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From PYP to MYP: Supporting transitions across the IB continuum

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INTRODUCTION

The transition from elementary to middle school can be a challenge for many schools and students, but in the case of IB schools, it also involves a change in curriculum approaches. Namely, it involves moving from a transdisciplinary approach, such as the IB Primary Years Programme (PYP), to an Interdisciplinary approach, such as the IB Middle Years Programme (MYP).

In our school, a K-12 IB world school in Bogota, Colombia, offering all 3 programs, this transition was problematic. Students experienced a decrease in academic achievement and many behavioural issues. For example, during the 2008 – 2009 academic year, 38% of our students failed at least one subject area in any given marking period, and a total of 17% of our students failed one or more subjects for the year. (Data taken from 2008 - 2009 academic results) Although very concerning, this pattern was consistent with current research in the field, which states, "Achievement declines across transition may reflect [a] lack of continuity in curriculum from elementary to middle school." (Akos, Queen & Lineberry, 2005, p. 37) In addition to the academic decline, we also faced discipline problems and many bullying cases.

When first analyzing the issues, the problem was judged to be owed to the immaturity of our students. We believed that they were not ready to face the requirements of the MYP and Middle School routines. In line with this thought, our first suggestion was to delay this transition one more year: instead of having the transition in 5th grade (11-12-year-old students), we moved it to 6th grade (12 – 13-year-old students). However, after closer analysis, the conclusion was reached that this delay would only postpone the problem and not really solve it, particularly when taking into account that the problems we were facing did not disappear as the children grew up, but rather became even more evident. This was also consistent with current research, which reveals, "Students who transitioned between grades six and seven had the most dramatic drop in grade point average compared to students who transitioned between grades five and six." (Akos, Queen & Lineberry, 2005, p. 54)

After careful analysis and consideration of the existing research in the field as well as our particular needs, we decided it was necessary to create a transition program, or a comprehensive program that could focus on identifying and designing effective strategies for the social, academic and procedural needs of our students within the MYP structure.

This article presents some of the strategies implemented in order to solve the issues identified and some of the results obtained from an action process of research carried out during the first year of the implementation of this strategy.

THE LITERATURE REVIEW

Research demonstrates that the success of most interventions designed to improve organizational performance depends largely on implementing what is already known, rather than from adopting new or previously unknown ways of doing things.
(Jefrey Pfeffer and Robert Sutton)

It is necessary to relate what we do in our teaching practice to current research in the field, as Akos, Queen & Lineberry recognise in the following observation: "One way to be more accountable and more precise in educational practice and intervention is to rely on the research previously conducted on educational phenomena." (Akos, Queen & Lineberry, 2005, p. 45)

The transition from primary to middle school is a complex issue, and it required the study of multiple perspectives. Such perspectives aided the design of an appropriate innovation. "Because school transitions involve multiple practitioners, an overview of the research on the transition to middle school from a variety of disciplines is an important consideration in understanding student needs and in designing effective interventions." (Akos, Queen & Lineberry, 2005, p. 45) The literature review conducted as part of the original research study on which this article is based was divided according to the different topics that were believed to help gain a better understanding of how to tackle this problem and design an appropriate intervention for this particular context.

To fulfil this purpose, six overarching themes were identified. Those themes were: *International Education; Perspectives and Practices, Curriculum Design and Teaching Methodologies (Focusing on Concept-based curriculum and IBO Programs), Interdisciplinary Curriculum and Team Teaching, Leadership and Organizational Learning Applied to Schools, Transition from Elementary to Middle School and Developmental Aspects of Pre-teens. What aided the development of the methodological aspects for the study was the review of literature regarding Action Research and Qualitative Research Methods.*

Studies concerned with the main difficulties faced by young adolescents during this transition, such as the investigations conducted by the National Middle School Association (2002), Newman, Lohman et al. (2000) and by Cauley and Jovanovich (2006), among others,

suggest that students' academic performance decreased due to social and emotional aspects that seemed to gain special importance around this time of their lives. At the same time, these same studies highlighted the need for those children to feel like they were being listened to in order to be socially and academically successful.

The challenge here was to design an effective and challenging program that took into account the needs of students this age. The selected theories and theorists, including IBO documents; studies conducted by the National Middle School Association (2002); Cauley and Jovanovich (2006); Akos, Queen and Lineberry (2005); Newman, Lohman et al. (2000); Jacobs (1989); Wormelli (2000); and Dufour, Dufour and Eaker (2008), among many others, provided the foundation and references for many of the conclusions found in the study, on which this article is based. Theories about leadership, curriculum design and teenager development provided the theoretical background and framework that aided the design and evaluation of an effective innovation for this context. In order to complete this literature review, searches in databases such as Jstor, Ebsco, Proquest and Sage Journals Online were conducted as well as searches in libraries, the reference sections of other studies and via online resources.

During the literature review, it was noted that, although several studies completed by the National Middle School Association (2002), Cauley and Jovanovich (2006), Akos, Queen and Lineberry (2005), among others, were conducted regarding the transition from elementary school to middle school, most of those were carried out in North American Schools. There have been very few studies within the international school context (mainly conducted by the IBO continuum division) and even fewer in Colombia. This also applies to the IB program articulation. Empirical studies regarding this topic are scarce. Although this is a concern for many schools around the world, very few have started either to reflect or to take actions to improve this situation.

The team teaching structure, although proven to be successful, has not been studied within the IB context, and even though this is not the purpose of this study, it is expected that some of the conclusions reached in this study could enlighten further projects in this field.

It has also been noted by Akos, Queen and Lineberry (2005), that only a small number of the studies conducted have looked into the perceptions of parents and teachers about this transition. According to such authors, the vast majority of the studies performed focus mainly on teacher and school staff perceptions or on one specific aspect regarding the transition (e.g. bullying, grades, etc.). Very few studies have focused on the effectiveness of a holistic transition program, which is one of the aspects being covered in this project.

Finally, it is important to understand that each school is unique and that there are particular needs for each school. Studies regarding this particular topic need to take these differences into account, meaning that most studies are a good point of reference but not necessarily transferable to various realities. It is necessary to adapt the findings to particular contexts. Other areas identified as important during the literature review will be discussed in this article, as the designed strategies for the innovation are introduced and explained.

METHODOLOGY

We hope the field will move beyond quantitative versus qualitative research arguments because, as recognized by mixed methods research, both quantitative and qualitative research are important and useful.
(R Burke Johnson and Anthony J. Onwuegbuzie)

This was an action-research project and, as such, was framed within the transformative paradigm, given that its purpose was to transform a reality or a problematic situation. According to many studies, the decision regarding data collection in action - research projects should be determined by the nature of the problem being studied. "Teacher researchers must determine what data will contribute to their understanding and resolution of a given problem" (Gay, Mills & Airisan, 2006, p. 507), but since action - research is mainly an attempt to understand and improve existing practices, qualitative methods seem more appropriate for this type of study, in spite of the fact that quantitative data should not be avoided if necessary.

