged people to sew the hats and knit the hats and they're homemade. And then every kid that's born at the hospital gets a red [hat]... And that was her own initiative

It is recommended that schools and teachers pair an emphasis on Approaches to Learning with Service as Action. Structurally the IB MYP programme could seek to further support schools with ways to bring the Approaches to Learning and Service as Action together within the disciplines and in the classroom. This could help to provide a well-balanced student who is both concerned with their own learning as well as with the concerns of the community around them.

Concept Driven Teaching and Lifelong Learning: Schools in which teachers emphasize Concept Driven teaching are more likely to have students who report that

²⁶ Creativity, Action, Service (CAS) is a Diploma programme core element which requires students pursuing a full diploma to demonstrate attributes of the IB learner profile in real and practical ways.

they are becoming lifelong learners. These teachers are more likely to believe that using key concepts in unit planning creates personal relevance and greater creativity for their students. In addition, they are likely to ask students broad conceptual questions and have them relate the key concepts to information they've learned in other classes or at other times in the school year. Students who are in these classes in turn indicate that they are more likely to "love learning for its own sake" and to feel that it is their "responsibility to make sense of what I learn at school." Concept Driven Teaching is an important strategy that teachers can use as they guide students toward a belief that they are able to take charge of their own learning and are capable of solving problems that arise in their life.

Interdisciplinary Planning and Lifelong Learning: Schools in which teachers emphasize the Interdisciplinary Planning strategy generally have students who are less likely to report that they "love learning for its own sake" and to feel that it is their "responsibility to make sense of what I learn at school." As with the Approaches to Learning strategy, this relationship is likely more complex than it first appears. Throughout all three years that the teacher survey was administered, teachers reported struggling to meet with other teachers to collaborate on their interdisciplinary planning. This has resulted in a variety of ways in which teachers report implementing this strategy. Additional research into the variety of methods used for implementing this strategy and their varying effects on students' attitudes toward learning will help to explain this relationship better.

Finding 2.3. Students who have a positive attitude about their school are more likely to be internationally minded, active community members and lifelong learners.

Students who described their school experience as being relatively valuable, interesting or good were more likely to be internationally minded, lifelong learners, and active community members than those that described it as relatively worthless, boring, or bad. Interestingly, those who indicated that their school was relatively easy were more likely to be lifelong learners and active community members than those who described it as relatively hard but were unlikely to be more internationally minded (see **Appendix 4**).²⁷ This indicates that MYP: Next chapter is more effective at increasing the student learner profile outcomes when students positively rate their school than when they find it overly difficult, uninteresting or worthless.

There is evidence to show that the way in which the MYP: Next chapter is implemented has some effect on students' attitude toward their school. When teachers report that

²⁷ Note these questions were asked on a sliding scale

they are better at implementing the Concept Driven Teaching strategy and when they report a positive attitude toward Building Quality Curriculum their students report a more positive attitude toward their school.

As noted under **Finding 2.2.**, when teachers report high implementation of the Approaches to Learning strategy, students report a less positive attitude toward their school. Although this is associated with an initial drop in students' self-reported international mindedness, lifelong learning and active community membership, caution should be taken when interpreting these results. It is likely that Approaches to Learning represents an additional responsibility for the students and would be best understood with a longitudinal study following learner profile outcomes over a period of time.

Teachers' implementation of the MYP: Next chapter strategies are not the only factors influencing students' attitude toward their schools²⁸. Efforts to increase the culture and atmosphere within schools will complement the MYP: Next chapter in developing students into active community members who are lifelong learners and have an international mindset.

In addition to students' attitude toward their school, female-identified students and students who took the survey in French or Spanish were more likely to report being internationally minded, lifelong learners and active community members, as compared to male-identified students or those who took the survey in English. This likely highlights the fact that gender and culture both influence response patterns and may not indicate that the MYP program is more effective for these subgroups.

Finding 2.4. Although students generally think they are prepared for future learning, teachers are uncertain about how to prepare students.

During the final round of site visits, the CEC asked members of the school communities about how prepared students are for the next step in their education (after completing the MYP). For many, but not all, this means continuing to the IB's Diploma Program (DP). Although these findings only represent the experiences of six MYP schools, there were consistent patterns of responses. Overall, students had mostly positive things to say about what they are learning as a function of being MYP students. Teachers, on the other hand, are concerned about preparing students for the content-focused nature of the DP.

²⁸ Implementation of MYP: Next chapter strategies predicts about 20% of the variability in student attitude ($F(8, 164) = 4.49, p < .001, R^2 = .18$)

Students often reported feeling prepared for the future, in general. They feel like they are learning important skills (e.g., how to research, how to present, how to work with others) that will be useful to them in the future. However, for students planning on continuing to the DP, they acknowledged an understanding of the difficulty of it. So, they still were not very confident and believed they would still need to work hard to be successful.

Teachers expressed difficulty with vertical articulation in terms of preparing students for the DP. Teachers discussed back-planning and working with DP teachers to have a better understanding of what their MYP students will need. However, they see inconsistencies between the MYP and DP that they feel make it difficult to prepare students. Specifically, teachers discussed the concept-driven nature of the MYP. They are supportive of this part of the MYP as they believe it gives them flexibility and helps them create assignments that are engaging for them and the students. However, they perceive the DP as being very content-driven, which is seen as the antithesis of the MYP concept-driven teaching. As a result, the MYP teachers interviewed are concerned about covering the content their students need to be successful in the DP. One MYP teacher observed:

[For the] DP program, the math curriculum is changing, but it's still content heavy, 80% of your exam...MYP criteria is only a quarter of your overall grade.

And another MYP teacher stated:

I wonder content-wise... I don't want them to go into high school not having some content that they really need.

Finding 2.5. Teachers and students see the benefits of the MYP but they come at a cost.

During the final round of site visits, the CEC also documented unintended outcomes of implementing the MYP for both students and teachers. Although these findings only represent the experiences of six MYP schools, there were consistent patterns of responses. Overall, both students and teachers found the MYP to have benefits and costs. However, the costs seem to weigh heaviest on teachers.

Students

Students and teachers reported that they believe the MYP is good for students because it helps students become more self-aware, open-minded, and willing to help others. Students report that they learn skills that will be important to their success later in life (e.g., researching, presenting). However, students at all schools described

experiencing stress and expressed concerns about school-life balance. At most schools, students discussed their stress, which centred around managing their workload, extra curriculars, and social relationships. Teachers often expressed awareness of these difficulties for the students. There was some evidence that, at some schools, teachers try to work together to avoid overwhelming their students (e.g., trying to avoid scheduling important exams for the same time). However, teachers are required to cover certain things and have a limited amount of time to do it. At one school all members of the school community were concerned about student stress, which seemed to be a persistent issue at this school. Students are still able to make meaning from their stress and believe that, as a result of it, they are learning how to balance their lives and learn important coping skills. They believe this is an important skill for them to develop in order to be successful in the future.

Generally, students believe anyone can benefit from being an MYP/IB student. But they acknowledge that it is a lot of work and may be different from other school programs. So, students that do not have an IB background might struggle a bit more, relative to students who have an IB background. At some schools, teachers and administrators expressed concern with how students are brought into their school and thus the MYP. At some schools' students must apply and there is concern that some of the inclusion criteria are limiting opportunities to students who would still benefit from the program.

Teachers

Teachers believe that the MYP pushes them to think more critically about how they engage with students and create lessons that are more valuable to students. They think that this is a result of the Concept-driven Teaching strategy. However, the trade-off with this flexibility is that teachers often feel like they can never just "phone it in" or take it easy. They are constantly having to recreate/change lesson plans, which contributes to this notion of "MYP = Many Years of Paperwork". Teachers are often stressed by the amount of work they have to do to create and recreate lesson plans and may not have the resources they need to implement the program well. This may provide some insight into the difficulties that teachers face with aspects of the MYP that require collaboration. Teachers struggle to implement all aspects of the MYP in just their own classrooms, let alone in collaboration with others. Additionally, when schools experience turnover or changes in leadership, it seems that it often falls to the more experienced teachers to take on additional responsibilities in order to keep the program running in times of transition.

Finding 2.6. There is not enough evidence to determine if the MYP: Next chapter program influences student academic performance.

IB schools have the opportunity to opt into the eAssessment system. Under this system, the IB administers exams designed to test students' academic ability. To determine if greater implementation of the MYP: Next chapter program resulted in higher academic outcomes, the level of implementation reported by teachers at each school was compared with the academic achievement of students at their schools. None of the strategies showed any significant correlation with the average subject grades earned by students in each school. Correlation analyses often fail to show relevant results, however, when there are multiple interacting factors. A correlation analysis predicting student grades from teachers' implementation of the Approaches to Learning strategy does not take into account the large variation of implementation with regards to the other strategies. For this reason, a multiple regression was run. This multiple regression was run predicting student grades from the level of implementation teachers reported for each of the strategies but was not significant either. The findings suggest that level of implementation had no measurable effect on student achievement. This may be due to the underpowered nature of the tests. Although a statistical test should have a power of .8 (80%) to detect the small effects most often found in education, this regression had a power of .25. This implies that unless the effect size of the results was very large, it would most likely go undetected. For more information see **Appendix 5**.

Although the CEC was able to attain the eAssessment data for 819 schools and 81,449 students, only 227 of these schools completed the 2019 teacher PMF survey. This represents data from 15,232 students. Both the student eAssessment data and the teacher implementation data was aggregated at the school level to allow for comparison. This hides student and teacher level differences and obscures some potentially powerful variation. We know from the 2018 technical report (Azzam and colleagues, 2018 p. 155) that individual differences are often more important than school level differences for both teacher implementation and student outcomes.

The lack of a measurable effect does not mean that the MYP: Next chapter fails to support student academic achievement. There just wasn't enough variation in schools' implementation to provide a meaningful comparison. In addition, there were very few schools who provided both eAssessment data as well as survey data. As more schools opt into eAssessments, enough variability may develop to determine the effect implementation of the MYP: Next chapter has on student academic performance.

In addition, due to the low power of the test, it was not possible to control for demographic variables such as region or type of school. As has been highlighted in previous reports examining implementation, context plays a significant role in the way in which students are educated.

Finally, it may be that given enough participants to run the perfect statistical test, there is still no relationship between teachers' implementation of the MYP: Next chapter strategies and students' scores on the eAssessment. Additional research may be

necessary to establish the validity of this assessment as a tool for measuring the academic outcomes of interest to the IB, schools, and students.

2.3 OUTCOMES SUMMARY

Students are showing a tendency toward an international mindset and they believe they are prepared for future learning; however, they are not always displaying all of the behaviours indicative of active community membership that the IB expects of them. Higher levels of MYP implementation are associated with better student outcomes, but there are many potential influencing factors.

