

Collaboration

A collaborative approach to transdisciplinary learning

Summary

- PYP schools commit to and support collaboration to improve the transdisciplinary learning experiences and student outcomes.
- Teachers collaborate within and beyond year-level teams, the school and the learning community about learning that takes place both inside and outside of the programme of inquiry.
- Students demonstrate agency, and their capacity to take action for their own learning, by collaborating with teachers and peers.
- Collaborative teaching practices between year-level and subject-specialist teachers come in different forms, and include co-constructed, supported and stand-alone learning experiences.

Demonstrating a commitment to transdisciplinary learning

Collaboration demonstrates a commitment to the common goal of supporting and reflecting on a transdisciplinary learning experience and improving student outcomes. Teachers are continually inquiring into and reflecting on learning and teaching as they collaborate with each other and with their students (Claxton, Chambers, Powell, Lucas 2011). A collaborative approach involving sustained dialogue and reflection helps teachers to grow as professionals. They reach deeper levels of understanding together as they inquire, reflect on and make decisions about the process of learning.

This collaborative approach is apparent at a school-wide level as well as in day-to-day and moment-to-moment learning and teaching. The learning community collaborates in policy development, resource planning and allocation, learning space design and culture-building. Collaboration may vary in response to the local context and the needs of the learning community, and will always be based on a commitment to the mission of the IB and the Primary Years Programme (PYP) pedagogy.

Once learning communities reach broad understandings about the curriculum, they go on to:

- design the transdisciplinary programme of inquiry
- support each other by providing feedback on teaching practice
- create and moderate assessment

- reflect on the success of the units and the programme.

Collaborative learning teams also establish systematic and ongoing professional learning and mentoring programmes that build vibrant professional learning communities. They support new teachers to establish inquiry-based learning and teaching practice. Schools extend their collaborative practice to local networks and the wider global IB community through participation in professional development and encouraging teachers to become active members of the IB educator network.

A collaborative approach puts students at the centre and aims to ensure a holistic, transdisciplinary and coherent learning experience for them. Collaboration starts by developing a shared understanding of what students know and can do.

Students are valued participants of the collaborative learning teams. They demonstrate agency and their capacity to take action for their own learning by collaborating with teachers and other students.

Collaboration—a “distinguishing” feature of transdisciplinary learning

The PYP is committed to transdisciplinary learning as an organizing principle of the curriculum. It has relevance across the subjects and transcends the confines of the subjects to connect to the real world.

Transdisciplinary learning cannot happen without collaboration across disciplines. The key aim of collaboration is to:

“fuse knowledge from a number of different disciplines and engage with stakeholders in the process of generating knowledge.”

— *Wickson et al 2006*

To achieve this aim, collaboration is intentional and continual. Collaboration supports the learning community in understanding how the expertise and perspectives of individuals contributes to the fusion of knowledge and new discoveries.

Through sustained collaboration, members of the learning community develop:

- openness towards other perspectives

- engagement with ideas different to one's own
- respect for the contribution of other subjects to the inquiry
- appreciation for rigour in debate and discussion
- appreciation for collective interpretation and reinterpretation of knowledge.



Supporting transdisciplinary learning requires time and a commitment to collaboration. This includes students, classroom teachers, single-subject teachers, librarians, media-specialist teachers, inclusion specialists, and so on. Teachers and students learn from each other as they share knowledge, perspectives and experiences; discuss how to design, plan, facilitate and assess learning and teaching; and consider how to transcend knowledge. Teachers co-learn with students when inquiries take them beyond subject boundaries, exploring a potentially infinite number of opportunities to address the transdisciplinary themes.

Collaboration that supports transdisciplinary learning also engages the learning community in ongoing reflection. Through reflection, members of the teaching team consider the impact of their own frames of reference (which includes subject knowledge, experience, beliefs, values and

assumptions) as well as the collective frames of reference. These considerations are central to transdisciplinary learning and are only possible through collaboration.