For the purposes of this particular study, the paradigm emphasis was given to the qualitative approach, and quantitative data was mainly used to validate qualitative data. In terms of time orientation, both types of data were collected simultaneously and throughout the study as it became available. Since a mixed approach was used to carry out this study, different strategies from both paradigms helped answer the proposed research questions. In general, all research questions were answered by a combination of quantitative and qualitative data analysis.

This study could also be described as what Ellis (2005) calls Level III research, or "evaluation research designed to determine the efficacy of programs at the level of school or district implementation" (p. 33) According to this author's perspective, it is important to determine a program's efficacy in a systematic way, as, "The only way to improve educational practice is to approach educational innovation with such deliberate, measured sense of its worth." (p. 35)

This study focused mainly on 5th grade students at the selected school, and a total of 130 students, with ages ranging from 11 to 12, were included in the study, as were their parents and teachers.

In order to collect data, a range of quantitative and qualitative tools were used. These included surveys, analysis of documentary evidence (such as grades, attendance and discipline records), standardized tests (such as the IOWA Basic Skills test and Pruebas Saber), interviews, focus groups, class observations and a reflective journal.

Quantitative data, such as academic results, attendance records, the number of discipline cases, tardiness, etc., were collected for the study as they became available. While analyzing academic results, the focus was on identifying the percentage of students not reaching the standard in each subject area. This percentage was calculated by identifying the number of students under 4.0 (which is the school's passing grade)/ the total number of students taking that subject. In terms of tardiness and the number of discipline incidents, for each marking

period (in our case, every two months or a bimester), a percentage of incidents was calculated, by also dividing the number of cases by the total number of students enrolled in the grade level. *% = Number of cases/ total number of students.*

It is worth mentioning that this quantitative data had to be analyzed very carefully, as those results could have been misleading since we were comparing two different groups of children, in two different settings. In order to ensure validity, all quantitative data was cross-referenced and validated through careful qualitative data analysis.

Surveys were carried out to gather information from several sources, such as parents, teachers and students. In general, they all had a number of standards that had to be rated using a Likert scale. Specifically for the parent survey, a 4-point Likert scale was used in an attempt to avoid central-tendency bias. Statements were grouped under the three categories identified as being important during the literature review: academic, procedural and social.

As with quantitative data, the analysis of qualitative data was carried out simultaneously with data collection. This not only facilitated the process of analyzing the information, but it also aided the collection of new and relevant information. While collecting data, comments and reflections were made in the Reflective Journal and through memos. Those helped to easily record first impressions and to identify gaps in any given category.

All types of quantitative data were analyzed following the same process. Information gathered from interviews, focus groups and observations (class or diaries) were taped and then transcribed or typed into a digital form (Microsoft Word). All of this was then read and re-read, and data was grouped into smaller pieces or codes that emerged from the data. It is important to mention that although codes emerged from the data (grounded theory), the emerged codes were once again grouped according to the 3 categories determined *a priori*. Those categories, or themes, were selected because they were recurrent throughout the literature review. They are procedural, aademic and social. According to Akos & Galassy, 2004, p. 49).

> Students appear to identify three primary categories of school transition concerns - academic, procedural, and social. Academic concerns focus on coping with increased homework and more difficult courses. Procedural concerns involve navigating around and dealing with the complexities of a larger school environment including multiple classes taught by different teachers, while social concerns include fitting in and making new fiends, getting along with peers, and coping with bullies or older students.

The emerged codes guided the analysis process. As important text segments were selected and grouped accordingly with the help of a matrix, these segments later served as evidence. The use of a matrix facilitated the process of comparing and contrasting information. Through this method, a more systematic analysis was achieved, and the current author was able to "make sense and find connections among the data" (Gay, Mills, & Airasian, 2006, p. 467). This process also aided the triangulation of information from different sources and methods. In order to present those findings, a narrative style was used.

In general, the collection and analysis of quantitative data was completed simultaneously and systematically. It was continuous along the study and helped provide a clear interpretation of the way all stakeholders perceived the effectiveness of the new structure.

In order to assure validity in the quantitative part of the study, all instruments designed to collect data were piloted. While analyzing all types and sources of data, special consideration was given to the fact that we were comparing two different groups of students under two different structures.

To assure validity in the qualitative part of the study, a range of triangulation strategies was used. Quantitative data was used to confirm and complement qualitative data using a matrix. The use of a variety of sources allowed for effective triangulation practices. Other strategies, such as member checking, prolonged engagement and simultaneity between data collection and analysis, facilitated verification. The analysis of data stopped when saturation was reached.

SOME OF OUR STRATEGIES: THE INNOVATION

We need a different orientation to school reform – one that embodies a richer understanding of teaching and learning.
(Mike Rose)

When introducing change to any school, there are two approaches: to use a comprehensive school reform model (CSR, which are programs usually founded on a strong research basis and have not been designed by the school implementing them) or to use what is known as a site-specific approach, which means designing an intervention that addresses the particular needs of the context. "The logic behind this option is that every school is different in some way. Consequently, no predesigned comprehensive school reform program will address the unique characteristics of a given school." (Marzano, Waters & McNulty, 2005, p. 81) Taking the above perspective into account, the purpose of this study was to use a site-specific approach to design and put into practice an appropriate innovation for this context and determine its effectiveness within the first year of implementation.

The literature suggests that effective transition programs need to be in place to support all students in this difficult time of change. These programs, in order to be successful, need to focus on 3 main areas (Cauley and Jovanovich, 2006): Academic, Procedural and Social changes. Since these areas are intrinsically related, the problem must be tackled from a comprehensive, rather than fragmented, perspective in order to create a more suitable environment for students moving from elementary to middle school. This approach is based on the following idea: "Comprehensive transition programs that include numerous activities geared toward the needs and concerns of students, parents and teachers can be effective in helping students transition to a new school with less anxiety and more academic success." (Cauley & Jovanovich, 2006, p. 23)

When determining the specific needs of our school, we immediately realized that one of the problems was the lack of knowledge our middle school teachers had about their students, which was significantly different from what was happening in elementary school, where teachers generally have a very solid understanding of their students and their needs. Thus, in order to ensure that our teachers had a better knowledge and understanding of their students and also to gain greater horizontal and vertical (across school sections and departments) articulation and consistency, we based this transition program on the team teaching approach.

