

The impact of the PYP exhibition on the development of international-mindedness, critical thinking and attributes of the IB learner profile

Summary developed by the IB Research department based on a report prepared by:

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This research explored a keystone event in the PYP—the PYP exhibition. The study found overwhelming support from parents, students and teachers for the exhibition as an activity and a deep conviction that this was not only a good use of curriculum time, but the pinnacle of PYP achievement.

Background

This study investigated the impact of the International Baccalaureate (IB) Primary Years Programme (PYP) exhibition on the development of students' international-mindedness, critical thinking and attributes of the IB learner profile. The PYP, an educational framework for children ages 3–12, offers a holistic education focusing on whole-child development through an inquiry-driven approach. The exhibition takes place in the final year of the PYP and is the culmination of a substantial piece of research involving group collaboration, inquiry, social action and a presentation to an audience. The exhibition is intended to be a collaborative and student-led inquiry during which students can demonstrate agency and take responsibility for their own learning (IBO, 2008).

Research design

This mixed methods study included both qualitative and quantitative data sources to explore views on the PYP exhibition. The study involved seven case study schools undertaking the PYP exhibition in five countries (Russia, China, Mexico, the United Kingdom and Kenya). In each of the schools, the data set included interviews with teachers, parents, students (both PYP students and first-year Middle Years Programme (MYP) students), managers and mentors (N = 59), as well as in-school observation of the exhibition and document analysis. In addition, the study included tailored surveys of parents (N = 97), teachers (N = 128) and students (N = 334) in schools in the five target countries.

Findings

Practices in implementing the PYP exhibition

Choice of topics

Choosing a topic was a very important part of the exhibition process. Experienced school staff were better prepared to help students to choose topics with sufficient depth and breadth, to link lines of inquiry to topics and to maintain a focus on action. Well-chosen topics fostered engagement with inquiry, critical thinking and international-mindedness.

As reported by staff in participating schools, the majority of topics related to environmental issues (22.8%), social or human rights issues (26.4%), science topics (19.8%) or humanities-focused topics (17.7%).

In all of the case study schools, students primarily investigated their topics using social science methods, examining a range of sources and evaluating this information to produce a presentation and report. Sources used by students included books, industry materials, internet sites and interviews with people in relevant positions and industries.

Timing and scheduling

The process of planning for the exhibition was usually lengthy. Often the process started after the previous year's exhibition by engaging in reflection on what was successful about the exhibition and what required improvement.

The timing of the exhibition varied from school to school. For example, one school was experimenting with a whole-year process to allow for in-depth investigation of the exhibition topics. In most case study schools, students' involvement was a six-week process, although the PYP coordinator and teachers may have been preparing and planning for much longer.

Components of the exhibition

The exhibitions in the case study schools were vibrant and varied. Below were some of the elements observed consistently across all case study schools:

- The students produced a piece of written work, usually in the form of a report, sometimes presented as a bound report, and other times displayed on posters.
- Oral presentations were an important part of the exhibition "sharing event" (final presentation). These were typically individual presentations, but done in the same small groups that students had been working in throughout the exhibition process. These were presented to other PYP students, teachers and parents.
- The use of ICT was abundant, including data searching, text management, document sharing, co-writing and data presentation.
- Music and drama were used by students individually and in groups during the sharing event.

Reflection and assessment

Reflection was at the heart of the PYP exhibition process in the participating schools. This was incorporated into the exhibition in a variety of ways, either as independent work done outside of the class or as a class lesson. Although some students said they had found reflections "boring at first", they recognized the importance of reflections in improving the quality of their independent and group work.

It is important to note that reflection was not confined to students. Schools engaged in reflection to improve their exhibition processes. Teachers and coordinators expected to make changes to improve student learning, and pointed out examples of changes made from previous years. As one PYP coordinator explained:

"We are going to reflect on Monday about what we are going to tweak for next year and I guess what was quite cool about this year was that it was truly like we were inquiring as well And it was such an organic process and we definitely know what we will do better next year".