- The Global Context strategy has the strongest associations with every student outcome associated with the student learner profile.
- The Approaches to Learning strategy is difficult for students and is associated with a lower tendency toward active community membership and an international mindset.
- Students who had positive attitudes toward their school reported better student outcomes. This attitude is related to teacher implementation of MYP: Next chapter strategies.
- Schools that opted into eAssessment reported significantly higher implementation of every strategy except Concept-driven Teaching.

Although teachers and students both see the benefit of the MYP, they all report that participating in the MYP is a lot of work. Students report struggles with school-life balance and teachers lament the continual need to change and update their lesson plans.

Though better implementation of the MYP: Next chapter program may result in stronger academic performance, no noticeable effect was detected with this data. There was not enough variation in the data to test the effect of implementation on eAssessment performance. Schools who participate in eAssessments are meeting IB's expectations for performance just like schools who are not participating in eAssessments.

CHAPTER 3: CONCLUSION AND KEY MESSAGES



A set of evaluation questions guided the data collection, analysis, and reporting for this final round of the evaluation. They include:

1. What have been the effects, both intended and unintended, of MYP: Next chapter implementation?
2. Which aspects of MYP: Next chapter appear to have had the greatest effect on students, teachers, and schools?
3. In what ways do outcomes vary for different schools, groups of students, and contexts?
4. What changes do schools perceive to have been most successful?
5. Does higher implementation of MYP: Next chapter lead to better academic performance?

Table 3.1 presents a summary of responses to these questions based on the data collected from the final phase of this study (i.e., site visit case studies, PMF survey responses from teachers and students, and eAssessments).

Table 3.1 CEC Evaluation Questions & Summary of Results	
Evaluation Question	Summary of Results
What have been the effects of MYP implementation?	High levels of MYP implementation are associated with better outcome performance, but there are many potential moderator variables.
Which aspects of MYP appear to have had the greatest effect on students, teachers, and schools?	Global Context and Approaches to Learning seem to have notable effects on student outcomes. However, teachers speak very highly of the impact of concept-driven teaching and learning.
In what ways do outcomes vary for different schools, groups of students, and contexts?	The type of school, the subject taught and the level or resources available to the teachers all have a positive impact on the level of implementation. This in turn influences student outcomes. In addition to this, students' attitude toward their schools has a strong impact on their learning outcomes.
What changes do schools perceive to have been most successful?	Schools found varying success in implementation different MYP: Next chapter strategies. Consistently, strategies that require collaboration with other teachers require overcoming more challenges and written requirements are prioritized.
Does higher implementation of MYP lead to better academic performance?	There was not enough evidence to determine if increased implementation led to a change in students' academic performance. This is due to the fact that few schools completed both the survey and the eAssessment in 2019. The lack of a larger dataset hindered the evaluation from examining the relationship between implementation and academic outcomes with a strong degree of confidence in the findings. Further research is recommended.

3.1 KEY MESSAGES

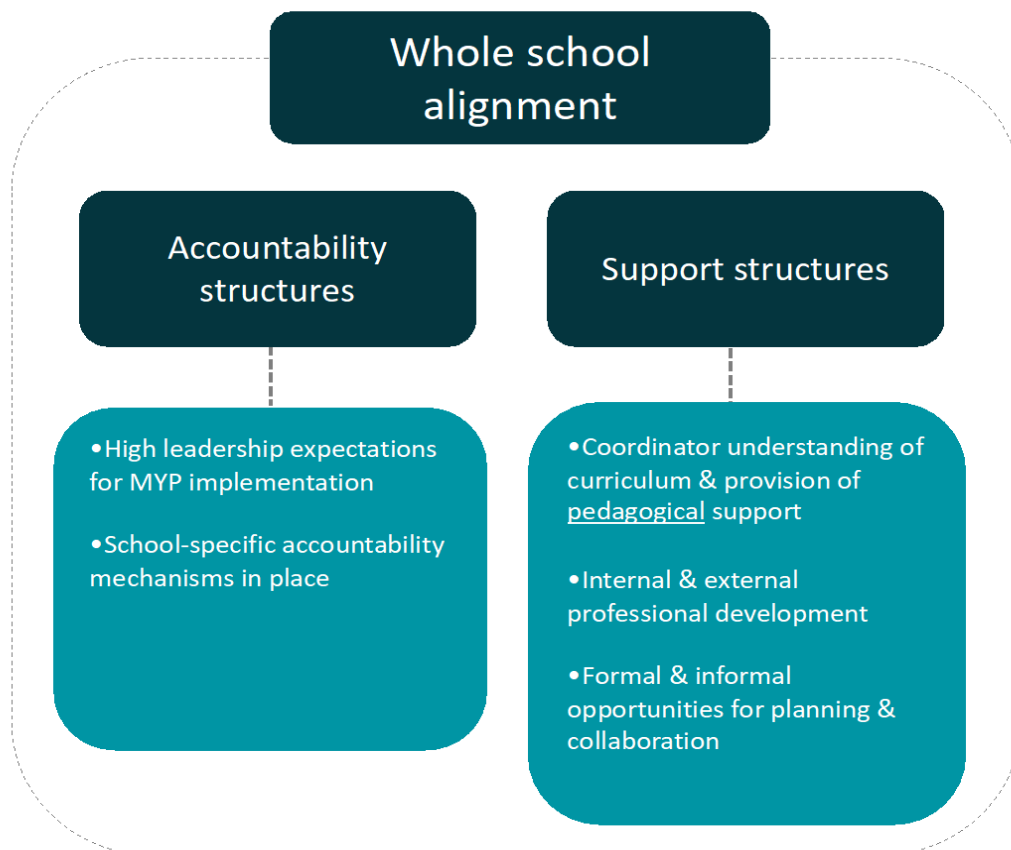
This study also suggests several key messages for a variety of different MYP: Next chapter stakeholders.

Strengthen whole school alignment of MYP implementation

Across the evaluation strategies that were not related specifically to in classroom disciplinary teaching or required collaboration (e.g., interdisciplinary planning, vertical articulation, and service as action) tended to lag behind the others in terms of implementation. In short, they were seen as more difficult to implement. Schools and the IB should find ways to strengthen the connections between specific elements of the programme and the important in-classroom teaching and learning experience such that all elements of the MYP work together to benefit students. Key facilitators of developing a whole school alignment of the MYP include accountability and support structures (see **Figure 3.1**).

These include high expectations from school leaders regarding implementation, with built in accountability mechanisms (e.g., regular progress meetings); in addition to consistent provisions of support from these school leaders and particularly the MYP coordinator. Supports include pedagogical understanding, formal and informal opportunities for planning and collaboration, and ongoing opportunity for professional development.

Figure 3.1. Whole school alignment through accountability and support



MYP and DP alignment is key for vertical articulation

Many teachers, in the course of the case study site visits, commented on how they were finding backwards planning and vertical articulation into DP difficult due to the difference in focus between content and concept. The MYP is focused on concept-based teaching and learning, which students and teachers seem to value. Teachers, in particular, enjoy the flexibility it provides them in creating their lessons. They are easily able to adjust the content of their classes to fit student interests, current events, and even their own passions. However, in trying to prepare their students for the DP, teachers have noticed how content-based the DP is. Therefore, in order to prepare students for their future learning MYP teachers do need to make sure their students are getting the content necessary to be successful in DP, which many teachers feel is a troubling inconsistency between the programs. Although the researchers do not have specific comments on how to better align these two programs, we suggest the IB consider the alignment and areas for improving it between the MYP and DP.

3.2 KEY MESSAGES FOR SCHOOLS AND TEACHERS

Foster positive attitudes and engagement

Students' attitudes toward their school is an important predictor of their success in terms of the learner profile outcomes examined in this study. The developmental years experienced throughout the course of the MYP are challenging and it can be difficult for schools to garner positive engagement with and feelings about school. However, this research suggests that such attempts at facilitating positive school experiences are worth it.

Pair a focus on Approaches to Learning with an emphasis on Service as Action

The Approaches to Learning strategy challenges both teachers and students as the responsibility for learning shifts toward the student. As teachers focus on the Approaches to Learning strategy, are less likely to report active community membership or even an international mindset. Students benefit from the balancing

influence of the Service as Action strategy emphasizing a focus toward others. Students in classrooms where Service as action is emphasized not only experience increases in active community membership and an international mindset, but they also have a more positive attitude toward their school.

Work on enhancing the well-being of students, teachers, and programme coordinators

Although students and teachers regularly attest to the benefits of the MYP, both groups acknowledge there are some costs to participating in the programme. The predominant concern for students is stress associated with balancing their schoolwork, extracurricular activities, and their home life with friends and family. Adolescence is an important time for addressing mental health. Many mental health disorders first present in adolescence (Rushton et al., 2002) and untreated mental health problems in adolescence can lead to detrimental outcomes. Although adolescents are more susceptible to mental health issues, they are also particularly receptive to behavioral modeling, positive influences of youth development strategies, and social and emotional learning (Steinberg et al., 2004). Therefore, it's important for schools to promote mental health awareness and skills. Previous research on school-based mental health programs have found that schools are well situated to address the unique mental health needs of adolescents and that whole school approach programs can successfully develop skillsets that promote mental health in adolescents (Wells et al., 2003).

Implementing the MYP is also stressful for teachers, which in some schools can be observed in the amount of turnover experienced. Therefore, it is important that schools make sure to actively support their teachers – who can then model positive coping and mental health skills to their students. The kinds of support teachers report valuing include ongoing opportunities for professional development (even for “advanced” MYP teachers) and scheduled time for planning and collaboration. Some methods we have observed schools use to address these kinds of supports include:

- Scheduling collaboration and planning days throughout the school year that occur during regular workdays and times
- Distributing the workload by assigning different people to becoming experts in particular programme components
- Selecting a particular component(s) (e.g., unit planning) that the entire school works on mastering with help from experts
- Establishing clear plans, agendas, and goals for collaborative components (e.g., vertical articulation, interdisciplinary units)

3.2 LIMITATIONS OF THE CURRENT STUDY

The research team acknowledges a number of limitations to this study that should be taken into account when interpreting findings.

SELF-REPORT

Findings from the survey component of this research are based on self-report and should therefore be interpreted with caution, as they reflect teacher and student perceptions of implementation rather than external, objective assessments of the curriculum framework.

NON-LONGITUDINAL

Even though this evaluation has been conducted over many years and has detected stable and consistent findings, data collected each year was not always collected from the same educators, students, or schools. With the exception of the case study schools, CEC did not track information from teachers and students over time. Therefore, it is difficult to make confident claims about change over time or how these changes impact outcomes.

NON-REPRESENTATIVE

Although a large number of MYP teachers, coordinators, and students completed the surveys and participated in site visits, they represent a minority of MYP schools. The findings are nevertheless reflective of a large portion of MYP schools, especially given that the same schools did not participate every year, it is possible that those who took part in this study differ in some substantial ways to those who did not take part.