This strategy allowed teachers the opportunity to know students more personally, which, according to several studies, fosters improvement in thinking and learning skills. In addition, studies conducted in US schools in which the Team Teaching model was used, have shown an increase in student academic results, greater parental involvement and greater teacher satisfaction. (see Erb & Stevenson, 1999, p. 47-50)

In order to achieve our purpose, we created a MYP year 1, self-contained team of teachers, a group of professionals in charge of this particular group who were especially comfortable and trained to teach this age of students. With this concept in mind, form tutors or group directors were assigned to teaching two subject areas each: Mathematics - Science and English – Humanities. This, in addition, helped in the creation of interdisciplinary units of study—an MYP requirement and a very convenient way to help our students move from a transdiciplinary approach to an interdisciplinary model.

This organization allotted each teacher the responsibility of teaching two groups of children two subject areas, which had the additional benefit of encouraging teachers to plan collaboratively and also discuss issues regarding their shared group of students, which is also in line with the guidelines stated by the National Middle School Association and MYP practices.

> In planning and implementing programs to address the needs and concerns of students moving from elementary to middle school environments, it is clear that collaboration among all adults who share responsibility and concern for our children's welfare is ultimately the most effective transition strategy we can employ. (NMSA and NAES 2002)

In Figure 1, we can see a graph with the number of the teachers a student has in primary versus a comparison between the previous structure in Bachillerato (the term used to refer to secondary education in Colombia) and the new proposed structure. As it can be observed, the new structure provides a transition from both models. The previous structure required students to go from interactions with one main teacher for around 60% of their time, to interactions with around 7 teachers in the same amount of time. As we can see in the graphic, the new grade 5 structure decreased those interactions to 2 main teachers.

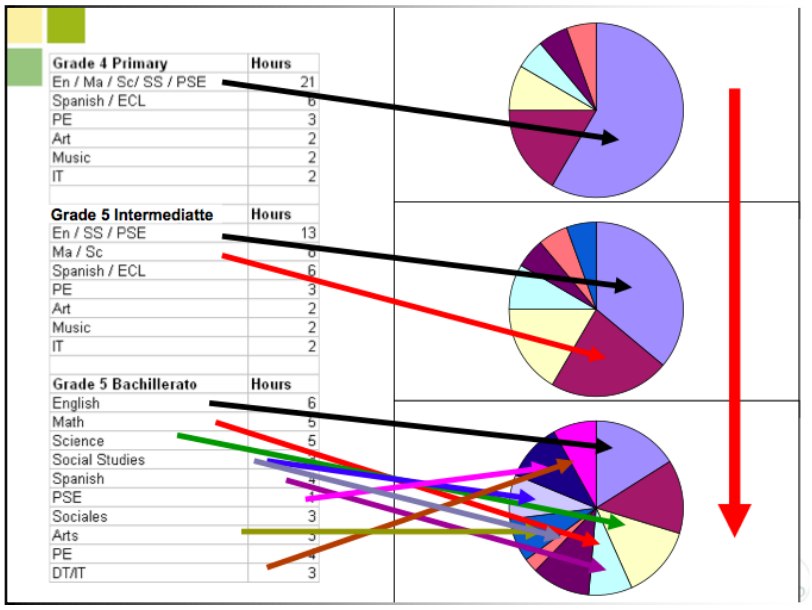


Figure 1: Comparative chart of number of teachers per student in grades 4 and 5 with the previous and new structure. (Taken from Academic Council presentation)

This new model not only helped to reduce the number of teachers each student had to interact with, it also reduced the overall number of students each teacher had under his or her supervision. This number dropped from 130 to 44, allowing teachers a much more direct knowledge of each individual and his or her needs.

Collaboration became extremely important, and it was entirely focused on student learning. It wasn't enough to provide time for educators to meet; we had to ensure the right focus for those meetings. We had to create "a collaborative culture in which teachers worked together interdependently and assumed collective responsibility for the learning of all students." (DuFour, Dufour & Eaker, 2008, p. 18) This collaborative approach also involved teachers and administrators from elementary and middle school, as we started to have regular conversations about the children in an attempt to ensure a greater level of consistency between our elementary and middle schools.

To start, we created an induction program that began while students were in grade 4. This induction program included a parent meeting, an induction day with students and several meetings between teachers from grades 4 and 5.

The induction program did not finish once our students began the new school year; the first week of school was also a part of it. It was decided that it was necessary to discuss the new academic program with our students, so we started what was called the "MYP Launch." This learning experience allowed our students a chance to inquire into the main aspects of the new program and to discover some of its key elements, such as areas of interaction and assessment criteria. It also provided students and teachers with some quality time to establish positive relationships.

Once our students were immersed in the new school year and academic program, it was necessary to observe how they were transitioning and to provide support for any student who

required our attention. Research suggests that the lack of fit between school policies, organization and the needs of young adolescents is the main cause of the problems faced during this transition process. "At a time when adolescents have a heightened self–consciousness, schools emphasize competition and social comparison, specially with regard to academic grades." (Cauley and Jovanovich, 2006, p. 16) For this reason, we were extremely careful in ensuring our policies, procedures and organization were in line with our students' needs as well as the standards and practices of the IB MYP.

Students at this age need to feel that they are successful, and the collaborative approach allowed teachers the possibility of designing more effective and appropriate learning experiences as well as more suitable assessment tasks for their students. This, in turn, allowed students the opportunity of experiencing success. In addition, two support programs were developed: the academic tracking and educational support programs. The idea behind such programs was to help identify students who were struggling and to provide help on a more individual basis according to their specific needs.

In order to facilitate student movement around the school, the grade five classes were placed in one main building. This strategy ensured a transition from what they had experienced in elementary, when they only had one main classroom to move from class to class in a more contained area. Also, addressing procedure, students' lockers were located inside their classes, which helped reduce dramatically our percentage of tardiness as well as reduce the incidence of items being lost or misplaced.

Social iteration was another area identified to be important within this transition. By providing teachers the opportunity to better know their students, we were already addressing this issue: by helping students to feel more secure, we cultivated the idea that they knew they had an adult they could turn to in case of need. In addition, a Personal, Social and Health Education Program was developed. This program focused on aspects such as the development of the IB learner Profile; identified problematic areas, such as bullying and peer pressure; and included a cigarette and alcohol use prevention program.

This program also provided support to our parents and helped build a closer home-school connection. Several conferences regarding the previously mentioned themes, including an overview of the academic program, were developed for parents.

Thus far, the strategies described focused mainly on addressing student and parent needs. However, the teachers also deserved some attention; after all, they were the ones in charge of making this project a success. In any given school, the person who is most likely to actually make a difference is the teacher. Teachers are in constant contact with their students, they plan learning experiences and deliver the curriculum, and they are the ones who are in charge of dealing with students and supporting them when they need it. Successful teachers make successful schools. If students are happy with their teachers, they are happy in school and perform better in all areas. The following priority then, was to design strategies to support teacher development as well as increase their knowledge about the curriculum and instruction issues, one of the key elements that help leaders who are leading change.

