

Research summary

School-based curriculum development in the International Baccalaureate Primary Years Programme

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Purpose

Every International Baccalaureate (IB) World School plays a crucial role in translating, operationalizing and realizing the IB vision. To better support school efforts in implementing Primary Years Programme (PYP) curriculum frameworks in their own context, the IB seeks to understand specific curriculum design practices at the school level as well as the role of teachers as curriculum designers in the process. This study investigates how PYP schools develop curriculum and perceive their own capacity to undertake the challenging yet invigorating task of school-based curriculum development (SBCD). It also explores how the IB may further support schools in their curriculum development journey.

The study involved three phases, specifically, a literature review, an investigation of SBCD practices in PYP schools, and a synthesis of findings. Across the study, attention was given to the following three key perspectives on curriculum development (Goodlad, 1994).

- **Substantive:** the process of creating key components of the curriculum, such as goals, subject matter, learner activities and resources for classroom use.
- **Technical-professional:** the methods of the overarching development process, which include needs and context analysis, design, evaluation and implementation.
- **Socio-political:** the influences of key stakeholders, such as teachers, school leaders, parent associations, policymakers, administrators, teacher unions and subject associations, textbook publishers, assessment developers, higher education institutions, inspectorate and students.

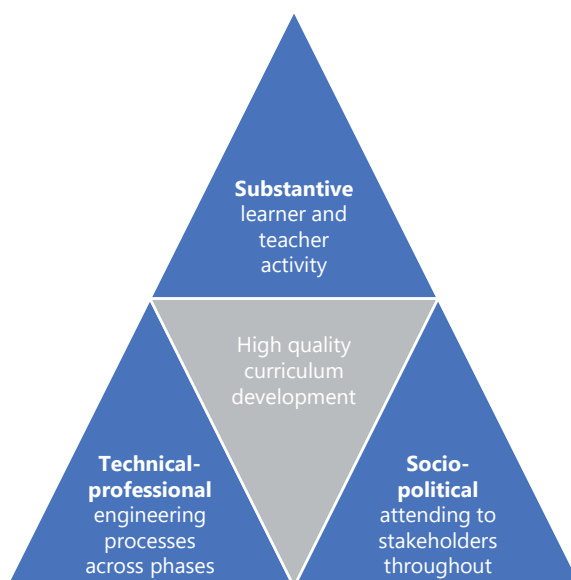


Figure 1. Model of SBCD perspectives

Further, researchers examined the infrastructure—the **human, material** and **structural** features of context—that support SBCD (McKenney, 2019). The overarching research

questions guiding this study were the following. How do PYP schools attend to the substantive, technical-professional and socio-political perspectives of curriculum development? How do human, material and structural contextual factors shape this work?

Research methods

The study included a literature review, which examined models for SBCD and contextual factors that influence SBCD. The researchers also conducted two surveys. The first survey explored the SBCD practices used in PYP schools and included 766 school personnel across all IB regions. A second survey, involving 892 school respondents globally, examined PYP schools' perceived needs and desired supports for SBCD. Additionally, the researchers conducted case studies in five schools, in four countries (India, United Arab Emirates, Belgium and Nigeria), which included online interviews and workshops to further explore school experiences with SBCD and contextual factors that influence SBCD processes and outcomes.

Literature review

In the literature review, the research team identified sources of literature that describe key models, principles and practices related to SBCD. The review of SBCD models yielded two main sets of factors that influence a school's ability to attend to one or more of the curriculum perspectives.

- The first set has to do with the **nature of the SBCD endeavour**, and includes the central subject matter, products for use during class, products for planning or organizing class time, the creators who are directly involved, and the roles held by teachers, school leaders or external experts.
- The second set of factors concerns the **context in which the school is situated** and includes how curriculum input and output is regulated and how change interactions are shaped.

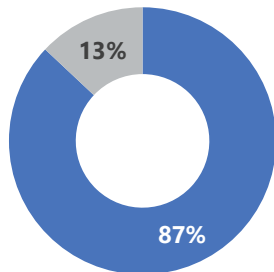
SBCD practices in PYP schools

Survey findings

Based on how PYP school personnel responded, it appears that **both teachers and school leaders are proactively involved in SBCD processes**, and that **external groups typically are not involved in any significant way**. This suggests that PYP schools organize most of the work themselves. Most respondents (87%) indicated that their schools were responsible for determining the goals and contents of SBCD products as well as for monitoring the effects of the SBCD products (95%) (figures 2 and 3). Since the vast majority of respondents to this survey indicated that SBCD is perceived to be the responsibility of those involved, it can be inferred that there is **substantial ownership and commitment to SBCD**, especially among the heads of school who responded.

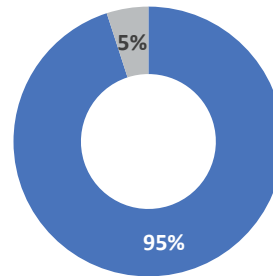
Input regulation

■ Our school ■ Others, outside of our school



Output regulation

■ Our school ■ Others, outside of our school



Figures 2 and 3. Influences on SBCD processes and outcomes

Nearly all respondents reported that both they and their teams are somewhat or very satisfied with SBCD practices at their school and the support that they receive from the IB for this work (figure 4). Efforts to support SBCD in most PYP schools would require increasing curricular literacy to assist schools in acting on their curricular freedom.

How do you currently perceive the guidance received from the IB for your SBCD?