ATTRIBUTING IMPLEMENTATION TO OUTCOME DATA

Due to concerns about the confidentiality of both student and teacher data, there was not enough identifying information to connect students to their teachers. Both the level of implementation and the strength of the student outcomes was aggregated at the school level before a relationship was analyzed. This reduced the power and accuracy of any statistical tests potentially obscuring some interesting findings. In addition, because there were so few schools in which teachers filled out the survey and students completed eAssessments, there was not enough data to find any but a very strong relationship between academic performance and MYP implementation. This likely led to the inconclusive results regarding the effectiveness of the MYP: Next chapter's effect on student academic performance.

3.3 FUTURE RESEARCH CONSIDERATIONS

UNDERSTANDING THE UNEXPECTED FINDINGS

Many of the student learner profile outcomes examined in this study are difficult to measure and are intended to be characteristics of MYP students long into the future. As a result, measuring these outcomes during the students' MYP years may not be the most accurate assessment of the impact of the MYP: Next chapter on these characteristics. Therefore, a study that explores these learner profile outcomes further into and beyond their IB careers, may shed more light on the impact of the MYP on the development of students who are internationally minded, active community members, lifelong learners, and prepared for their future education. In particular, based on the results of this research, we recommend a focus on Approaches to Learning and students' experiences with this strategy.

UNDERSTANDING MYP IMPLEMENTATION

The MYP Next chapter provides for flexible implementation within a school's context. Although the MYP is designed and recommended for a full five-years of implementations, schools may opt to implement the MYP in different configuration of years (i.e. 1-3, or only years 4 and 5). This aspect of flexibility may influence adherence, but it was out of scope of this evaluation and warrants further investigation.

USING EASSESSMENTS DATA FOR STUDENT OUTCOMES IN THE FUTURE

The eAssessments provide a valuable opportunity for collecting information on the impact of the MYP on student outcomes, particularly academic. Due to the more low-stakes nature of the eAssessment (relative to the DP exams), the eAssessments are also a potentially reliable way for the IB to gather information that may help to develop better tools to support curriculum implementation. However, additional research is necessary to establish the relationship between the implementation of MYP and the eAssessment outcome results. Future research, for example, may include requesting a small random sample of schools to participate in the eAssessments (for free) while collecting implementation data, and other assessment tools. This may help provide relevant information about the connection between MYP implementation and its academic outcomes, and also help to cross-validate the eAssessment with other academic measures.

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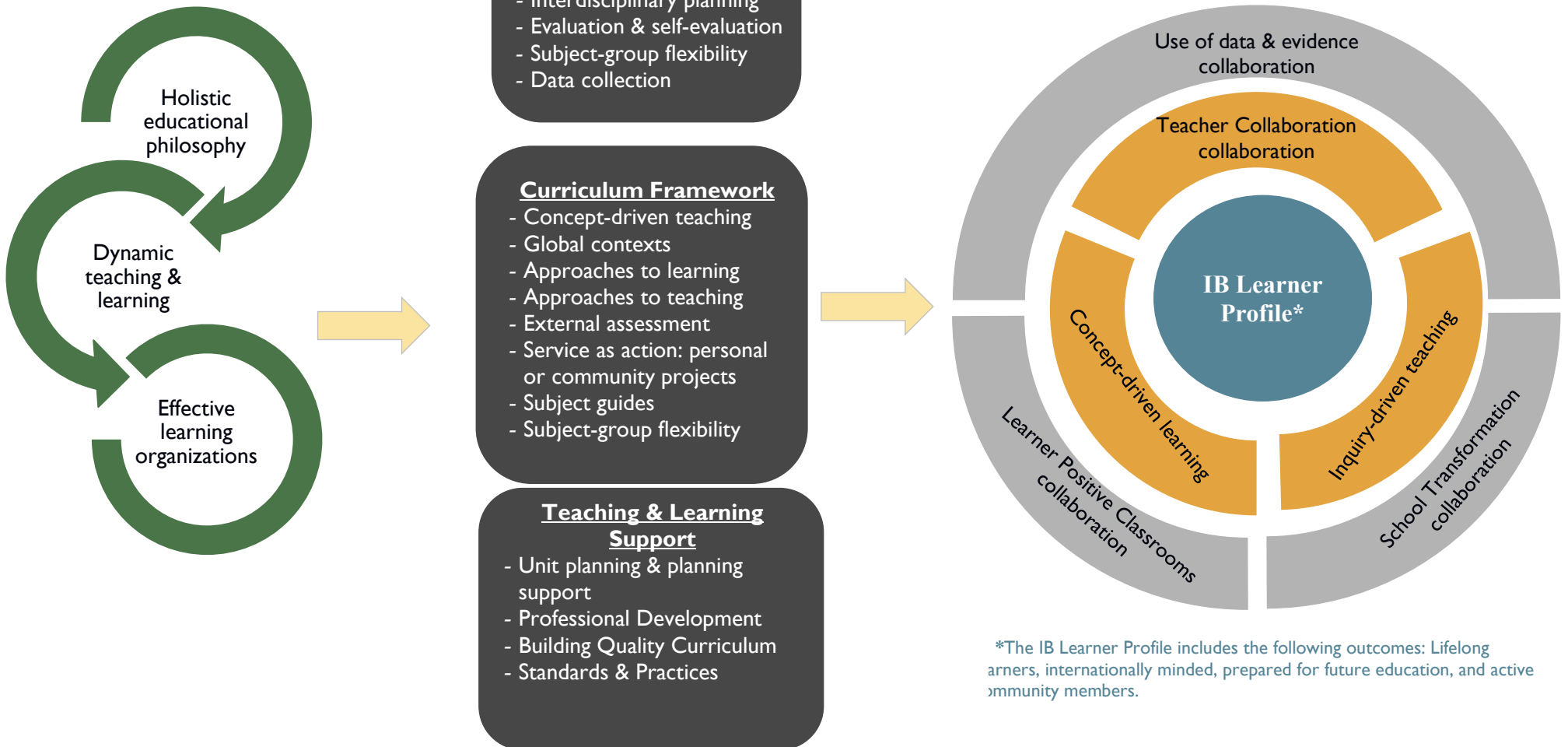
APPENDICES

APPENDIX 1: MYP NEXT CHAPTER LOGIC MODEL

Guiding Principles

Strategies

Outcomes



APPENDIX 2: PERFORMANCE MONITORING SURVEYS (2019)

PMF TEACHER SURVEY, ROUND 3 (2019)

My name is Tarek Azzam and I am an Associate Director at the Claremont Evaluation Center. My team and I are conducting an independent research study on the IB Middle Years Programme (MYP) and want to find out about teachers' experiences with the programme. This survey is part of that study.

Survey Purpose: The purpose of this survey is to learn about how the MYP is being implemented in IB World Schools and to find out what conditions best support MYP implementation. We are asking you to take part because teacher feedback is critical to learning more about how the IB can best support MYP implementation.

Nothing in this survey will be used in any way to assess **you** as a teacher. The purpose of this survey is to learn more about MYP implementation **in general** and to learn how to make implementation easier and more effective.

Who is conducting this survey? This is an **independent** research study. It is being conducted by the Claremont Evaluation Center at the IB's request.

What we will ask you to do: If you agree to take this survey we will ask questions about your experiences teaching in the MYP, and your thoughts on the different aspects of the new MYP Programme. The survey will take 20-30 minutes to complete.

Compensation: You will not be compensated for your participation in this survey. We will thank you, though, for taking the time to provide feedback. Your participation will also help the IB and the IB Community learn more about teacher experiences in the MYP and could help improve the programme to benefit you, other teachers, and students.

Taking part is voluntary: Taking part in this survey is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part or to skip some of the questions, it will not affect your current or future relationship with IB or the Claremont Evaluation Center. If you decide to take part, you are also free to stop at any time.

Confidentiality: Your answers will be kept confidential. Any information we present to the IB will not include any information that will make it possible to identify you. Research records will be stored so that it is not possible to identify individual respondents.

If you have questions: If you have any questions or would like additional information about this study, please contact me at tarek.azzam@cgu.edu.

Statement of Consent: Please select 'Yes, I agree to participate' if you would like to continue with the survey. By continuing on with this survey you are also indicating that you understand the above information and agree to participate.

- Yes, I agree to participate
 - No, I do not agree to participate
-

APPENDIX 2: PMF SURVEY ITEMS

Thank you for agreeing to participate in our survey. Your help will allow us to learn about teachers' experiences implementing the MYP curriculum framework.

1. **In 2014 the IB community introduced a new curriculum framework, the MYP: Next chapter. Many schools have developed transition plans to guide their shift towards the MYP: Next chapter.**

First, we would like to know about the implementation of the MYP: Next chapter curriculum framework at your school.

Has your school started to implement the MYP: Next chapter curriculum framework?

- ☐ Yes
 - ☐ No
 - ☐ I don't know
-
2. To the best of your knowledge, what YEAR and MONTH did your school start implementing the MYP: Next chapter curriculum framework?
 - ☐ 2013
 - ☐ 2014
 - ☐ 2015
 - ☐ 2016
 - ☐ 2017
 - ☐ January
 - ☐ February
 - ☐ March
 - ☐ April
 - ☐ May
 - ☐ June
 - ☐ July
 - ☐ August
 - ☐ September
 - ☐ October
 - ☐ November
 - ☐ December
 3. What is the status of your School?
 - ☐ Authorized
 - ☐ Candidate
 4. What year did you become an Authorized IB MYP School?
 5. Which statement is true?
 - ☐ We completed a five year evaluation of our school between January 2015 and December 2018
 - ☐ We will have a five year evaluation of our MYP programme this year (January - December 2019)
 - ☐ We will have a five year evaluation of our MYP programme after 2020

APPENDIX 2: PMF SURVEY ITEMS

To help us understand more about the context in which you work, this section asks a small number of questions about your school.

6. Which IB programmes are offered at your school? Please check all that apply.
- ☐ PYP ☐ MYP ☐ DP ☐ CP
7. What type of school do you work at?
- ☐ Private international
 - ☐ Private national
 - ☐ Public (state)
 - ☐ Other: _____
8. Was your school previously a moderating school?
- ☐ Yes
 - ☐ No
 - ☐ I don't know
9. Do you offer the MYP in partnership with another school?
- ☐ Yes, What school do you partner with? _____
 - ☐ No
 - ☐ I don't know
10. What region do you work in?
- ☐ The Americas
 - ☐ Asia Pacific
 - ☐ Africa/Europe/Middle East
11. What country do you work in? _____
12. Relative to other schools in your country, how would you describe the resourcing at your school?
- Insufficient -1 2 3 4 5 6 7- Sufficient
13. Approximately how many years has your school been affiliated with IB?
- ☐ 1-30;
 - ☐ I don't know

Thank you so much for your responses so far! In this next section, we would like to ask about your experiences with different aspects of the MYP curriculum. We will ask questions about:

- 1. Interdisciplinary Planning**
- 2. Vertical Articulation**

APPENDIX 2: PMF SURVEY ITEMS

3. **Global Contexts**
4. **Concept-Driven Teaching**
5. **Approaches to Learning**
6. **Service as Action**
7. **Building Quality Curriculum**
8. **eAssessments**

We look forward to hearing your feedback!