The strategy design employed to achieve this purpose was the team teaching approach. It has been stated in several studies that teachers who work in teams in general perform better and feel happier with their jobs. To create the teams, we selected teachers with previous experience in elementary and/or middle school with the intention of securing knowledge from both programs. We built a team with teachers with "high expectations for students but higher expectations for themselves." (Whitaker, 2003, p. 17)

In any professional learning community, teachers are also seen as learners, and in order to guide their learning process, a performance management procedure was designed. It is important to clarify that this performance management process was a whole school initiative, not only a fifth grade strategy.

The performance management process started with self-reflection on a set of standards. These were designed with the school's mission, vision and educational purposes and the IB program's standards and practices in mind. The self assessment and assessment of the standards followed a meeting with the teacher and class observations, and after these, each teacher identified strengths and weaknesses and established goals, according to their needs and the school's goals. Those individual goals, as well as the perceived needs, guided our meetings, professional development opportunities, mentoring and supervisory tasks.

The formulation of goals as well as the constant support and supervision practices not only provided support for teachers, but they also helped to determine priorities in terms of professional development, an area identified to be critical by many IB world schools. As it was pointed out by Tristian Stobie's (2007) research,

> …the IBO programmes in general (and particularly the PYP and MYP) require considerable teacher creative professionalism. Since effective creative professionalism requires teachers to understand fully and to support the principles of the programme, and have time to develop these in practice, professional development is critical. (p. 149)

The National Middle School Association also highlighted this issue in their position paper "This we Believe." They recommended the following:

> Building a learning community that involves all teachers and places top priority on the education and healthy development of every student, teacher and staff member… professional development should be integrated into the daily life of the school and directly linked to the school's goals for student and teacher success and growth. To meet these goals, people work together in study groups, focus on learning results, analyze student work and carry out action research. (2003, p. 11)

As our teachers reflected on their practices individually and with others, they were able to learn and to continue improving. With this learning, we expected to help the school learn as well and promote "*multilevel learning*"—the kind of learning that "depends on learning at

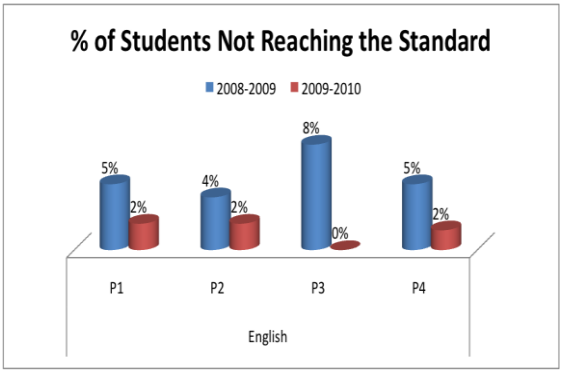
individual, group and organizational levels." (Collinson and Cook, 2007, p. 32) By inquiring into theory and our own practices, using data to inform teaching and setting goals based on this data, we were able to start the process of developing a Professional Learning Community, which experts commonly refer to "as the types of school that have most impact on learning." (DuFour & Dufour)

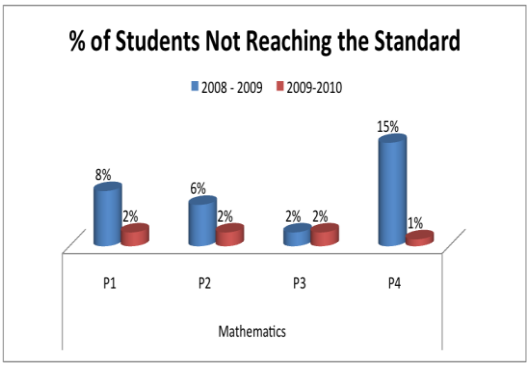
SOME OF OUR RESULTS

The difficulty lies not so much in developing new ideas as in escaping old ones.
(John Maynard Keynes)

With the new structure, the overall academic level of our students improved noticeably. As it can be observed in the following graphs, the number of students failing different subject areas decreased considerably. Please note that "academic" refers to all data regarding student achievement, internal and external. Internal includes aspects such as grades, evaluations committees, Educational Support and academic tracking numbers, student and parent perceptions as well as external data, such as the IOWA tests.

With the new structure, the overall academic level of our students improved considerably. This was evident throughout a variety of data and sources of information. First, the comparison between students "failing" subjects within the previous and the current structures was significant. In Figure 2, we can observe a comparison of the percentage of students not reaching the standard in the different academic areas, under the new and the previous structure.





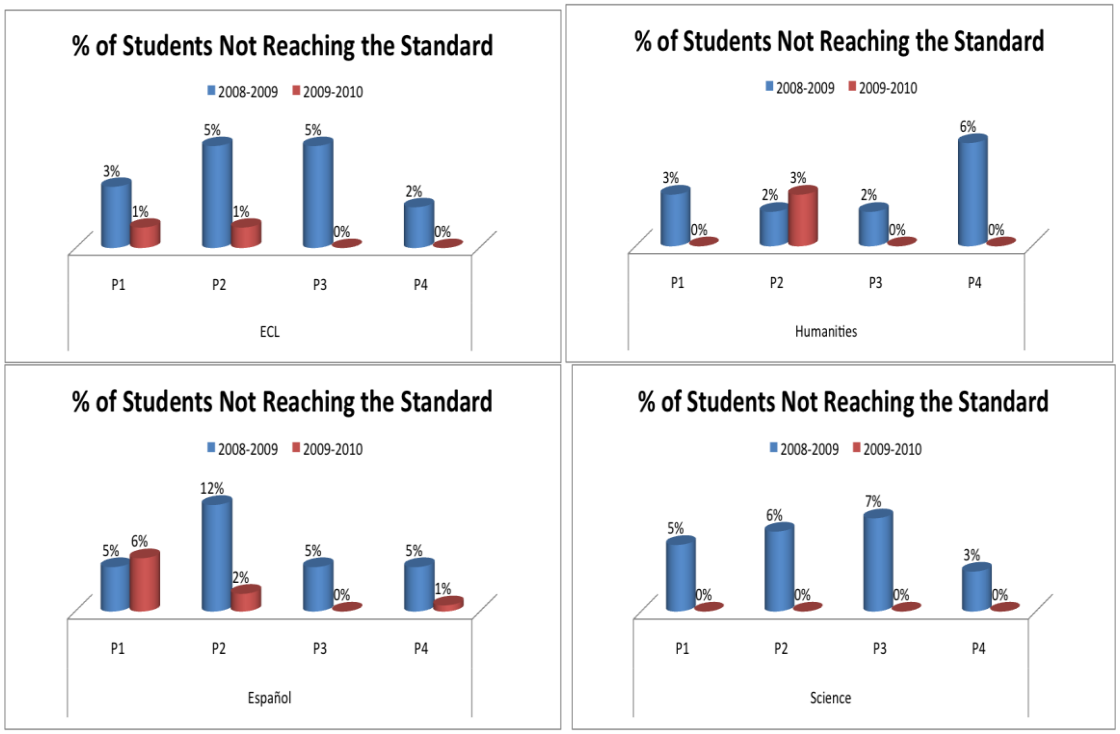


Figure 2: Comparison of total percentage of students not reaching the standard in 2008-2009 and in 2009-2010 in the different subject groups

As it can be observed, in almost all areas, there was a considerable decrease in the overall number of students failing. We could easily conclude here, with this data, that the new structure did help to improve academic achievement. However, it was still important to validate this information with other sources of data, due to the fact that we were comparing two different groups of children, each with different needs and academic achievement levels. Those results could possibly mean only that we had a better cohort of children in terms of their academic level and not necessarily that the structure fostered academic improvement.