The PYP exhibition was assessed by ongoing, formative assessment and, in most cases, a summative assessment. The assessment of the PYP exhibition included the assessment of target activities throughout the process in addition to assessment of the sharing event. The sharing event was assessed using a rubric in all of the schools although the mechanism and impact of this was different across schools. In some cases, the assessment was conducted by teachers, mentors, MYP teachers or even visiting dignitaries. The most valuable use of these assessment criteria was as a basis for student reflection, which took the form of self-assessment, a video or a final written reflection. These reflections showed self-aware students who were able to consider their own activities and cognition.

Action

The action element of the exhibition was particularly valued by parents, students and teachers and was also seen as key in developing international-mindedness. Study participants described "action" in relation to being caring or principled.

The action element of the exhibition, however, was challenging for schools and teachers; coordinators clearly found it difficult to help students to identify meaningful actions. In schools where the exhibition process was confined to a short period, the action element was seen as problematic and challenging. Schools in which the exhibition was planned for a longer period, on the other hand, found it easier to retain the importance of this aspect of the exhibition. Although "action" was challenging for participants, it was also identified as one of the crucial elements that made the exhibition meaningful.

Impact of the PYP exhibition on the development of critical thinking, international-mindedness and learner profile attributes

Critical thinking

Teachers, parents and students found the PYP exhibition to be an opportunity to undertake critical thinking, bringing together attributes, skills and knowledge learned in the PYP.

All of the teachers that were interviewed identified critical thinking as an important outcome of the PYP exhibition, and saw it as an essential part of exhibition activities. Most teachers and school leaders related critical thinking to critical research skills and critical literacy, personal independence and in some cases wider global issues.

When asked about critical thinking, most students referred to the analysis of sources, allowing them to be critical about different sources of information and viewpoints. They recognized this as a goal and an accomplishment. All of the students expressed some caution with the use of internet sources, however, the students who were provided with greater support in analysing internet sources tended to employ more evaluation strategies.

Critical thinking was identified by parents in the case study schools as a “real world” outcome of the exhibition and as one of the desirable outcomes of the PYP. They saw this as an important skill that prepared their children for further education and future careers.

International-mindedness

International-mindedness was the most difficult concept for parents, teachers and students to discuss directly. They recognized the complexity of international-mindedness and found it difficult to define in their discussions, preferring to use examples of topics or actions. Nevertheless, there was evidence that they saw the development of international-mindedness as one of the key impacts of the exhibition, often expressed in terms of knowledgeable, caring, open-minded or principled students and actions.

Key skills and learner profile attributes

Overall, parents, teachers and students reported that they valued the PYP exhibition as an activity that gives students the opportunity to work cooperatively, to develop critical inquiry skills and to learn about different perspectives. Many of the working practices discussed by students pointed to features of cooperative learning. Students highlighted their cooperative working skills as an important achievement and source of pride.

In the survey, teachers and parents reported that students were using inquiry skills, as shown in Table 1. Parents and teachers agreed most strongly that students had undertaken reflection on their own points of view and had learned how to select and

analyse information sources. The students also showed high levels of agreement with the inquiry skill statements, although at somewhat lower levels than parents and teachers.

	Teachers (N = 128)	Parents (N = 97)	Students (N = 334)
The children in my class ... My child ... I ...	<i>Number (and percentage) either agreeing or strongly agreeing</i>		
selected sources of information	119 (92.2%)	91 (93.8%)	321 (96.1%)
analysed sources of information	120 (93.1%)	91 (93.8%)	292 (87.4%)
evaluated the point of view and truthfulness of different sources of information	103 (79.8%)	87 (89.7%)	280 (83.8%)
discussed choices of information with others	109 (84.5%)	95 (97.9%)	282 (84.4%)
reflected upon my/their own point of view	120 (93%)	93 (95.9%)	289 (86.5%)
justified arguments, using evidence and argument	116 (89.9)	89 (91.7%)	278 (83.2%)

Table 1: Teacher, parent and student agreement with items related to inquiry skills

All of the participants interviewed, including parents, teachers, students and mentors, said that the exhibition embodied the values of the PYP and gave students the chance to develop and display the attributes of the IB learner profile. Parents saw the exhibition as an opportunity for their child to undertake a sophisticated independent inquiry, using 21st-century skills and technologies that would prepare their child for the wider world.