First, we would like to learn a little about your experiences with interdisciplinary planning.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

14. In my experience, interdisciplinary planning enhances student learning.
15. I have the skills I need to use interdisciplinary planning.
16. At my school, I am expected to develop interdisciplinary understanding.
17. I know what should be included in a good interdisciplinary unit.
18. I know what a good interdisciplinary unit looks like in practice.
19. Teacher collaboration is necessary for successful interdisciplinary unit planning.
20. It is important for me to know what students are learning in other subjects.
21. At my school, I am expected to develop interdisciplinary understanding.
22. I have the resources I need to use interdisciplinary planning.

Overall, how often do the following occur?

- | | |
|--|---|
| <input type="radio"/> Never | <input type="radio"/> One a month |
| <input type="radio"/> Less than once in six months | <input type="radio"/> Once every two weeks |
| <input type="radio"/> One in six months | <input type="radio"/> Once a week |
| <input type="radio"/> Twice in six months | <input type="radio"/> More than once a week |
| <input type="radio"/> Three times in six months | |

23. I make my unit plans available to other teachers in my grade level.
24. Other teachers at my school make their unit plans available me.
25. When I teach, I reference content being taught in other classes.
26. My class activities require students to draw on some content they've acquired in other classes.
27. My class assignments require students to combine content they've learned in multiple classes.
28. I meet with other teachers at my school in order to collaborate on unit plans.
29. I meet with other teachers at my school to collaborate specifically on interdisciplinary unit plans.
30. In my subjects, students are encouraged to focus only on that subject.
31. My unit plans require students to communicate their thoughts about the subject in multiple ways.

32. At my school, students complete at least one interdisciplinary unit during each MYP year.
 - ☐ Yes, all MYP years

APPENDIX 2: PMF SURVEY ITEMS

- Only some MYP years
 - No interdisciplinary units
 - I don't know
-

Thank you for your insights about interdisciplinary planning!

Next, we would like to learn about your experiences with vertical articulation at your school.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

The current unit planning process...

- 33. Allows lessons to be better integrated across MYP Years.
- 34. Allows students to build upon previously learned knowledge.
- 35. Allows students to build upon previously learned skills.
- 36. Enhances the quality of my lessons.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

I know how to form unit plans that....

- 37. Build upon my students' previously learned knowledge.
- 38. Build upon my students' previously learned skills.
- 39. Prepare my students for knowledge they will learn in the future.
- 40. Prepare my students for skills they will learn in the future.

Please indicate how much you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

- 41. My students' previous teachers adequately prepared them for learning in my class.
 - 42. I use past learning objectives to inform my planning of future units.
 - 43. I use long-term learning objectives to guide my planning of units in the near term.
 - 44. At my school, teachers are expected to collaborate with teachers in the previous MYP year when making unit plans.
-

We have just a few more questions about vertical articulation.

How often do the following occur?

- | | |
|--------------------------------|-----------------------------|
| ○ Never | ○ Three times in six months |
| ○ Less than once in six months | ○ One a month |
| ○ One in six months | ○ Once every two weeks |
| ○ Twice in six months | ○ Once a week |

APPENDIX 2: PMF SURVEY ITEMS

- More than once a week

- 45. I meet with teachers in the year above me to share unit plans.
 - 46. I meet with teachers in the year below me to share unit plans.
 - 47. I reference content my students learned in a previous MYP year when teaching new material.
 - 48. When teaching new content, I reference content students will learn at a future time.
 - 49. I make clear to students why they are learning a given concept by tying it to a future learning objective.
 - 50. I encourage students to relate class material to concepts they've learned previously.
-

Next, we would like to learn about global contexts.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

- 51. Using classroom activities that incorporate global contexts enhances student learning.
- 52. Contextual learning helps students understand why the information they are learning is important.
- 53. At my school, I am expected to use global contexts in everyday practice.

Please indicate how often the following occur.

- | | |
|--------------------------------|-------------------------|
| ○ Never | ○ One a month |
| ○ Less than once in six months | ○ Once every two weeks |
| ○ One in six months | ○ Once a week |
| ○ Twice in six months | ○ More than once a week |
| ○ Three times in six months | |

- 54. My lessons require students to understand class material from multiple perspectives.
 - 55. My lessons reference current local, national, or international examples.
 - 56. I use activities to help students identify their biases.
 - 57. I know exactly why students are learning the concepts and topics I've planned to teach each day.
 - 58. I draw on real world examples (e.g. settings, events, or circumstances) when teaching.
 - 59. I seek to make class material directly relevant to the lives of my students.
-

Please indicate how often the following occur.

- | | |
|--------------------------------|-------------------------|
| ○ Never | ○ One a month |
| ○ Less than once in six months | ○ Once every two weeks |
| ○ One in six months | ○ Once a week |
| ○ Twice in six months | ○ More than once a week |
| ○ Three times in six months | |

- 60. I teach students about the interconnectedness of the world.

APPENDIX 2: PMF SURVEY ITEMS

- 61. I encourage my students to discuss class material from the perspective of their own life experience.
 - 62. I encourage my students to explore their identity in the context of other possible identities.
 - 63. I challenge my students to consider class content from unfamiliar perspectives.
-

Thank you for all your help so far! Now we have a few questions about concept-driven teaching.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

The use of key concepts in unit planning...

- 64. Encourages processing factual information at a deeper level
- 65. Creates personal relevance
- 66. Achieves higher levels of creativity
- 67. Achieves higher levels of critical thinking

How important is it that your students are able to demonstrate knowledge of:

1- Not at all important 2 3 4 5 6 7- Extremely important

- 68. Facts
 - 69. Topics
 - 70. Concepts
-

How much do you disagree or agree with the following statement?

- 71. To do well in my class, students must be able to recall only facts.

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

How frequently do the following occur?

Never, Seldom, About half the time, Usually, Always

- 72. I use key concepts to build my unit plans.
- 73. I use related concepts to build my unit plans.
- 74. I connect class content to the overarching key concept.

- 75. How so? Choose all that apply.
 - Class discussion

APPENDIX 2: PMF SURVEY ITEMS

- Lecture
- Class activity
- Homework
- Readings
- Outside class activity
- Other: _____]

How often do the following occur?

- | | |
|--------------------------------|-------------------------|
| ○ Never | ○ One a month |
| ○ Less than once in six months | ○ Once every two weeks |
| ○ One in six months | ○ Once a week |
| ○ Twice in six months | ○ More than once a week |
| ○ Three times in six months | |

76. I give students the opportunity to discuss new topics using concepts they have already learned.
77. When I teach, I encourage students to apply their knowledge from other classes.
78. I spend the majority of each class lecturing to students.
79. When I teach, I ask students broad conceptual questions.
80. My classroom activities are oriented around a key concept.

Thank you so much for your responses! Your feedback is very important to us.
Next, we would like to find out about your experiences with Approaches to Learning.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

81. I feel confident in my understanding of how ATL skills develop over time.
82. Teachers work together to plan how we will teach ATL skills.
83. I know how to build my students' ATL skills.
84. I should demonstrate ATL skills to my students in my classroom.
85. Students should practice their ATL skills in my classroom.

How do you feel about incorporating ATL skills into your teaching practice?

Explicitly focusing on ATL skills **in my classes** is:

86. Bad _____ Good
87. Pointless _____ Worthwhile
88. Ineffective _____ Effective
89. Hard _____ Easy

How frequently do the following occur?

- | | |
|--------------------------------|-------------------------|
| ○ Never | ○ One a month |
| ○ Less than once in six months | ○ Once every two weeks |
| ○ One in six months | ○ Once a week |
| ○ Twice in six months | ○ More than once a week |
| ○ Three times in six months | |

APPENDIX 2: PMF SURVEY ITEMS

I provide my students opportunities to...

- 90. Decide how they will complete projects.
- 91. Select the topics of their projects.
- 92. Reflect on their progress on assignments.
- 93. Reflect on their experience after completing an assignment.
- 94. Communicate class material in their own words.
- 95. Demonstrate their understanding in multiple ways.
- 96. Practice multiple forms of communication.

In addition, how frequently do the following occur?

- | | |
|--|---|
| <input type="radio"/> Never | <input type="radio"/> One a month |
| <input type="radio"/> Less than once in six months | <input type="radio"/> Once every two weeks |
| <input type="radio"/> One in six months | <input type="radio"/> Once a week |
| <input type="radio"/> Twice in six months | <input type="radio"/> More than once a week |
| <input type="radio"/> Three times in six months | |

- 97. Assignments in my class give students the opportunity to collaborate with each other.
- 98. Assignments in my class require students to have performed research outside of class.
- 99. I provide an atmosphere in my class where students feel comfortable **making mistakes.**
- 100. I provide an atmosphere in my class where students feel comfortable **taking risks.**
- 101. I design class activities that allow for a diversity of student learning styles.
- 102. Our written curriculum includes an Approaches to Learning planning chart for all years of the programme.
- 103. When presenting a new topic or task, I encourage my students to use their ATL skills to help them with the new information or activity.
- 104. When presenting a new problem, I encourage my students to suggest their own solutions before providing further guidance.
- 105. When presenting a new problem, I ask my students to consider the issue from multiple perspectives.
- 106. At the end of a unit, I ask my students about their conclusions about the topic.
- 107. We explore how the topics we cover are represented in the media.

Thank you so much for your responses! You're over halfway done!
Next, we would like to learn about service as action.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

- 108. Service projects can have a real impact on our local community.
- 109. Service projects should be tied to students' interest.
- 110. Service projects should utilize skills students learned in the classroom.

How often do the following occur?

APPENDIX 2: PMF SURVEY ITEMS

- Never
- Less than once in six months
- One in six months
- Twice in six months
- Three times in six months
- One a month
- Once every two weeks
- Once a week
- More than once a week

APPENDIX 2: PMF SURVEY ITEMS

- 111. I invite students to think of how global phenomena affect their local community.
- 112. I encourage students to think about how they can engage with their local community.
- 113. I encourage students to consider key concepts in the context of the local community.
- 114. I provide students opportunities **to learn** about their local community.
- 115. I provide students opportunities **to engage** with their local community.
- 116. I provide students opportunities to help **solve problems** in the local community.
- 117. I provide students opportunities to reflect on their service to others.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

- 118. When discussing community service with students, I encourage them to think of service in terms of the hours they spend in service.
- 119. When discussing community service with students, I encourage them to think of service in terms of quality of their interactions.
- 120. Which of the following should **always** be incorporated in unit plans?
Please check all that apply.
 - Interdisciplinary planning
 - Service as action
 - eAssessments
 - Global contexts
 - Vertical Articulation
 - Key concepts
 - Learner profile
 - Related concepts
 - None of these

Thank you so much for your insights!

