

# Lower School

## Comprehensive Guide

2023 – 2024





# Welcome to Lower School

Dear Parents,

Lower School encompasses Grade 1 to Grade 5 and is authorised to offer the Primary Years Programme (PYP) of the International Baccalaureate.

Our goal in delivering the PYP is to develop internationally-minded students with the knowledge, skills, concepts, attitudes and learner profile attributes needed to continue learning into the Middle Years Programme (MYP) or to fit seamlessly into another country's education system.

As our students progress through Grades 1 to 5, they develop increasing independence and a greater sense of responsibility, Emphasis is placed on taking action and demonstrating agency in regards to their learning.

The students' understanding of the world around them and of their role to play as citizens of the world is nurtured over the course of their Lower School experiences, culminating in the Grade 5 PYP Exhibition in which students independently conduct investigations, present findings, and take action in connection with a globally significant issue.

Lower School students, staff and the general school community aim to consistently exemplify ISB's core values of Community, Integrity, Respect and Responsibility, with the goal of helping our students develop into confident and caring citizens of the world. More information on our school's mission, core values, beliefs and objectives can be found in the ISB Parent Handbook and on our school website at [www.isbergen.no](http://www.isbergen.no).

Our staff are committed to working closely with everyone in the ISB community to make each and every year a special one for all students and families. Welcome to the 2024-2025 school year!

Leanne Hagen

Principal for Lower School



|  |           |
|--|-----------|
| <b>Contents</b>  |           |
| <b>Welcome</b>   | <b>2</b>  |
| <b>Reporting to Parents</b>                                | <b>3</b>  |
| Report cards   | 4         |
| <b>School Day</b>  | <b>5</b>  |
| Classroom Environment                                      | 6         |
| Text Books   | 6         |
| Information and Communications Technology                  | 6         |
| Assembly   | 7         |
| Swimming   | 7         |
| General Supplies   | 7         |
| Supervision  | 7         |
| Homework Policy Grades 1-5                                 | 7         |
| Student Records  | 9         |
| School Counsellors   | 9         |
| Individual Educational Needs                               | 9         |
| <b>IB Primary Years Programme (PYP)</b>                    | <b>9</b>  |
| <b>Mathematics</b>   | <b>11</b> |
| Language Arts, English as a Second Language, and Norwegian | 13        |
| Language in a transdisciplinary programme                  | 14        |
| English language support – ELS                             | 15        |
| Norwegian  | 16        |
| Personal, Social and Physical Education                    | 16        |
| The Arts   | 17        |
| Social Studies   | 19        |
| Science  | 20        |

## Reporting to Parents

|   |  |
|---|--|
| <b>Toddle Learning journal and portfolio:</b>           | Maintained throughout the school year  |
| <b>Home-School Conferences:</b>                         | Twice a year   |
| <b>Student-led conferences/End of Unit celebration:</b> | Twice a year<br>(except grade 5, who do the PYP Exhibition in place of one student-led conference) |
| <b>International Schools Assessment Test:</b>           | Written by grades 3-5 in February  |
| <b>National Norwegian Reading Tests:</b>                | Grade 5  |
| <b>National Norwegian Mapping Tests:</b>                | Grade 3  |

### Report cards

After much discussion, research and careful consideration amongst the lower school staff and administration, it was decided that the school would no longer send home traditional report cards for grades 1-5.

Staff determined that the primary purpose of traditional report cards is to communicate what has been done in the classroom and to outline strengths and goals for the students. In going forward, traditional report cards are not necessarily the best way to do this. Such reports do not provide any new information to students, and students do not need report cards to tell them about what has been happening in class. As well, students are always in constant communication with teachers in regard to their strengths and goals. Recognizing strengths and setting goals is also a key part of our home-teacher-student conferences held in November and May.

In terms of parents, traditional report cards in general do not and should not share new information. In fact, one of our reporting rules at ISB is that there should be no surprises for parents on report cards. The home-teacher-student conferences and Toddle student learning journals play a much bigger role in terms of providing timely information to parents regarding student strengths and goals.