However, data gathered from the Iowa tests (external source) also confirmed these results. Figure 3 shows our grade 5 IOWA test results, and it can be observed that the students' results, under the new academic structure, improved considerably when compared to previous years.

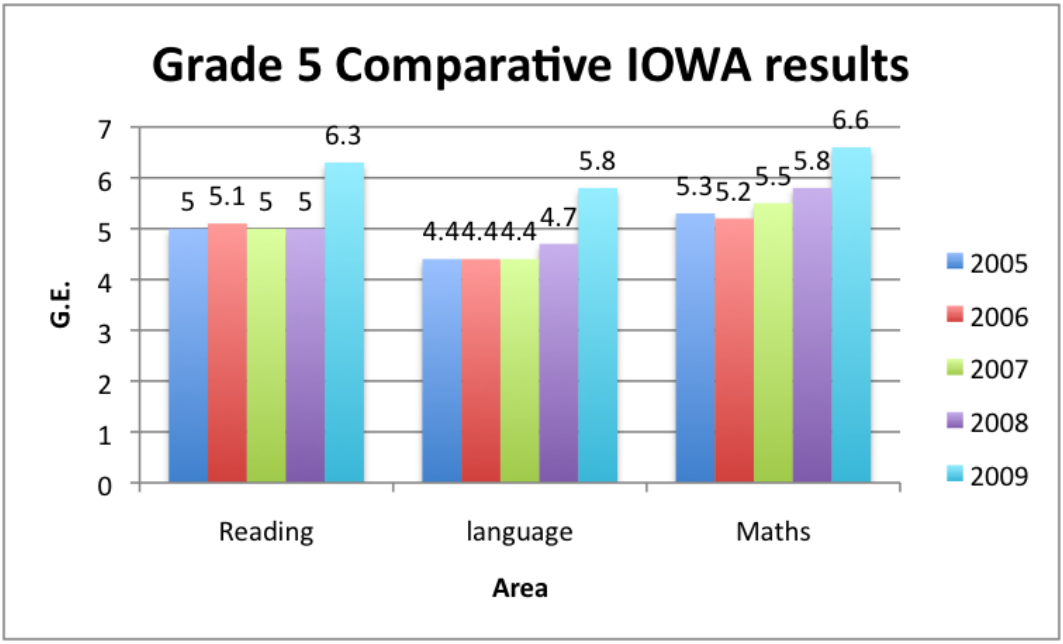


Figure 3: Grade 5 IOWA Test Results for the past five years (Grade 5 Colombia, Grade 6 US equivalent)

These positive results were also important to show that students under the new structure actually achieved better academic performance and that the decrease in the number of students not reaching the standard in the different subject areas, found with the data collected internally, is consistent with data collected externally, disregarding the possible assumption that better results meant that our teachers decreased their expectations due to a closer connection to their students or we simply had a better cohort of children.

Teachers also believe that this improvement was the result not only of more effective teaching and assessment procedures but also of the way that a safer setting, such as the one in place with the new structure, allowed students to feel more comfortable and perform better, thus obtaining better academic results.

Once we were able to validate our results with external results, it was important to start analyzing how effective we were in supporting our students in terms of helping them to understand the differences between the two programs, the PYP and the MYP, and off course cope with the growing demands of the new framework.

Figure 4 shows that during the first bimester, 10 students did not reach the expected level in one subject, and two students failed two subjects. Although we still had several students failing subject areas, an improvement was already surfacing as compared to the previous year, when we had 4 students failing 3 or more subject areas, 5 students failing 2 and 14 failing 1. The numbers across all other marking periods are also consistently lower than the previous year, under the previous structure.

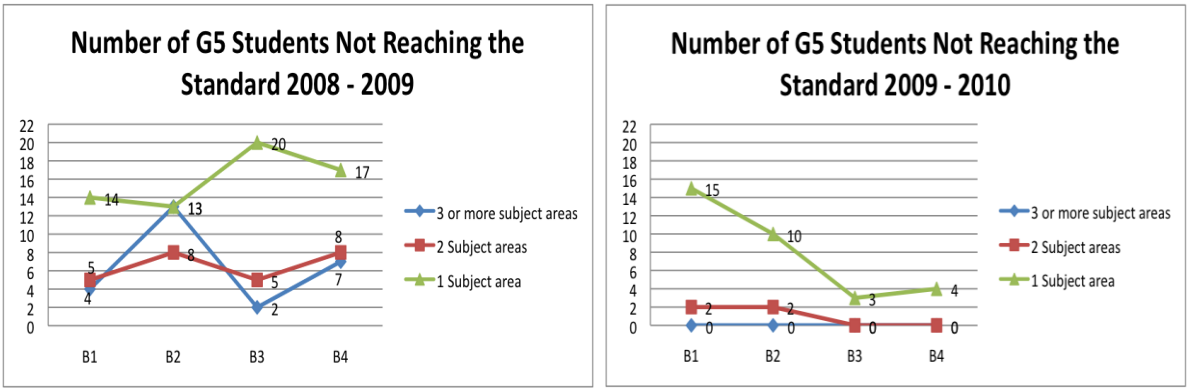


Figure 4: Comparative number of students not reaching the standard each marking period or bimester

The students failing subject areas during the first marking period were identified, and Individualized Educational Plans were developed. They were all included in the Academic Tracking program, and teachers, along with the Educational Support teacher, were asked to monitor those individuals closely.

In order to further validate our academic analysis, parents also had to be involved, and in order to get this information from them, two strategies were used: an interview with the parent representative and a survey conducted of those parents who had older children and, thus, were able to compare both structures. Figure 5 shows the mean in terms of parental academic impressions.