As you may have heard, IB has recently started a new service called Building Quality Curriculum. We would now like to learn a little about your thoughts on this new service.

- 121. Prior to this questionnaire, were you aware that there is a service that provides feedback on unit plans for a fee?
 - Yes

APPENDIX 2: PMF SURVEY ITEMS

- Somewhat
- No

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

- 122. Feedback on unit plans is important for improving my instruction.
 - 123. Receiving feedback on unit plans is an important part of evaluation visits.
 - 124. Monitoring of unit plans is a good use of funds.
 - 125. It would be helpful to receive feedback on my unit plans.
-

- 126. When was your school's last evaluation visit? _____ ○ I don't know
- 127. My school has received feedback on unit plans as part of our latest evaluation visit.
 - Yes
 - No
 - I don't know

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

- 128. I was able to form plans to improve my teaching based on the feedback my school received.
- 129. Our school policies were adjusted as a result of the feedback my school received.
- 130. I am better able to implement the MYP Next chapter curriculum as result of the feedback we received.
- 131. My teaching practices have changed as a result of the feedback my school received.
- 132. Please describe how your teaching practices have changed.
- 133. Have you used the Building Quality Curriculum services outside of an evaluation visit?
 - Yes
 - No
 - I don't know
- 134. To what extent did you find the feedback useful; To what extent have your teaching practices changed as a result of the feedback? How, if at all, have they changed?
- 135. Do you feel better prepared for your next evaluation visit? Would you recommend the service to other MYP teachers?

APPENDIX 2: PMF SURVEY ITEMS

Thank you so much for your responses! Finally, we would like to learn about your thoughts and experiences with eAssessments.

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

MYP eAssessments....

- 136. Are aligned with the goals of the MYP Next chapter curriculum.
- 137. Help schools achieve the MYP's goals.
- 138. Helps prepare students for the Diploma Programme.
- 139. Have a positive effect on the reputation of MYP Next chapter.
- 140. Assess students' conceptual understanding.
- 141. Produce credible data on student learning.
- 142. Produce reliable data on student learning.

- 143. Please consider the country where you teach. How frequently do students in this country take school-wide, standardized tests?
 - Never
 - Less than once per year
 - Once per year
 - Twice per year
 - Three times per year
 - Four times per year
 - More than four times per year

- 144. Has your school participated in eAssessments?
 - Yes
 - No, and our school does not plan to adopt MYP eAssessments
 - No, but our school plans to adopt MYP eAssessments
 - There are no MYP Year 5 students at my school

- 145. Which of the following best describes why your school does not administer MYP eAssessments?
 - Our school administers other assessments
 - Our school does not support standardized testing of this age group
 - The cost of administering MYP eAssessments is too high
 - MYP eAssessments are not supported by our parent community
 - Other_____

- 146. Please tell us the main reason why your school administers an assessment other than MYP eAssessment_____

- 147. When does your school plan to adopt MYP eAssessments?

APPENDIX 2: PMF SURVEY ITEMS

- In 2019
- In 2020
- After 2020
- I don't know

148. Did your school have any external assessments prior to eAssessments?

- Yes
- No
- I don't know

149. Were those assessments helpful, and if so how?

150. How do eAssessments compare to your previous external assessment experience?

151. What has been your experience with eAssessments?

152. Can you please describe your experience with the onscreen aspect of eAssessments? What measures, if any, were taken to help familiarize students with the technology? _____

Overall, how much do you disagree or agree with the following statements?

1 - Strongly Disagree 2 3 4 5 6 7-Strongly Agree

Based on your experience,

153. It is easy to administer the eAssessment onscreen.

154. My students were familiar with using a computer for testing.

155. It would be better for eAssessments to be pencil and paper.

156. Has having external assessment changed your teaching in any way?
If yes, how? _____

157. Have eAssessments (specifically, **online** external assessments) changed your teaching in any way?

Thank you for your time and your input! In this last section, we would like to learn about you.

APPENDIX 2: PMF SURVEY ITEMS

158. What subject areas/year levels do you teach? [Language Year 1, Mathematics Year 2, etc.]
Subject 1: _____
Year: _____
159. What school do you work at? Please write the full name of the school.

160. How many years have you worked at your current school? o 1 - 30
161. How many years of experience do you have teaching the MYP? _____
-
162. What is your highest level of education you have completed?
- o High school
 - o Associates Degree/Some college
 - o Bachelor's Degree
 - o Master's/Professional Degree
 - o Doctorate/PhD
 - o Other: _____
163. What subject area(s) do you have formal qualifications in?
- o Education
 - o Language Acquisition
 - o Language and Literature
 - o Individuals and Society
 - o Sciences
 - o Mathematics
 - o Arts
 - o Physical and Health Education
 - o Design
164. What is your gender?
- o Male
 - o Female
 - o Other
165. Is there anything else you would like to share with us before submitting the survey? _____

Thank you so much for your time and your responses! Your input has been very helpful to us!

APPENDIX 2: PMF SURVEY ITEMS

PMF STUDENT SURVEY, ROUND 3 (2019)

What's the point of this survey? You are being asked to fill out this survey as part of a research study on the IB Middle Years Programme. We are asking you to take part because student input is very important to learning more about how the IB works at your school.

How you can help: We can use the information you give us to make a positive difference at your school and other IB World Schools. The survey will take 20-30 minutes to complete.

Payment: You will not be paid to take this survey. We appreciate and will thank you, though, for taking the time to share your thoughts with us. Students usually feel good about contributing, too.

Do you HAVE to take this survey? Taking this survey is completely voluntary. You may skip any questions that you do not want to answer. If you decide to take the survey, you are also free to stop at any time. If you choose not to take this survey at all, it will not affect you negatively in ANY way.

Privacy: Only your honest answers can help make a difference so we have created a safe space for you to be honest. Your answers will be kept completely private. No teacher or administrator will EVER know what you put down on this survey.

Statement of Consent: I have read the above information, and I agree to take part in the study.

- Yes, I agree to participate
 - No, I do not agree to participate
-

Thank you for agreeing to take our survey!

1. First, how do you feel about your school overall?

- Bad _____ Good
- Hard _____ Easy
- Boring _____ Interesting
- Worthless _____ Valuable

APPENDIX 2: PMF SURVEY ITEMS

Now, thinking about your **classes** how much do you **disagree or agree** with the following statements?

- Strongly disagree
 - Disagree
 - Neither Agree nor Disagree
 - Agree
 - Strongly Agree
2. The knowledge I learn in one subject helps my understanding of other subjects.
 3. The skills I learn in one subject area helps me do well in other subjects.
 4. The concepts I learn for one topic are applicable to other topics.
 5. The concepts I learn in one subject help my understanding of other subjects.

Next, we'd like to learn about you and your view of the world.

How much do you **disagree or agree** with the following statements?

- Strongly disagree
 - Disagree
 - Neither Agree nor Disagree
 - Agree
 - Strongly Agree
6. I enjoy trying to understand people's behaviour in the context of their culture.
 7. I feel very concerned about the lives of people who live in countries where human rights are not respected.
 8. There is more than one way to approach a problem.
 9. I enjoy trying to understand other people's perspectives.
 10. I find it generally interesting to spend time talking with people from another culture.
 11. I feel an obligation to speak out when I see my government doing something I consider to be wrong.
 12. Everyone can learn something of value from all different cultures.
 13. I am able to affect what happens on a global level by what I do in my own community.
 14. I think of myself as not only a citizen of my country but also a responsible member of the global community.

Thank you for your responses!

APPENDIX 2: PMF SURVEY ITEMS

How much do you know about the following issues?

- Hardly anything or nothing
- A little
- Some
- A lot

15. Global citizenship (knowledge to become a responsible member of the global community)
 16. Global citizenship (skills to become a responsible member of the global community)
 17. Sustainable development (Earth's finite resources)
 18. Sustainable development (our responsibilities for the future)
 19. Diversity (respecting different cultures and traditions)
 20. How much do you know about these issues? Social Justice (fairness and equality)
 21. Human rights (rights and responsibilities in **local** contexts)
 22. Human rights (rights and responsibilities in **global** contexts)
 23. Conflict resolution (choices and their consequences)
 24. Conflict resolution (negotiation)
 25. Interdependence (how **people** are linked)
 26. Interdependence (how **places** are linked)
 27. Values and perceptions (how cultural values shape behaviors)
-

Thank you very much for your help.

Next, we're interested in your thoughts on learning.

How much do you **disagree or agree** with the following statements?

- Strongly disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

28. I love learning for its own sake.
29. I can solve problems when they arise.
30. I prefer to have others plan my learning.
31. I seldom think about my own learning and how to improve it.

APPENDIX 2: PMF SURVEY ITEMS

- 32. I feel others are in a better position than I am to evaluate my success as a student.
- 33. I often find it difficult to locate information when I need it.
- 34. It is my responsibility to make sense of what I learn at school.
- 35. When I learn something new I try to focus on the details rather than the 'big picture'.

In this section, we ask about your experience at an IB school.

36. In which MYP year level did you begin the MYP? 1 - 5

37. Which MYP year level are you in now? 1 - 5

38. How much do you disagree or agree with the following statements?

- Strongly disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Compared to this time last year, my understandings of school subjects are more complex.

In this section we'd like to learn about how you intend to spend your time over the next few years.

Listed below are different actions that you as a young person could take during next few years.

What do you expect that you will do?

- I will certainly not do this
- I will probably not do this
- I will probably do this
- I will certainly do this

- 39. Write to a newspaper about political and social issues.
- 40. Contribute to an online discussion forum about social and political issues.
- 41. Join an organization for a political or social issue.
- 42. Volunteer time to help people in the local community.

APPENDIX 2: PMF SURVEY ITEMS

43. Volunteer time to help the international community.

44. Talk to others about political and social issues

Overall, how much do you **disagree** or **agree** with the following statements?

- Strongly disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

45. I can apply things I learn in school to the activities I do in the community.

46. Volunteering my time to help people in the local community would be valuable.

47. How helpful was your community/personal project to your community?

- Not at all helpful
- A little helpful
- Somewhat helpful
- Very helpful
- Extremely helpful

How much do you disagree or agree with the following statement?