Another factor in eliminating traditional report cards was our implementation of the Toddle digital learning portfolio for grades 1-5. With Toddle, parents no longer need to wait for conferences or report cards to get feedback on their child's learning. Instead, this is now happening on a regular basis across the subjects and inquiries. The use of Toddle provides much more meaningful feedback to students and parents, and on an ongoing basis. It is

much easier for parents to see what their child is working on in class, how their child is progressing, and what their goals may be. A student's Toddle journal can essentially be seen as a virtual real-time report card. Sharing student work and reflections on Toddle also helps facilitate a deeper partnership between parents, students and teachers, as well as encouraging home discussions on the learning taking place in the classroom.

In addition, students in grades 3-5 write the International Schools Assessment tests in February each year. International Schools' Assessment (ISA) is an assessment program that has been specifically developed to measure the skills of international students in Mathematical Literacy, Reading and Writing. It was designed and developed by the Australian Council for Educational Research (ACER) and has been administered since 2001.

ISA is based on the internationally endorsed Mathematical Literacy and Reading Frameworks of OECD's Programme for International Student Assessment (PISA). The student report details performances in relation to scales that describe increasingly advanced skills in Mathematical Literacy, Reading Literacy (Grades 3,4 & 5) and Writing (Grades 4 & 5). Parents will be provided with a copy of their child's individual report. You can read more about the ISA tests here: <https://www.acer.org/au/isa>

Parents can also arrange to meet with homeroom or specialist teachers at any point during the school year to discuss their child's progress or other issues. We always accommodate parent requests for meetings for whatever reason.

The school will provide a Leavers report for any student transferring to a new school. It should be noted as well that parents can provide a new school with examples from their child's Toddle digital learning portfolio, which contains numerous samples of the student's work in various subjects and inquiries. The new school can also be given a copy of the home-teacher-student conference report, with information on student strengths and goals.

## School Day

Monday to Friday, except Wednesdays

| Morning meeting | Class        | Break         | Class         | Class         | Lunch         | Break         | Class         | Class         |
|-----------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 8:50 - 9:15     | 9:15 - 10:10 | 10:10 - 10:30 | 10:30 - 11:25 | 11:25 - 12:20 | 12:20 - 12:45 | 12:45 - 13:10 | 13:10 - 14:05 | 14:05 - 15:00 |

Wednesdays

| Morning meeting | Class        | Break         | Class         | Class         | Lunch         | Break         | Class         | Class         |
|-----------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 8:50 - 9:15     | 9:15 - 10:00 | 10:00 - 10:15 | 10:15 - 11:00 | 11:00 - 11:50 | 11:50 - 12:10 | 12:10 - 12:30 | 12:30 - 13:15 | 13:15 - 14:00 |

### Classroom Environment

ISB places a strong emphasis on the importance of having a positive and nurturing teaching and learning environment. Children are taught skills to promote social competence and reduce social-emotional problems, focusing on the core areas of empathy, self regulation (impulse control, emotion regulation, anger management), and social problem solving. The Lower School uses the [Responsive Classroom](#) as our social emotional learning programme and this forms the basis for our morning meetings and classroom management.

There is also a strong focus on preventative bullying strategies and helping students in developing a variety of relationship skills, including strategies for making and keeping friends and steps for joining a group activity. The school emphasises that all members of the school community must take responsibility for decreasing bullying.

### Text Books

We believe that students learn best through authentic inquiry, so textbooks are generally seen as resources rather than as a curriculum. Teachers are encouraged to facilitate the children to go beyond textbooks and digital content and pursue their natural curiosities and desires to inquire, explore and discover. We aim for our curriculum to be one in which



students learn to collaborate, discover and make meaning of the real world around them. These are the essential tenets of the IB programmes which we deliver.

In today's classroom with increasing access to technology and online information, the range of teaching resources shouldn't be limited to using one textbook per topic or subject covered, but rather a wide range of resources that best meet students' individual needs and learning styles should be used.

## **Information and Communications Technology**

All students from grades 1-4 will be provided with a school-issued iPad to use throughout the school year. Students in grade 5 will be issued with a Chromebook.

## **Assembly**

Lower School students meet in assembly on a regular basis. These are opportunities to come together, communicate and share ideas, performances and learning experiences.

## **Swimming**

Swimming lessons for students in grades 2, 3 and 4 are offered in blocks of weeks per class. Information regarding timing, transport and equipment will be sent home to classes prior to their swimming block. ISB has a 1 hour slot at Slåtthaug swimming pool and students are transported to and from the school using public transport.