Parental engagement in the PYP exhibition

Findings suggest that parents valued and understood the role of the PYP exhibition in their child’s education. Of the parents who responded to the survey, 93.8% agreed or strongly agreed that the PYP exhibition was a good use of curriculum time, and 97.9% agreed or strongly agreed that “my child learned a lot through doing the exhibition”.

Parents spoke about their own child’s exhibition in terms of enthusiasm and wonder. They were impressed by their child’s achievements, skills and maturity. They valued the exhibition for helping to develop “real world” skills, such as internet searching, evaluating information and reflectiveness—skills that are useful in further education and life beyond. For many of the parents, the PYP exhibition affirmed their choice of an IB education

for their child. They also saw the exhibition as offering strong preparation for the MYP because of its inquiry focus.

Mentors

The IB describes the primary role of mentors as acting as “a guide and resource in the accomplishment of specific tasks during the exhibition process” (IBO, 2008, p. 5). Many mentors commented on their efforts to support students with time management, keeping students focused and also handling some of the logistical aspects of the exhibition process.

The IB indicates that mentors can be community members, older students, parents and teachers (IBO, 2008). However, in the case study schools, the overwhelming majority of mentors were teachers in the school, followed by other school staff (such as librarians, teaching assistants and support staff). When mentors came predominantly from the school staff, this frequently caused problems with timetabling for schools, due to the large amount of time that mentors need to dedicate to the role. In contrast, in schools where parents, librarians and others were invited to become mentors, these scheduling difficulties were alleviated, as teachers’ time was less stretched.

The role of the PYP exhibition in relation to the transition to the MYP

PYP and MYP students, parents and teachers all perceived the PYP exhibition as excellent preparation for the MYP and further schooling in general. Study participants felt that the exhibition was extremely useful for helping to develop students’ confidence, skills, attitudes and knowledge.

MYP students in all countries believed that the PYP exhibition had been helpful in preparing them for the MYP. They felt that they were more confident than students who had arrived in the MYP from local non-IB primary schools, citing presentation skills in particular as something they had developed through the exhibition.

Recommendations

Below are a selection of recommendations presented by the researchers based on the study. For the full list of recommendations, please refer to the full report.

- Teachers should plan well in advance for the PYP exhibition.

- Schools should support students in selecting topics of inquiry that are suitable for a PYP exhibition project and that support the development of international-mindedness.
- Teachers should consider the action element of the exhibition from the beginning of the planning process. Allocation of time to the action element is important for its success and should be planned and monitored by coordinators.
- Schools should aim to provide “just enough” support to enable students to understand, engage with and achieve their goals, while maintaining a student-led experience.
- Schools with more experience with the exhibition have a substantial knowledge base to draw from. Currently, schools benefit enormously from visits to the exhibitions of other schools, but shared training and “critical friendship” between schools would be an advantage, especially for new PYP schools.

Conclusions

This study found the PYP exhibition to be a valuable and pivotal experience in the life of the schools, families and students who were involved. The exhibition was inquiry-led, although the structured support of teachers emerged as a key factor in giving students the space and freedom to make decisions and conduct inquiry. The reflections of teachers, mentors, parents and students were at the heart of continual improvement of the PYP exhibition experience. However, it was clear that experienced schools were better able to manage the process to give students an optimum experience, select challenging and action-linked topics and support students. Sharing this knowledge between more-experienced and less-experienced schools would be valuable.

Reference

International Baccalaureate Organization. 2008. *Primary Years Programme: Exhibition guidelines*. Cardiff, UK. International Baccalaureate Organization.

This summary was developed by the IB Research department. A copy of the full report is available at <http://www.ibo.org/en/research/>. For more information on this study or other IB research, please email research@ibo.org.

To cite the full report, please use the following.

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