- Strongly disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

48. For me, studying six subjects has allowed me to focus on subjects that interest me.

49. I have a sense of the subjects I would like to learn more about in the future.

In this last section, we would like to learn more about you.

APPENDIX 2: PMF SURVEY ITEMS

50. What is the name of the school you attend? Please write the school's full name.

51. In which region is your school located in?

- IB Americas
- IB Africa, Europe, and Middle East
- IB Asia-Pacific
- I don't know

52. What country is your school located in? _____

53. What is your age? 10 - 17

54. If you know it, what is your current GPA? _____

55. What are the names of your teachers?

56. What is your gender?

- Male
- Female
- Other

57. Has being an MYP student had any positive impacts on your life?

58. Has being an MYP student had any negative impacts on your life?

You're done! Thank you so much for your help!

APPENDIX 3: SITE VISIT PROTOCOLS

Please note, all protocols were also translated into French for data collection conducted in French.

ADMINISTRATOR (HEAD OF SCHOOL) INTERVIEW PROTOCOL

1) INTRODUCTION

A) For our records, can you remind me of your role here at <school name>?

1) Follow-up: How long have you been <role> at <school>?

2) OVERALL EXPERIENCE

A) It has been about a year since our last visit. How is your school's transition to MYP: Next chapter going now?

Prompt: Have there been any accomplishments or set-backs in the last year?

B) Have there been any major changes to how your school implements MYP: Next chapter since our last visit?

Prompt: For example, have there been changes to your planning processes, professional learning strategy, school systems or structures?

C) Thinking about your current implementation, which part(s) of the MYP framework do you feel your school now implements well?

1) Follow-up: Could you please give me an example?

D) Were you working at an MYP school before the transition to the new curriculum on 2014?

1) IF YES Follow-up: Which parts of the MYP: Next chapter do you think have been most valuable for teachers and students at your school?

E) Has your school been able to integrate the MYP framework with local, state, or national curriculum?

1) IF YES Follow-up: Could you please give me an example?

F) Does your school utilize eAssessments?

1) IF YES Follow-up: How do you think eAssessments have affected the way your school implements the MYP: Next chapter curriculum?

2) IF NO Follow-up: Why is that? Do you anticipate using eAssessments in the future?

3) STUDENT OUTCOMES

One of our goals for this round of site visits is to learn more about student outcomes.

The next set of questions relate to some key outcome areas for MYP students.

A) The first of these is international mindedness. To what extent do you feel that your students display international mindedness?

1) Follow-up: Can you give me an example of a student who has displayed international mindedness?

2) Follow-up: Which parts of the MYP curriculum, if any, help create students who are internationally minded?

3) Follow-up: Are there any parts of the curriculum that hinder the development of internationally minded students?

APPENDIX 3: SITE VISIT PROTOCOLS

B) What about lifelong learning? Would you describe your students as lifelong learners, and if so, how?

1) Follow-up: What parts of the MYP curriculum, if any, help to build lifelong learners?

2) Follow-up: Do any parts of the curriculum hinder the development of lifelong learners?

C) How well do you feel the current MYP curriculum prepares students for future learning, and in particular the transition to DP?

1) Follow-up: Which parts of the MYP curriculum help prepare students for future learning?

2) Follow-up: Which parts, if any, make the transition to future learning or the DP difficult?

D) To what extent do you feel students at your school are active community members?

1) Follow-up: Do you expect they will go on to be active community members in the future?

2) Follow-up: Which parts of the curriculum help and which parts of the curriculum hinder the development of students who are active community members?

E) Are there particular types of students who tend to gain the most from MYP? Are there any students who don't benefit from, or who experience difficulties with MYP?

4) UNINTENDED OUTCOMES - STUDENTS

A) Beyond what we've talked about already, what positive outcomes do you observe for students in the MYP? Here, we're particularly interested in outcomes that flow from things like Approaches to Learning, the Global Contexts, Concept-Driven Teaching, and Service as Action.

B) What about negative outcomes? Are there any difficulties, or challenges that emerge from students in relation to these parts of the MYP curriculum?

5) UNINTENDED OUTCOMES - TEACHERS

A) What about teachers? Are there any positive outcomes for teachers that flow from curriculum elements like Approaches to Learning, the Global Contexts, Concept-Driven Teaching, and Service as Action?

B) What about negative outcomes?

6) DATA USE - TEACHERS

A) To what extent do you feel that teachers at this school use data to evaluate school strategies, identify vulnerable pupils or inform planning?

1) Follow-up: What types of data do they use? Where do they obtain this data?

7) SCHOOL FACTORS

We're almost done! I really appreciate your honesty with these questions.

A. From your perspective, what school-level features have helped to support positive outcomes for MYP students at your school?

Prompt: Things like collaboration, resourcing, support from leadership, etc.

B. Are there any features of your school that have made achieving positive outcomes for students difficult?

APPENDIX 3: SITE VISIT PROTOCOLS

Prompt: Things like collaboration, resourcing, support from leadership, etc.

10) CLOSING

I really appreciate all of your answers and you for sharing all of that with me. I have just a couple of short questions before we wrap up.

1) Is there anything else that you feel we should have talked about regarding your experiences with the MYP?

Prompt: Is there a topic or question I should have asked you about or that you felt was missing from the interview?

2) Is there anything else you would like to share about your experiences with the MYP?

Thank you for taking the time to participate in this interview. Your participation will be very helpful for this project and we hope that the results will help to inform MYP policies and practices. Just as a reminder, all of your responses will always be kept completely confidential, and they will never be linked with your name or any other identifying information.

APPENDIX 3: SITE VISIT PROTOCOLS

TEACHER INTERVIEW PROTOCOL

1) INTRODUCTION

Thank you so much for meeting with me today! I would like to start by learning a bit more about you.

A) How long have you been teaching?

1) Follow-up: How long have you been teaching at an IB school?

B) How long have you been teaching at <school>?

1) Follow-up: What classes do you currently teach?

B) Were you an MYP teacher before the transition to the new curriculum in 2014?

1) **IF YES** Follow-up: What differences have you noticed working with the new curriculum?

Prompt: is the new curriculum more flexible?

Prompt: has it enabled or inhibited teacher collaboration?

2) **IF YES** Follow-up: Which parts of the MYP: Next chapter do you think have been most valuable for teachers and students at your school?

2) OVERALL EXPERIENCE

A) You probably know we visited your school about a year ago. In this past year, have there been any major changes to how your school implements MYP: Next chapter?

Prompt: For example, have there been changes to your planning processes, professional learning strategy, school systems or structures?

B) Overall, how well do you feel like you understand and implement the MYP curriculum?

1) Follow-up: how comfortable are you with **unit planning**?

2) Follow-up: how comfortable are you with **approaches to teaching and learning**?

3) Follow-up: how comfortable are you with **concept-based teaching**?

C) What about the broader school community? How well does the school overall understand and implement the MYP curriculum?

D) Does your school utilize eAssessments?

1) **IF YES** Follow-up: How has participating in the eAssessments impacted your implementation of the MYP: Next chapter?

2) **IF NO** Follow-up: Do you know why not? Do you know if your school expects to implement eAssessments in the future?

3) STUDENT OUTCOMES

One of our goals for this round of site visits is to learn more about student outcomes. The next set of questions relate to some key outcome areas for MYP students.

A) The first of these is international mindedness. To what extent do you feel the students you teach display international mindedness?

1) Follow-up: Can you give me an example of a student who has displayed international mindedness?

2) Follow-up: Which parts of the MYP curriculum, if any, help create students who are internationally minded?

3) Follow-up: Are there any parts of the curriculum that hinder the development of internationally minded students?

B) What about lifelong learning? Would you describe your students as lifelong learners, and if so, how?

APPENDIX 3: SITE VISIT PROTOCOLS

1) Follow-up: What parts of the MYP curriculum, if any, help to build lifelong learners?

2) Follow-up: Do any parts of the curriculum hinder the development of lifelong learners?

C) How well do you feel the current MYP curriculum prepares students for future learning, and in particular the transition to DP?

1) Follow-up: Which parts of the MYP curriculum help prepare students for future learning?

2) Follow-up: Which parts, if any, make the transition to future learning or the DP difficult?

D) To what extent do you feel students at your school are active community members?

1) Follow-up: Do you expect they will go on to be active community members in the future?

2) Follow-up: Which parts of the curriculum help and which parts of the curriculum hinder the development of students who are active community members?

E) Are there particular types of students who tend to gain the most from MYP? Are there any students who don't benefit from, or who experience difficulties with MYP?

4) UNINTENDED OUTCOMES

A) Beyond what we've talked about already, what positive outcomes do you observe for students in the MYP? Here, we're particularly interested in outcomes that flow from things like Approaches to Learning, the Global Concepts, Concept-Driven Teaching, and Service as Action.

B) What about negative outcomes? Are there any difficulties, or challenges that emerge from students in relation to these parts of the MYP curriculum?

5) UNINTENDED OUTCOMES - TEACHERS

A) What about teachers? Are there any positive outcomes for teachers that flow from curriculum elements like Approaches to Learning, the Global Concepts, Concept-Driven Teaching, and Service as Action?

B) What about negative outcomes?

6) DATA USE - TEACHERS

A) To what extent do you feel that teachers at this school use data to evaluate school strategies, identify vulnerable pupils or inform planning?

1) Follow-up: What types of data do they use? Where do they obtain this data?

2) Follow-up: What about you, personally? What types of data do you use? Where do you obtain this data?

7) SCHOOL FACTORS

We're almost done! I really appreciate your honesty with these questions.

A. From your perspective, what school-level features have helped to support positive outcomes for MYP students at your school?

Prompt: Things like collaboration, resourcing, support from leadership, etc.

B. Are there any features of your school that have made achieving positive outcomes for students difficult?

APPENDIX 3: SITE VISIT PROTOCOLS

Prompt: Things like collaboration, resourcing, support from leadership, etc.

10) CLOSING

I really appreciate all of your answers and you for sharing all of that with me. I have just a couple of short questions before we wrap up.

1) Is there anything else that you feel we should have talked about regarding your experiences with the MYP?

Prompt: Is there a topic or question I should have asked you about or that you felt was missing from the interview?

2) Is there anything else you would like to share about your experiences with the MYP?

Thank you for taking the time to participate in this interview. Your participation will be very helpful for this project and we hope that the results will help to inform MYP policies and practices. Just as a reminder, all of your responses will always be kept completely confidential, and they will never be linked with your name or any other identifying information.

APPENDIX 3: SITE VISIT PROTOCOLS

STUDENT FOCUS GROUP PROTOCOL

Introduction and Instruction

Smile and greet the students as they walk into the room. Ask them to choose a seat and sit down. If you are still waiting for a few students to arrive, inform the group that more students will be joining the discussion and that things will start soon. Before all students arrive, be friendly and try to make conversation with the students to begin establishing positive relationships.