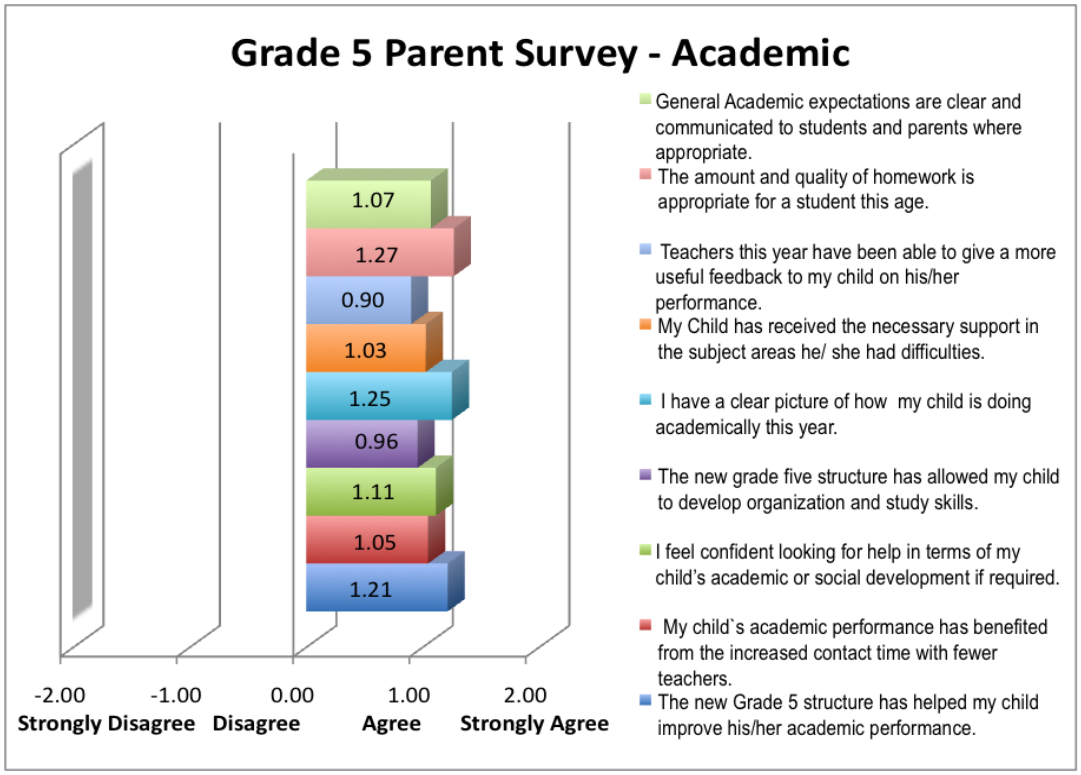


Figure 5: Grade five parent survey: Focus on Academic results

As it can be observed, all results were very positive, and in general, parents perceived an improvement in terms of academic results. The two lower areas were teacher feedback (number 3) and the development of study and organizational skills (number 6).

In terms of number 3 (effective feedback to students), it was interesting to cross-reference this variable with the one regarding parents having a clear picture of their child's academic progress (number 5), which actually was the second highest. The analysis of both results tends to show us that teachers were more effective giving parents feedback about their students than giving the same feedback to their students. This was probably the result of an increased knowledge of the children, which is evident in number 8, but it does not necessarily mean better teacher feedback to students.

Regarding organizational skills and study habits, it was determined that our students still required guidance in this area; however, we believe this is an issue that has to do with developmental aspects and might be difficult to change. As it was identified through research, pre adolescents find it difficult to get organized in terms of study habits due to a shift of focus in their interests more towards a more social aspect. This conclusion is reinforced by analyzing the standard deviation result for this variable. Table 1 shows a comparison of the same results, this time adding the standard deviation for all answers.

Tabla 1. *Grade five parent survey: Focus on Academic results*

Variable	Mean	Standard Deviation
1. The new Grade 5 structure has helped my child improve his/her academic performance.	1,07	0,80
2. The amount and quality of homework is appropriate for a student this age.	1,27	0,69
3. Teachers this year have been able to give a more useful feedback to my child on his/her performance.	0,90	0,98
4. My Child has received the necessary support in the subject areas he/ she had difficulties.	1,03	0,99
5. I have a clear picture of how my child is doing academically this year.	1.25	0,94
6. The new grade five structure has allowed my child to develop organization and study skills	0,96	1,09
7. I feel confident looking for help in terms of my child's academic or social development if required.	1,11	1,04
8. My child's academic performance has benefited from the increased contact time with fewer teachers.	1,05	1,08
9. General Academic expectations are clear and communicated to students and parents where appropriate.	1,21	0,68

As observed, variable number 6 had a very high standard deviation rate, showing a more diverse range of opinions, which might suggest differences according to particular cases. For example, for some children, the grade five structure helped them foster those habits, while for others, it didn't, according to their particular developmental needs. The overall lower mean and the high standard deviation support this conclusion.

The social aspect is perhaps the most difficult to deal with in this transition, as during this time, students are moving from childhood into adolescence, and according to the IB, "MYP students are at an important age of transition, of personal, social, physical and intellectual development, of uncertainty and questioning, of searching for relevance and meaning." (MYP, A basis for Practice, p. 2) The social aspect of this analysis has to do with all of these aspects: creating peer and teacher relationships, getting along with more teachers, making new friends, belonging to a group and even dating, which are some of the issues that concern our students.

The team teaching structure designed for grade five allowed teachers to get to know their students better and also to share the responsibility of addressing those concerns in a more effective way. Literature suggests that students experiencing the transition to middle school should have at least one adult they can turn to in case of need. With this structure, all of the students had several adults they could trust. In our particular case, we were able clearly observe how this was achieved. Figure 6 shows the grade five parent survey, focusing on the social aspect. As it can be observed, the highest two items were happy children and teachers that know the children, with 1.52 and 1.53, respectively. This is perhaps the clearest indication that the whole strategy was effective.