Effective collaboration

Providing a meaningful PYP transdisciplinary learning experience requires collaboration before, during and after an inquiry from all members of the school community to:

- establish a clear purpose
- identify shared values and understandings around the benefits of collaboration
- consider how to organize planning meetings
- have access to the people and materials that inform and support the process
- agree on ways to document, communicate and share the ongoing process of planning and reflection.

Making time for collaboration

Finding time for collaboration requires creative thinking on the part of schools. The following examples provide a starting point, although local and national regulations governing each school will influence decisions of this nature.

- Schedule early release or late start days so that teams can plan together; build these into the yearly and/or weekly calendar.
- Build in time for planning together during orientation days.
- Build in shorter school days by making these up with a longer school year.
- Allocate extra budget for substitute teachers to release teams for collaborative planning and reflection.
- Organize staff retreats away from school for collaborative planning and reflection.
- Alternate the focus of staff meetings; professional development, collaborative planning and other needs.
- Release some teachers during assemblies.

- Members of the leadership team (principal, PYP coordinator and so on) covers classes so teachers can meet to plan and reflect together.
- Support face-to-face planning with technology (shared online collaboration spaces; digital meeting platforms to enable broader participation).

Supporting ongoing and effective collaboration

The following questions provide a starting point for schools to consider ways to support ongoing and effective collaboration.

Does collaborative planning and reflection:

- take place regularly and systematically?
- include all teachers, including librarians, IT/ media and inclusion specialists, on a consistent basis?
- respect student agency, include student voice and consider student well-being?
- make room for meaningful dialogues?
- provide a safe space for debating ideas?
- consider all participants' perspectives and experience?
- provide opportunities to reflect on prior experience and future goals?
- address vertical and horizontal articulation of subject knowledge, skills, concepts and attributes of the learner profile?
- ensure that all teachers have an overview of students' prior knowledge and learning experiences?
- respect teacher agency and consider teacher well-being?

The collaborative planning process

Whole-school involvement in developing the programme of inquiry is professional development for all. It can strengthen each teacher's understanding of underlying educational theories and is an opportunity to share experiences, ideas, processes and imaginings to transcend subjects. Through collaboration, teachers develop:

- the capacity to look beyond their own disciplinary boundaries

- the capacity for self-reflection
- the ability to reflect on knowledge integration processes
- the ability to take on new ideas.

Members of the pedagogical leadership team support collaboration by creating opportunities for teachers to develop mutual trust and collegiality (Augsburg 2014). They ensure that teachers:

- collaborate throughout planning, implementation and reflection
- collaborate to connect subject-specific knowledge and approaches to learning
- share responsibilities for helping students make connections across, between and beyond subjects for transdisciplinary learning
- review the programme of inquiry for vertical and horizontal articulation
- collaborate to integrate national, regional and state curriculums in ways that promote understanding of the transdisciplinary themes.

Collaboration between year-level and subject-specialist teachers

Some PYP schools have year-level teachers with full responsibility for their students and responsibility for all subjects. In schools with a single class per year level, teachers from different year levels plan together.

In schools with more than one class per year level, teachers working with a particular year level form a team to plan inside and outside of the programme of inquiry with input from the students. Through such collaboration, teachers offer and present different perspectives and ideas that enrich the learning and teaching experience. Some schools, including those with mixed-aged settings, may plan the programme of inquiry over a two-year cycle.

Note: A four- or six-unit requirement per year still applies to a two-year cycle.

Some PYP schools have year-level teachers, single-subject teachers (for example, arts, personal, social and physical education, music, additional languages, mathematics, and so on) and support teachers. In these schools, everyone views themselves as a PYP teacher contributing to, and planning

for, student well-being, transdisciplinary learning experiences and the overall outcomes of the programme.



Collaborative teaching practices can come in different forms. Figures CP01–03 provide some examples. Schools are encouraged to adapt collaborative practices from these examples or from other examples that work in their contexts. The following practices apply to all teachers—year-level teachers, learning support teachers or subject-specialist teachers.