Over the course of the focus group, students may begin to feel more comfortable and potentially speak rapidly, interrupt each other, or speak over each other. Please remind students as often as necessary to speak one at a time because the conversation is being recorded.

When students are seated and the room is cleared, please use the following script to begin the focus group:

Introduce Yourself

Hello everyone! My name is (lead facilitator) _____ and I am a researcher from Claremont Graduate University in the United States. Thank you so much for coming to talk with me today - I am so glad that you all agreed to be a part of our discussion!

I'm here because I am part of a team that is studying what it is like to be an MYP student. We've been travelling all around the world and talking to students like you to find out about your experiences as an MYP student and your thoughts about the MYP.

What we'll be doing today is called a focus group. This means I'll be asking a whole bunch of questions that I'd like to hear your thoughts about. There are no right or wrong answers to any of the questions I'm asking; we really just want to know your honest thoughts.

Just like you would in class, please raise your hand to let me know you'd like to say something and I'll call on you.

Because we only have a short amount of time, and quite a few questions to ask, if there are lots of students who have answered a particular question, when I call on you I might ask you a new question, just to move the conversation along.

Ground Rules and Reminders

The discussion we have today is PRIVATE. When we share our findings with IB we won't use any of your names, and we won't tell your teachers, or your parents, or anyone outside this room what you say.

But we also ask the same of you. We really do want to hear what you honestly think so please don't share what people say with anyone outside this room. Is this ok with everyone here? Wait for nods or verbal assent.

APPENDIX 3: SITE VISIT PROTOCOLS

Having said that, it's also not a secret that you're here. Your parents know you're talking to us, your teachers know you're talking to us and they've all said it is ok. We just ask that you keep the content of what we say private so that people are able to say what they think. Wait for nods or verbal assent.

Audio recording

I'd also like to record our conversation today. This is because it can be difficult to write down everything you say and I want to make sure we're remembering things correctly! No one will hear the recording but my team and I.

Is this ok with you? Wait for nods or verbal assent.

If a student declines to be recorded, then facilitators must write-out or type as many responses as possible. Do **not** record the conversation if even one student does not want to be audio recorded.

Great, so to help us with the recording, and the conversation more generally:

- If you have a phone please put it on silent and put it away.
- Please speak loudly and clearly so the recorder picks up what you say!
- Please be respectful of each other's responses by not judging anything anyone shares.
- We are recording this conversation so it's important not to speak over someone else or else we won't be able to use anything either of you are saying.

Does anyone want to add anything to this list?

Does anyone have any questions before we get started?

Pause for questions. If they have questions, answer them to the best of your ability.

I. Student Background

To start things off, we'd like to learn a little bit about you as students.

1. Let's go around one by one, tell me your name, how long you have been a student at this school and how long have you been an IB student?

II. Overall Program Perceptions & Recommendations

1. Would you recommend that non-IB students attend an IB school? Why or why not?

Note to focus group facilitators: These first 3 questions (student background & overall perceptions) are intended as warm up questions. Please don't spend more than 5-7 minutes on these questions, especially if you have a short time (<45 minutes) with the students. Use your judgment and skip one of the questions in the overall perceptions section if needed.

III. Exploring Outcomes

I'd like to now talk about your experiences at this school and how you feel about being an MYP student.

APPENDIX 3: SITE VISIT PROTOCOLS

Lifelong learners

1. One thing IB hopes is that students at MYP schools will become lifelong learners. How much (if at all) would you describe yourself as a lifelong learner?
 - a. For you, what does being a lifelong learner look like?
2. What parts of your school experience contribute to you being (or not being) a lifelong learner?

Note – lifelong learners: Here is how we have defined lifelong learners in the Performance Monitoring Framework, in case students ask you what it is. **You would need to paraphrase:** Students develop a love of learning and several strategies for learning. Students become individuals who continuously pursue self-directed growth

International mindedness

1. Another area IB talks a lot about is international mindedness. Do you feel like you are internationally minded, and if so, how?
2. What parts of your school experience contribute to you being (or not being) internationally minded?

Note – international mindedness: Here is how we have defined international mindedness in the Performance Monitoring Framework, in case students ask you what it is. **You would need to paraphrase:** Students cultivate deep understanding of complexity, diversity and motives that underpin human actions and interactions. Students develop an attitude of openness and curiosity about cultures and the world. Students have an appreciation for multilingualism, intercultural understanding and global engagement

Prepared for future education

1. How well do you feel you've been prepared for your future education as an MYP student?
2. When you think about your experience at school, which parts of MYP, if any, help prepare you for future education?
3. Which parts don't help in terms of preparing you for your future education?

Active community members

1. Would you describe yourself as an active community member? If so, what does this look like / what do you do as an active community member?
2. Think about yourself in five years time. Do you expect you will be an active community member then?
3. What parts of your school experience encourage you, or help you to become an active community member?
4. Are there any parts of your school experience that discourage you or make it hard to be an active community member?

APPENDIX 3: SITE VISIT PROTOCOLS

Note – active community members: Here is how we have defined active community members in the Performance Monitoring Framework, in case students ask you what it is. **You would need to paraphrase:** Students have personal understanding of what it means to live a life of active and responsible citizenship, and contribute to the creation of a better and more peaceful world. Students understand there is mutuality and bidirectionality in being an active community member

Other outcomes - positive or negative

1. Are there particular types of students who tend to gain the most from MYP? Are there any students who don't benefit from, or who experience difficulties with MYP?
2. Are there any down sides, or negative impacts that you have experienced because of being an MYP student?
3. And beyond what we've already talked about, are there any other positive impacts you've experienced through being an MYP student?

IV. Closing Remarks

1. Thank you so much for participating in this focus group. I have no more questions! Does anyone have any last thoughts that you want to share about your experience with IB, MYP, or being a student at this school?

APPENDIX 4: STUDENT LEARNER PROFILE OUTCOMES DATA TABLES

BACKGROUND TO TABLES

Questions related to the Student Learner Profile Outcomes were asked in each student survey since 2017. There was very little variation in responses and therefore, where possible, the combined responses from all three years are represented in the tables below (Tables 4.1-

ACTIVE COMMUNITY MEMBERSHIP

Table 4.1 Active Community Membership Question Set 1

How much do you disagree or agree with the following...					
	N	Mean (SD)	Not yet met the standards	Met the standards	Exceeded the standards
Active Community Membership (Composite)	50531	3.50 (0.73)	57%	39%	5%
I feel an obligation to speak out when I see my government doing something I consider to be wrong.	50257	3.55 (1.04)	17%	44%	40%
I am able to affect what happens on a global level by what I do in my own community.	50238	3.48 (1.01)	17%	40%	43%
I can apply things I learn in school to the activities I do in the community.	49517	3.70 (1.00)	35%	46%	20%
Volunteering my time to help people in the local community would be valuable.	49494	4.03 (0.94)	65%	35%	0%

Table 4.2 Active Community membership Question Set 2

Listed below are different actions that you as a young person could take during next few years. What do you expect that you will do?					
	N	Mean (SD)	Not yet met the standards	Met the standards	Exceeded the standards
Write to a newspaper about political and social issues.	49496	2.04 (0.83%)	28%	46%	21%
Contribute to an online discussion forum about social and political issues.	49434	2.27 (0.88%)	20%	41%	30%
Join an organization for a political or social issue.	49407	2.30 (0.89%)	20%	40%	31%
Volunteer time to help people in the local community.	49429	3.00 (0.84%)	6%	17%	48%
Volunteer time to help the international community.	49399	2.81 (0.86%)	8%	25%	46%
Talk to others about political and social issues.	49422	2.73 (0.97%)	12%	27%	37%

APPENDIX 4: STUDENT LEARNER PROFILE OUTCOMES

A multiple Linear Regression model was run to examine the relationships between all 8 MYP: Next chapter strategies and the student learner profile outcome: **Active Community Membership (ACM)**. Data from the PMF teacher survey and the student survey were aggregated at the school level for the analysis. The results indicated that the model significantly explained 11% of the variability in Student ACM, $F(8, 161) = 2.44$, $p = .016$, $R^2 = .11$. Of all Strategies, the unique contribution of the Approaches to Learning strategy and the Service as Action strategy were significant while holding other predictors constant (see **Table 4.3**). Further examination indicated that this model was primarily driven by the process behavioral indicators of teacher implementation, $F(7, 102) = 3.07$, $p = .006$, $R^2 = .17$, where both the Approaches to Learning and the Service as Action strategies were still found to be significant. Teacher's knowledge and beliefs about the various strategies, the process cognitive predictors, do not seem to predict student outcomes (see **Table 4.3**).

Table 4.3 Approaches to Learning and Service as Action have a significant relationship with the Active Community Membership outcome.

<i>Totals</i>			
Strategy	Beta	B	p
Global Context	0.01	0.00	0.922
Approaches to Learning	-0.27	-0.10	0.033
Service as Action	0.24	0.07	0.021
Interdisciplinary Planning	-0.12	-0.04	0.289
Vertical Articulation	0.19	0.06	0.092
Concept Driven Teaching	0.17	0.07	0.184
Building Quality Curriculum	0.13	0.03	0.146
eAssessment	-0.07	-0.01	0.432
Behavioral			
Global Context	0.13	0.04	0.408
Approaches to Learning	-0.50	-0.16	0.002
Service as Action	0.35	0.10	0.004
Interdisciplinary Planning	0.23	0.06	0.075
Vertical Articulation	-0.09	-0.03	0.452
Concept Driven Teaching	0.09	0.04	0.532
Building Quality Curriculum	0.07	0.01	0.445
Cognitive			
Global Context	0.23	0.05	0.050
Approaches to Learning	-0.06	-0.02	0.563
Service as Action	0.05	0.02	0.561
Interdisciplinary Planning	-0.03	-0.01	0.785
Vertical Articulation	0.00	0.00	0.976
Concept Driven Teaching	0.03	0.01	0.788
Building Quality Curriculum	0.03	0.01	0.781

APPENDIX 4: STUDENT LEARNER PROFILE OUTCOMES

INTERNATIONAL MINDEDNESS

Table 4.4 International Mindedness Question Set

How much do you disagree or agree with the following...					
	N	Mean (SD)	Not yet met the standards	Met the standards	Exceeded the standards
International Mindedness (Composite)	50437	4.01 (0.66)	29%	66%	4%
I enjoy trying to understand people's behavior in the context of their culture.	50380	2.94 (0.78)	38%	62%	0%
I feel very concerned about the lives of people who live in countries where human rights are not respected.	50360	3.18 (0.8)	35%	65%	0%
There is more than one way to approach a problem.	50342	3.34 (0.74)	26%	74%	0%
I enjoy trying to understand other people's perspectives.	50321	2.99 (0.77)	36%	64%	0%
I find it generally interesting to spend time talking with people from another culture.	50312	3.02 (0.81)	9%	32%	60%
Everyone can learn something of value from all different cultures.	50313	3.16 (0.79)	34%	66%	0%
I think of myself as not only a citizen of my country but also a responsible member of the global community.	50271	2.87 (0.84)	49%	51%	0%

A weighted least squares multiple linear regression model was run to examine the relationships between all 7 MYP: Next chapter strategies behavioral indicators and the student learner profile outcome: **International Mindedness**. This method was used due to a violation of the assumption of homoscedasticity required for most regression models. The model significantly explained 17% of the variability in student International Mindedness, $F(7, 102) = 2.90$, $p = .008$, $R^2 = .17$. Of all Strategies the unique contribution of teachers' behavior related to the Global Context strategy, and the Approaches to Learning were significant while holding other predictors constant (see **Table 4.5**).