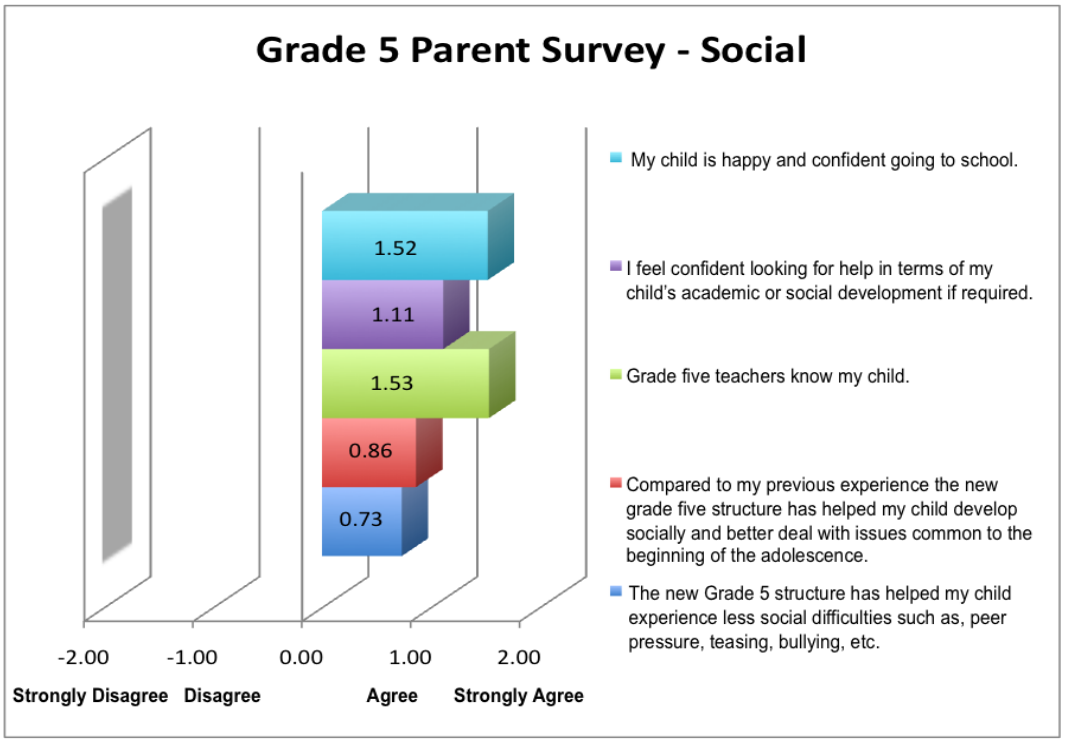


Figure 6: Grade five parent survey: Social results.

Once again, we find two areas that show a positive overall impression but that obtained lower results. Those areas were opinions regarding students experiencing less social difficulties and the way in which we were able to provide support for students dealing with issues associated with the beginning of adolescence. Once again, these areas are not only difficult to measure due to individual differences but they are also almost impossible to eliminate since they respond to developmental characteristics that cannot be changed. This means that social situations will probably always exist at some level during this transition period, and all we can do is provide support and guidance in order to make sure matters are dealt with accordingly.

The survey results and parent interview show that the new structure was effective in dealing with such issues. From the results, it is clear that parents feel comfortable approaching the school in order to deal with those issues and feel that the school has provided them with guidance in terms of how to better deal with issues associated with the beginning of adolescence.

It is also important to reiterate here that perhaps the most difficult aspect to analyze in this study is the social aspect, mainly due to the fact that results regarding this aspect were based on opinions. It is quite complex quantifying data regarding social interactions, and this is why a qualitative analysis was more appropriate. We might say that some of the opinions were a bit more qualified, as we asked parents who had experienced this transition with an older child to express their feelings as well as experienced teachers. Students gave their opinions, but they had no basis for comparison. Another source of data that was analyzed here is a comparison in the number of discipline cases for both years; however, it is also necessary to analyze this carefully because a decrease in discipline cases might suggest that students do not feel comfortable approaching teachers so although there are issues, those are not reported or the other way around: due to closer relations with their teachers, students may approach them more freely which could increase the number of reported cases. This is why we mainly focused here on serious cases, or the ones that were dealt with by the school's discipline committee.

Although we all agree that we will never be able to eliminate incidents in terms of students' relationships, we were able to significantly decrease the number and seriousness of incidents. While in the previous year, a large number of incidents involving bullying, teasing, etc. were reported and dealt with by the discipline committee, this year we only had to deal with a few. When asked, teachers, students and parents agreed that we were able to foster a "more caring environment within the group, and when required, we have been able to respond quickly and in an appropriate way." (Parent representative interview) It is also worth mentioning that only one student was "suspended" from school this year as a consequence of negative behavior versus 6 reported cases of students suspended as a disciplinary action during the previous year.

In terms of procedure, the transition to middle school poses many challenges: students are required to move from class to class within a given time, to store their belongings in lockers, to have their recess times with older students, as well as to follow a very different timetable, which means starting school almost two hours earlier.

In general terms, parents perceive the new structure to be beneficial in terms of helping students overcome difficulties related to procedure, and Figure 7 shows these opinions. Once

again, it is important to note here that although three different categories have been identified, they should always be analyzed in relation to each other, which means that some items are common for all three areas. This is why some variables are repeated, although in each particular section, they were analyzed from a different perspective.

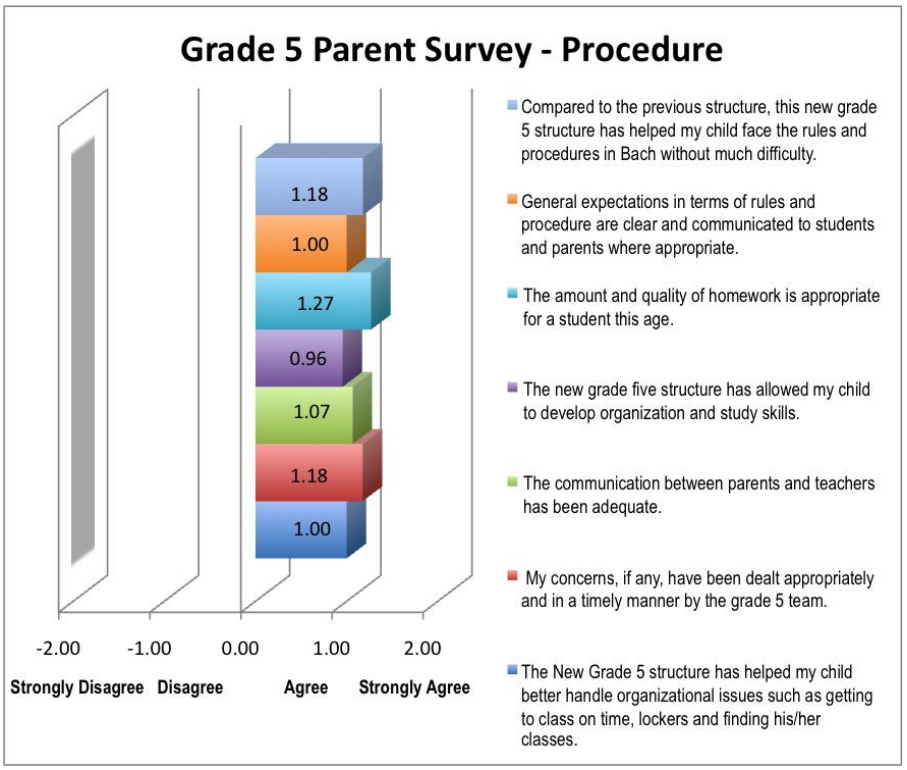


Figure 7: Grade five parent survey: Focus on Procedure

It is interesting to note here how the variable regarding homework rated so positively. This variable was also analyzed before, from the academic perspective, but from an organizational perspective, homework is usually a source of concern and conflict for many schools. This was no different at our school. However, the fact that most parents agreed that the amount and quality of homework was appropriate for students this age was a clear indication that our procedures in this area were working.