## **General Supplies**

You can find more information (including a supply list for students) on our grades 1-5 curriculum at our website [www.isbergen.no](http://www.isbergen.no), under the "Learning at ISB" section - Lower School

## **Supervision**

Supervision from 07:30-09:00 and 15:00-16:30 is available at a charge by trimester per student for grades 1 through 4.

## Homework Policy Grades 1-5

In deciding on a homework policy for grades 1-5, ISB considered the following:

- Cross-cultural data disproving the claim that countries whose students do more homework tend to be those with the best test scores
- Top performing countries like Japan and Finland assigning less homework than other countries
- Studies involving primary school students finding no significant effects on grades and test scores based on the amount of homework given or completed
- Studies showing that many parents say they have had a serious argument with their child over homework that involved yelling or crying
- Information on the benefits of children reading regularly for information and most importantly for pleasure, and that regular practice improves fluency, word recognition, comprehension and confidence for children.

Homework for Grades 1-4 (approximately 15-30 minutes daily, including reading)

Students in grades 1-4 are not assigned written homework during the school year, with occasional exceptions.

Students in grades 1-4 will be expected to read on a daily basis at home during the school week. This can be done using a child's home language as well.

Besides reading, students may also be assigned homework tasks that do not require writing. Examples of such homework tasks might be:

- A video to watch prior to a class lesson
- Flashcards to practice skills (phonics or maths)
- Spelling /phonics word practice
- Helping parents with cooking a meal (for example, to study fractions, measurement, how to write down steps, etc.)
- Playing games to practise skills
- Interviewing a family member in connection with a unit of inquiry.
- Online maths programme to reinforce concepts already covered

Homework for Grade 5 (approximately 15-45 minutes daily, including reading)

Homework for Grade 5 will follow many of the same guidelines as homework for grades 1-4, except that there will be more written tasks involved. This is done with an eye towards preparing the students for Grade 6, where they will have more written homework assignments.

## **Student Records**

Only authorised school personnel and a student's parents have access to a student's records. Permission will be sought from parents for the transfer of records to another school.

## **School Counsellors**

The school counsellors support the school community in helping to ensure a positive and nurturing learning environment, and are available to meet with students and parents.

## **Individual Educational Needs**

Students with individual educational needs are identified as having a barrier to learning, or have exceptional gifts or talents. At ISB, we try to ensure that students with individual educational needs achieve their potential through an adapted or modified differentiated educational programme. The IENS Coordinator works with members of the teaching staff, individual students, and the state Educational-Psychological Service (Pedagogisk-Psykologiske Tjenesten Bergen - PPT) to develop appropriate programmes.

In grades 1-10, the school does not have the facilities or resources to cater for students with severe physical or learning disabilities, including low cognitive functioning or conduct disabilities.

## IB Primary Years Programme (PYP)

ISB offers children between the ages of 3 and 11 the Primary Years Programme (PYP). The PYP has recognition worldwide as a model of exemplary educational practice. Its philosophy is based on constructivist theories of learning, which state that children construct their learning from what they already know and can do. Students build their learning by finding the answers to questions they inquire into. The teaching approach is transdisciplinary so that traditional subjects are integrated into one another to help students appreciate that the world is a complex place in which it is important to see connections.

The PYP focuses on five essential elements of learning:

- understanding of concepts
- acquisition of knowledge
- mastering of skills
- development of attitudes and attributes
- decision to take action

The knowledge component is developed through inquiries into six transdisciplinary themes of global significance, supported and balanced by six subject areas.

The six themes are:

- Who we are
- Where we are in time and place
- How we express ourselves
- How the world works
- How we organise ourselves
- How we share the planet

The six subject areas include:

- Language
- Social Studies
- Mathematics
- Arts (Visual Arts and Performing Arts)
- Science and Technology
- Personal, Social and Physical Education

The IB PYP is a concept driven, holistic approach to education and consists of the Essential Elements:

- Approaches to Learning
- Knowledge (Transdisciplinary Themes/Traditional subjects)
- Concepts
- Learner Profile
- Action

The IB Learner Profile is the International Baccalaureate's mission statement translated into learning outcomes. It is at the heart of this common framework and an embodiment of what the IB means by "international-mindedness". These ideals inspire, motivate and focus the work of schools and teachers, uniting them in a common purpose.