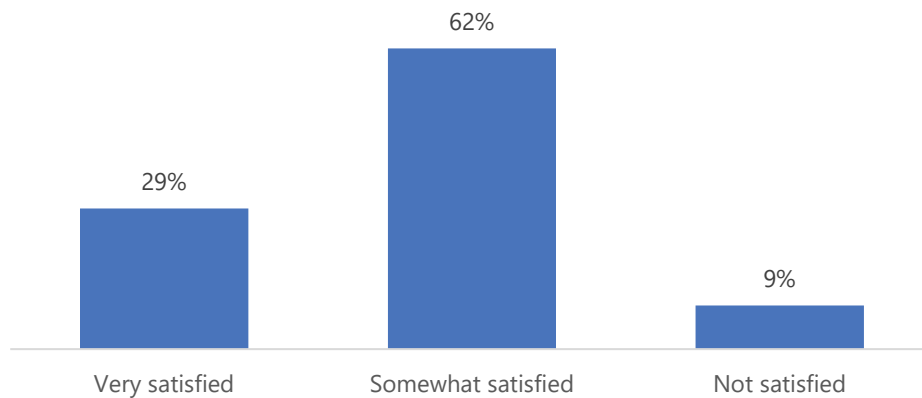


Figure 4. School perceptions of IB support for SBCD

Case study findings

In the cases examined, most schools had **multiple frameworks to adhere to alongside the PYP framework**, which may include their national curriculum, specific curricular products that have been adapted by the school, and other benchmarks or standards. However, within these frameworks, there was **often room for autonomous curriculum development** and the creation of their own curricular products.

All schools had a strong focus on developing expertise for attending to students and their needs, and utilized a learner-centred approach. Teachers were viewed as the most essential asset in attending to student needs.

All schools had access to an abundant number of artefacts (materials and resources), which influenced the product quality in their SBCD. While different structures that influence products for SBCD were identified, the most important aspect was the necessity for all stakeholders to agree upon a shared vision.

Various types of expertise were viewed as important during the SBCD processes within the schools—for example, project management, analysis, design, and curriculum development expertise—however, all schools valued **evaluation expertise** the most. The importance of this type of expertise seems to be intertwined with the cyclical design process that was used across the schools. In terms of structures which influence SBCD, PYP schools identified **leadership** as the most important factor in successful SBCD efforts.

Expertise for communicating and collaborating with stakeholders was deemed an important factor on all levels: from the team level to the school, regional and national levels and, in the IB's case, also the international level. Most teams preferred to start the design process with a smaller team, and involve various stakeholders later on in the process. Schools were content with the different artefacts that influence stakeholder engagement that are already in place in most schools, though they did note that some of their regular channels were interrupted due to the COVID-19 pandemic. Most schools celebrate stakeholder involvement and had a desire to connect with other IB World Schools (IBWS). Additionally, most schools expressed a need for **leadership and guidance** through **general IB workshops, formalized programs and professional development**.

Synthesis

School perceptions of needs related to SBCD

- Survey respondents indicated that they have **less time than they need to collaborate** and to conduct their SBCD work.
- Regarding needs in terms of IB frameworks, results showed that most respondents would benefit from **general IB workshops**, some **clarity regarding the specifics in IB frameworks** and **clarification of the IB's expectations** on certain topics (for example, learner agency).
- Respondents indicated that, although many materials are present, they need guidance in terms of finding the **right materials for their local context** and specific projects. In addition, they would like to empower teachers to play a teach-the-teacher role and facilitate workshops.
- Respondents felt a need for **more expertise on curriculum design** in their teams and would like help from internal and external experts in their SBCD efforts. Results

showed that the vast majority of respondents would like to learn more about using a **design approach to curriculum development**.

- Most respondents felt a need for sharing **inspiring practices and innovative educational activities** externally.
- Furthermore, there was a need for SBCD workshops and for the IB to provide **professional development in curriculum design**.
- Schools also thought it was important to **interact with other PYP schools** on occasion.

Recommendations based on the study findings

A synthesis of all existing data across the study yielded five key recommendations for the IB.

1. **Use SBCD models to provide structure to the curriculum design process and to shape guidance and thinking tools for IBWS.**
2. **Provide guidance with clarity and explicitness, addressing commonalities and differences across and within schools.** Schools acting in a decentralized context may need more structure and guidance from the IB.
3. **Offer guidance on systematic prototyping as a key approach in curriculum design.** A prototyping model involves end users in the design process and creates multiple drafts, which are then tested and evaluated using an evidence-based research approach. Schools understand that curriculum design is a continuous process and expressed interest in learning more about how to implement a prototyping approach.
4. **Value and celebrate existing expertise and SBCD champions.** Start from the expertise that is already present in school teams and make local work visible.
5. **Create collaboration and learning infrastructure among IBWS.** Promote sharing among PYP schools and provide exemplary materials, guidance and workshops. Offer professional development for curricular leadership and conduct SBCD workshops with a number of schools on an annual basis.

Summary of key findings from the study

1. **PYP schools are often more alike than different in terms of their curriculum design practices.** Therefore, the IB can be more explicit in terms of expectations and degrees of freedom for schools in their curriculum design process.
2. **PYP schools report having the curricular freedom to design for their context, but can lack expertise and support.** The IB has an important role to play in providing a vision, guidance and support for SBCD. Efforts to support SBCD may require attention to increasing curricular literacy to assist schools in acting on their curricular freedom
3. **PYP schools report needing more support with a prototyping approach to SBCD.** This is an area where the IB can also deliver more guidance and support.

References

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- McKenney, S. (2019). Developing the human, material, and structural aspects of infrastructure for collaborative curriculum design: Lessons learned. In J. Pieters, J. Voogt, & N. Pareja Roblin (Eds.), *Collaborative curriculum design for sustainable innovation and teacher learning*. Springer, Cham. https://doi.org/10.1007/978-3-030-20062-6_22