Results also show that the grade five structure helped students deal with rules and middle school expectations in a more positive way. It is necessary to remember here that form tutors spent the first three weeks of school going over procedure and discipline expectations with their students. This probably helped students not only become more familiar with the rules and expectations, but also decreased the number of discipline cases, since literature suggests that when students are aware of the expectations in terms of behavior, they are least likely to have difficulties.

The lowest rated item in the parent survey was once again the development of study skills and organization skills. When this result was triangulated with interviews, it was evident that different parents had very different perspectives in this matter. Some strongly believed

that the structure did in fact help their children develop those skills, while others believed we were overprotecting the children and thus not helping them develop in those areas.

Students, in contrast, believed that they have been able to develop organizational and study skills within the new structure and felt they were more prepared to face the increasing levels of demands posed by the teachers. This perspective is also shared by teachers who see their students as being at a better level, as compared to students they had in previous years. Those perspectives could also be cross-referenced with the academic results analyzed before. As we were able to observe, students this year had better academic results than previous students in this same grade level, which might suggest the development of better organizational and study skills.

Additional clear evidence that the structure has helped students with procedure and organization is the reduction in tardiness. Tables 2 and 3 summarize this information.

Tabla 2. Number of late arrivals to school, 1st semester 2009 – 2010

Grade Level	# of lates to school: 2008 – 2009 academic year	# of lates to school: 2009 – 2010 academic year	Percentage difference
5th Grade	146	56	65% Reduction

Tabla 3. Number of late arrivals to class, 1st semester 2009 - 2010

Grade Level	# of lates to Class: 2008 – 2009 academic year	# of lates to Class: 2009 – 2010 academic year	Percentage difference
5th Grade	138	5	99% Reduction

This data provides evidence that we were able to reduce tardiness, but of course, it is necessary to remember that by grouping all of grade five together in one main building, we significantly reduced the distance students had to travel in order to get to their classes on time, which obviously had a great impact on those results. However, the fact that we achieved a 65% reduction in students being late to school should not only be seen as an improvement in terms of procedure and organization; this result could also be an indicator of overall student satisfaction, as many studies have shown there is a direct correlation between student satisfaction and attendance records and tardiness.

SOME CONCLUSIONS

The links between the three programmes, which offer a continuum of international education, become a reality when the programmes are implemented by dedicated administrators and teachers in IB World Schools. While the programmes have common elements, the effectiveness of the implementation of a sequence of two or three programmes depends ultimately on a commitment by the school to building a continuum and maintaining a clear focus on teaching and learning. This requires continuous, mutual cooperation and collaboration between administrators and teachers at all levels.
(Towards a Continuum for International Education, IB 2008)

The transition from elementary to middle school poses many challenges for schools. This reality is even more demanding within the international school context and, particularly, those schools offering IB programs. Such a challenge, besides requiring a holistic approach, demands considerable and collaborative efforts from administrators, teachers, parents and students. We were able to observe, through the results presented in this study, how a carefully planned induction program and a middle school structure that takes into account student needs as well as fosters collaboration among teachers could be successful in supporting this transition process in terms of academic achievement, social and procedural needs.

We were able to observe how this structure helped students achieve better academic results, experience less social difficulties and learn how to deal with middle school procedures more effectively, all aspects identified as problematic during this specific transition period and in our particular school. Overall, we can say this was a very successful innovation and that it certainly exceeded our initial expectations.

Nonetheless, this process initiated a cultural change in our school, a change of focus from departmentalization to collaboration, from a focus on the academics to a focus on the social aspect, and as any change in culture, it requires time. Because of this, it is important to point out that this is only a one-year snapshot of a specific group experiencing this new structure. In order to determine and validate those results, a more longitudinal study will be required since positive results may be due to a better cohort of children or the work of a very enthusiastic group of professionals.

Some of the results obtained through this project are consistent with studies regarding the effectiveness of the team teaching strategy. It was determined by previous research that the team teaching strategy improves academic results and increases parental involvement and overall teacher satisfaction with work conditions, and all of these aspects were clearly attained during this initial year.

Two aspects seem to be crucial for the successful implementation and articulation of IB programs and the attainment of a continuum for international education: planned processes to ensure teacher collaboration and a greater knowledge of the programs, which leads to a strong professional development plan for teachers and administrators. Both aspects, although critical, tend to be very expensive and often put aside by many schools.

As it was mentioned throughout the study, although three main categories were identified, they should not be perceived as separate. The transition between schools and the

articulation of IB programs requires a holistic approach. It is necessary to understand that the whole is more that just the sum of its parts. Children would not have been able to achieve better academic results without the provision of a safer and more caring environment.

As observed, the new structure was effective in helping students achieve better academic results, have fewer issues in following Bach procedures and experience fewer social and discipline difficulties. In terms of the transition from PYP to MYP, an increased teacher knowledge of the program philosophy, principles and practices as well as greater collaboration helped students understand and cope with the differences between both programs as well as identify interdisciplinary links among subjects and thus be able to move from a transdisciplinary to an interdisciplinary approach more effectively. In order to validate those results, it would be necessary to carry out another study involving the same group of students in order to determine if the observed academic improvement is sustainable across the years.

In terms of perceptions, all involved in this process agreed it was a positive one. Parents felt we were successful in creating a safer, more controlled environment for their children. Students felt safer and off course happier; they enjoyed coming to school and spoke highly of their teachers. They do wish sometimes for more freedom, but pre adolescents will always want more freedom in spite of still requiring a more controlled environment in order to be successful.

Teachers agreed that due to the collaborative nature of the project, this was perhaps one of their best years in school. The ones with a basis for comparison stated that they were able to achieve much more with this particular group than ever before. They also felt much more appreciated by their students, parents and managers, which ultimately lead to a better feeling toward their working environment and a higher commitment toward maintaining high expectations and standards.

Overall, we can say that this intervention was successful. It fostered collaborative inquiry and collaboration, and the results can be seen in improved student learning and fewer social and discipline issues.

It is clear now how any innovation that involves the transition from elementary to middle school not only needs to be based on sound research but it also needs to be approached from a holistic, rather than fragmented, perspective. Also, in order to see this project's long term development, as well as to ensure continuous development in the school, it would be important to extend this research project and conduct a similar study as a second phase of the action research cycle.

While reflecting on areas that would need further research, it is important to take into account that this innovation and the study of its effectiveness was designed for a particular context, and this structure as such may not be transferable to other contexts. If it is, some modifications would have to be made in order to better suit the needs of the new context. This limitation is not unique to this study; rather, it is actually one of the limitations found in the literature review, as most of the studies regarding the transition from primary to middle school are site–specific research projects.

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