Collaborative practice	Supported learning experiences
Ways of working	<p>Year-level and single-subject teachers collaboratively plan and independently deliver learning experiences inside and outside of the programme of inquiry.</p> <p>Learning experiences occur in parallel in homeroom and in single-subject settings during the duration of an inquiry. Students construct new knowledge by integrating their learning experiences gained from multiple perspectives</p>
Scenarios	<p>Scenario 1</p> <p>In a unit of inquiry under the transdisciplinary theme “How we express ourselves”, with the central idea “Throughout history, people have interacted with each other and communicated using arts”, students explore with the year-level teacher how images interact with text in literature and, with the arts specialist teacher, how forms of art as communication have changed over time.</p> <p>Scenario 2</p> <p>An investigation to develop the conceptual understanding that “Patterns repeat and grow” in mathematics is co-constructed between the year-level or mathematics specialist teacher and the visual arts and PE specialist teachers. Strong connections are made by applying the</p>

mathematics patterns and sequences presented in visual arts and through dance and gymnastics movements.

Figure CP01 *Co-constructed learning experiences*

Collaborative practice	Supported learning experiences
Ways of working	<p>The year-level or single-subject teacher(s) takes a leading role in delivering learning experiences inside and outside a collaboratively planned unit of inquiry. This support could occur before, during or after the unit of inquiry on which the teachers had collectively decided. The support could be related to assisting the acquisition of a skill or providing further opportunities for skills practice or application, or for student action.</p>
Scenarios	<p>Scenario 1</p> <p>Under the theme “How the world works”, with the central idea of “The values and beliefs of a culture are expressed through its languages”, the language specialist teacher leads an inquiry into the languages and cultures of the learning community; the year-level teacher supports this throughout the year by providing students with opportunities to use their family languages in investigations, inviting parents to read stories in their own language(s) to the class, or encouraging students to use their own language(s) on the playgrounds.</p> <p>Scenario 2</p> <p>Under the theme “Sharing the planet”, with the central idea of “Over time, living things may need to adapt in order to survive”, the year-level teacher leads an inquiry into the rights and responsibilities in the struggle to share finite</p>

resources with other people and with other living things. The year-level teacher calls on the science specialist teacher to provide a scientific lesson on the impact of environmental changes on habitats.

Scenario 3

In a unit of inquiry, a librarian supports students to acquire research skills or annotation skills. An IT specialist teacher assists students in using different forms of media for communicating research findings

Figure CP02 *Supported learning experiences*

Collaborative practice	Stand-alone learning experiences
Ways of working	<p>A language or mathematics specialist teacher, a support/enrichment teacher or a bilingual teacher co-teaches alongside the classroom teacher—or in a separate setting—to support acquisition or mastery of a specific skill or subject knowledge directly or indirectly related to a unit of inquiry. Teachers ensure that these stand-alone learning experiences are authentic, relevant to the programme of inquiry and reflect the core elements of the IB Learner Profile, conceptual understandings and approaches to learning.</p>
Scenarios	<p>Scenario 1</p> <p>A mathematics specialist teacher supports students to understand basic multiplication and division facts.</p> <p>Scenario 2</p> <p>A year-level teacher supports students in the acquisition of grapheme–phoneme correspondences.</p> <p>Scenario 3</p> <p>A physical education specialist supports students to develop a wide range of movement skills by using a variety of equipment and a range of play experiences.</p>

Scenario 4

A music specialist teacher supports students' understanding of the elements of music: beat, rhythm, pitch, tempo, dynamics and tone colour.

Figure CP03 *Supported learning experiences*

Collaboration within and beyond the learning community

Students, as agents of their own learning, are fully engaged throughout the unit of inquiry. They define their learning goals, lines of inquiries and success criteria with teachers. They collaborate with teachers to modify learning as new information or interests emerge. They reflect on their learning individually and collaboratively with peers and teachers throughout the inquiry.

When learning is connected to real-life contexts, students see the relevance of their learning beyond the school. There are valuable experts and resources within and beyond the learning community that can be used to support and enhance learning. For example, the following community members might be able to help with learning inside and outside of the programme of inquiry.

- Other students who have a particular passion or interest
- Colleagues working in a different section of the school
- Parents and extended family members
- Experts and professionals in various fields within the local and global community

Collaboration with members outside the learning community is key to providing students with an authentic learning experience and in helping students making connections from their learning to the real world.