APPENDIX 4: STUDENT LEARNER PROFILE OUTCOMES

Table 4.5 Teacher behavior related to the Global Context and Approaches to Learning Strategies have a significant relationship with the International Mindedness outcome.

<i>Total</i>			
Strategy	Beta	B	p
Global Context	0.70	0.01	0.695
Approaches to Learning	0.16	-0.06	0.158
Service as Action	0.35	0.02	0.347
Interdisciplinary Planning	0.74	-0.01	0.735
Vertical Articulation	0.56	0.02	0.558
Concept Driven Teaching	0.94	0.00	0.939
Building Quality Curriculum	0.15	0.02	0.145
eAssessment	0.68	0.00	0.677
<i>Behavioral</i>			
Global Context	0.37	0.06	0.017
Approaches to Learning	-0.40	-0.09	0.008
Service as Action	0.14	0.03	0.268
Interdisciplinary Planning	0.10	0.02	0.431
Vertical Articulation	0.09	0.02	0.419
Concept Driven Teaching	-0.07	-0.02	0.664
Building Quality Curriculum	0.11	0.01	0.241
<i>Cognitive</i>			
Global Context	0.12	0.02	0.29
Approaches to Learning	0.02	0.00	0.877
Service as Action	-0.03	-0.01	0.737
Interdisciplinary Planning	-0.15	-0.04	0.144
Vertical Articulation	0.08	0.02	0.462
Concept Driven Teaching	-0.01	0.00	0.947
Building Quality Curriculum	0.08	0.01	0.375

APPENDIX 4: STUDENT LEARNER PROFILE OUTCOMES

LIFELONG LEARNING

Table 4.6 Lifelong Learning Question Set

How much do you disagree or agree with the following...					
	N	Mean (SD)	Not yet met the standards	Met the standards	Exceeded the standards
Lifelong Learning (Composite)	50281	3.21 (0.47)	73%	25%	2%
I love learning for its own sake.	50437	4.01 (0.66)	43%	40%	18%
I can solve problems when they arise.	50380	2.94 (0.78)	81%	19%	0%
I prefer to have others plan my learning.	50360	3.18 (0.8)	68%	20%	11%
I seldom think about my own learning and how to improve it.	50342	3.34 (0.74)	64%	22%	13%
I feel others are in a better position than I am to evaluate my success as a student.	50321	2.99 (0.77)	74%	16%	9%
I often find it difficult to locate information when I need it.	50312	3.02 (0.81)	61%	29%	10%
It is my responsibility to make sense of what I learn at school.	50313	3.16 (0.79)	35%	42%	23%
When I learn something new I try to focus on the details rather than the 'big picture'.	50271	2.87 (0.84)	45%	41%	14%

A weighted least squares multiple linear regression model was run to examine the relationships between all 7 MYP: Next chapter strategies behavioral indicators and the student learner profile outcome: **Lifelong Learning**. This method was used due to a violation of the assumption of homoscedasticity required for most regression models. The model significantly explained 34% of the variability in Lifelong Learning, $F(7, 98) = 7.28$, $p < .001$, $R^2 = .34$. Of all Strategies, the unique contribution of the Interdisciplinary Planning strategy, Context Driven teaching strategy, and teachers' behavior related to the Global Context strategy was significant while holding other predictors constant (**see Table 4.7**)

APPENDIX 4: STUDENT LEARNER PROFILE OUTCOMES

Table 4.7 The Interdisciplinary Planning strategy, the Concept Driven Teaching strategy and behavior related to the Global Context strategy have a significant relationship with the Lifelong Learning outcome.

<i>Total</i>			
Strategy	Beta	B	p
Global Context	0.09	0.02	0.52
Approaches to Learning	-0.05	-0.01	0.742
Service as Action	-0.01	0.00	0.905
Interdisciplinary Planning	-0.27	-0.05	0.039
Vertical Articulation	-0.02	0.00	0.878
Concept Driven Teaching	0.39	0.08	0.004
Building Quality Curriculum	-0.03	0.00	0.818
eAssessment	0.11	0.01	0.233
Behavioral			
Global Context	0.37	0.06	0.011
Approaches to Learning	-0.20	-0.05	0.119
Service as Action	-0.18	-0.03	0.101
Interdisciplinary Planning	-0.04	-0.01	0.717
Vertical Articulation	0.09	0.02	0.461
Concept Driven Teaching	0.26	0.06	0.084
Building Quality Curriculum	0.14	0.01	0.128
Cognitive			
Global Context	-0.08	-0.01	0.502
Approaches to Learning	0.04	0.01	0.717
Service as Action	-0.02	0.00	0.846
Interdisciplinary Planning	0.10	0.02	0.368
Vertical Articulation	0.00	0.00	0.984
Concept Driven Teaching	0.16	0.03	0.133
Building Quality Curriculum	-0.15	-0.02	0.105

APPENDIX 5: STUDENT ACADEMIC OUTCOMES DATA TABLES

A series of tests was run to determine if there was any relationship between teachers' implementation of the MYP: Next chapter strategies and students' academic outcomes as indicated by the results of the 2019 eAssessment (see **tables 5.1, 5.2 & 5.3**).

Although the CEC was able to attain the eAssessment data for 819 schools and 81,449 students, only 227 of these schools completed the 2019 teacher PMF survey. This represents data from 15,232 students. Both the student eAssessment data and the teacher implementation data was aggregated at the school level to allow for comparison. This hides student and teacher level differences and obscures some potentially powerful variation. We know from the 2018 technical report (Azzam and colleagues, 2018 p. 155) that individual differences is often more important than school level differences for both teacher implementation and student outcomes.

A simple correlation analysis was run comparing the average implementation of each strategy with the average student grades in each school (**see Table 5.1**). Unfortunately, there were no significant results.

Table 5.1 There are no significant correlations between teachers' implementation of MYP: Next chapter strategies and student grades on the eAssessment

Strategy	r	p	Cohen's d
Global Contexts	-0.02	0.821	-0.03 (small)
Approaches to Learning	-0.01	0.837	-0.03 (small)
Service as Action	-0.06	0.370	-0.12 (small)
Interdisciplinary Planning	-0.03	0.669	-0.06 (small)
Vertical Articulation	-0.02	0.766	-0.04 (small)
Concept Driven Teaching	-0.1	0.121	-0.21 (small)
Building Quality Curriculum	-0.02	0.802	-0.03 (small)
eAssessment	-0.08	0.274	-0.15 (small)

Table 5.2. There are no significant correlations between how well teachers met expectations relative to implementation and student grades on the eAssessment

Strategy	r	p	Cohen's d
Global Contexts	0.1	0.137	0.2 (small)
Approaches to Learning	0.13	0.059	0.26 (small)
Service as Action	0.03	0.637	0.06 (small)
Interdisciplinary Planning	0.06	0.345	0.13 (small)
Vertical Articulation	0.01	0.84	0.03 (small)
Concept Driven Teaching	0.12	0.073	0.24 (small)
Building Quality Curriculum	0.04	0.518	0.09 (small)
eAssessment	0.09	0.206	0.18 (small)

APPENDIX 5: STUDENT LEARNER PROFILE OUTCOMES

The above results (see **table 6**) do not take into account the simple fact that no one strategy is ever implemented in a vacuum. The MYP: Next chapter program is designed for each of the strategies to be implemented in unison. For that reason, a multiple regression was run. This allows us to answer the following questions:

1. Does understanding the teacher implementation of the MYP: Next chapter program give us any insight into students' academic performance (as indicated by the eAssessment?)
2. Assuming that the answer to the previous question is yes, which individual strategies are predictive of a change in students' academic performance and how much of a difference do they make?
3. Relative to the other strategies, which strategies are the most effective?

Table 5.3. A multiple regression predicting student grades from the MYP: Next chapter strategies is not significant

Strategy	Beta	B	p
Intercept	4.24	4.51	< .001
Global Contexts	-0.00	-0.00	.959
Approaches to Learning	0.02	0.03	.807
Service as Action	0.02	0.02	.747
Interdisciplinary Planning	0.05	0.05	.521
Vertical Articulation	0.02	0.02	.786
Concept Driven Teaching	-0.14	-0.15	.129
Building Quality Curriculum	0.04	0.03	.538
eAssessment	-0.05	-0.03	.410

$F(8, 201) = 0.53$, $p = 0.83$, $R^2 = 0.02$

Power = 25%

Unfortunately, this multiple regression does not indicate that the teacher implementation of the MYP: Next chapter program gives us any insight into students' academic performance (See **Table 5.3**). This may be due, however, to being underpowered. At 8 and 201 degrees of freedom this test is only at 25% power indicating a 75% change of missing a significant result if it was present.

An additional multiple regression was run predicting student academic performance from how well teachers met expectations of performance in implementing the MYP: Next chapter strategies. Again, the overall model was found to be non-significant (See **Table 5.4**). This model was also underpowered (power = 53%), however, indicating a lack of sufficient data to determine the effectiveness the MYP: Next chapter program had in influencing academic outcomes. In addition, because the model was already underpowered, contextual variables, such as region of language, could not be added to the model as an improvement upon its predictive value.

APPENDIX 5: STUDENT LEARNER PROFILE OUTCOMES

Table 5.4. A multiple regression predicting student grades from teachers' ability to meet expectations for implementation is not significant

Strategy	Beta	B	p
Intercept	4.23	3.25	< .001
Global Contexts	0.07	0.30	.229
Approaches to Learning	0.13	0.52	.053
Service as Action	-0.05	-0.13	.381
Interdisciplinary Planning	-0.04	-0.14	.563
Vertical Articulation	-0.04	-0.13	.481
Concept Driven Teaching	-0.00	-0.01	.980
Building Quality Curriculum	-0.03	-0.10	.600
eAssessment	0.07	-0.14	.193

$F(8, 201) = 1.12$, $p = 0.351$, $R^2 = 0.04$

Power = 53%