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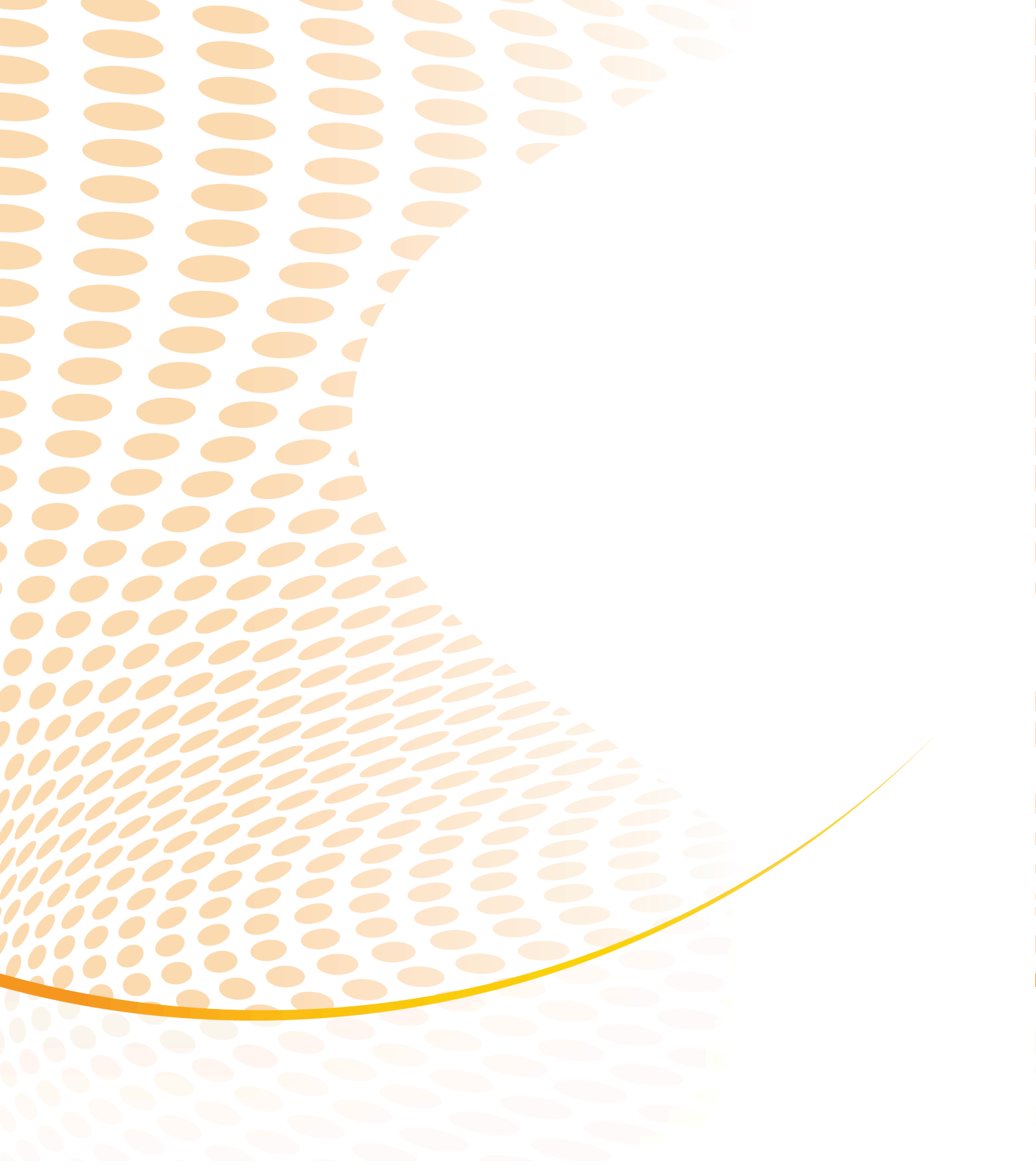
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Further reading

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