## **Mathematics**

The power of mathematics for describing and analysing the world around us is such that it has become a highly effective tool for solving problems. It is also recognized that students can appreciate the intrinsic fascination of mathematics and explore the world through its unique perceptions. In the same way that students describe themselves as "authors" or "artists", a school's programme should also provide students with the opportunity to see themselves as "mathematicians", where they enjoy and are enthusiastic when exploring and learning about mathematics.

In the IB Primary Years Programme (PYP), mathematics is also viewed as a vehicle to support inquiry, providing a global language through which we make sense of the world around us. It is intended that students become competent users of the language of mathematics, and can begin to use it as a way of thinking, as opposed to seeing it as a series of facts and equations to be memorised.

How children learn mathematics: It is important that learners acquire mathematical understanding by constructing their own meaning through ever-increasing levels of abstraction, starting with exploring their own personal experiences, understandings and knowledge. Additionally, it is fundamental to the philosophy of the PYP that, since it is to be used in real-life situations, mathematics needs to be taught in relevant, realistic contexts, rather than by attempting to impart a fixed body of knowledge directly to students. How children learn mathematics can be described using the following stages:

1. **Constructing meaning about mathematics:** Learners construct meaning based on their previous experiences and understanding, and by reflecting upon their interactions with objects and ideas. Therefore, involving learners in an active learning process, where they are provided with possibilities to interact with manipulatives and to engage in conversations with others, is paramount to this stage of learning mathematics. When making sense of new ideas all learners either interpret these ideas to conform to their present understanding or they generate a new understanding that accounts for what they perceive to be occurring. This construct will continue to evolve as learners experience new situations and ideas, have an opportunity to reflect on their understanding and make connections about their learning.
2. **Transferring meaning into symbols:** Only when learners have constructed their ideas about a mathematical concept should they attempt to transfer this understanding into symbols. Symbolic notation can take the form of pictures, diagrams, modelling with concrete objects and mathematical notation. Learners should be given the opportunity to describe their understanding using their own method of symbolic notation, then learning to transfer them into conventional mathematical notation.
3. **Applying with understanding:** Applying with understanding can be viewed as the learners demonstrating and acting on their understanding. Through authentic activities, learners should independently select and use appropriate symbolic notation to process and record their thinking. These authentic activities should include a range of practical hands-on problem-solving activities and realistic situations that provide the opportunity to demonstrate mathematical thinking through presented or recorded formats. In this way, learners are able to apply their understanding of mathematical concepts as well as utilise mathematical skills and knowledge.

As they work through these stages of learning, students and teachers use certain processes of mathematical reasoning.

- They use patterns and relationships to analyse the problem situations upon which they are working.
- They make and evaluate their own and each other's ideas.
- They use models, facts, properties and relationships to explain their thinking.
- They justify their answers and the processes by which they arrive at solutions.

In this way, students validate the meaning they construct from their experiences with mathematical situations. By explaining their ideas, theories and results, both orally and in writing, they invite constructive feedback and also lay out alternative models of thinking for the class. Consequently, all benefit from this interactive process.

Mathematics in a transdisciplinary programme and wherever possible, should be taught through the relevant, realistic context of the units of inquiry. The direct teaching of mathematics in a unit of inquiry may not always be feasible but, where appropriate, prior learning or follow-up activities may be useful to help students make connections between the different aspects of the curriculum. Students also need opportunities to identify and reflect on “big ideas” within and between the different strands of mathematics, the programme of inquiry and other subject areas.

Links to the transdisciplinary themes should be explicitly made, whether or not the mathematics is being taught within the programme of inquiry. A developing understanding of these links will contribute to the students’ understanding of mathematics in the world and to their understanding of the transdisciplinary theme. The role of inquiry in mathematics is important, regardless of whether it is being taught inside or outside the programme of inquiry. However, it should also be recognized that there are occasions when it is preferable for students to be given a series of strategies for learning mathematical skills in order to progress in their mathematical understanding rather than struggling to proceed.

## **Language Arts, English as a Second Language, and Norwegian**

The need to communicate is instinctive. The development of language is fundamental to that need to communicate; it supports and enhances our thinking and understanding. Language permeates the world in which we live; it is socially constructed and dependent on the number and nature of our social interactions and relationships.

The learning process simultaneously involves learning language—as learners listen to and use language with others in their everyday lives; learning about language—as learners grow in their understanding of how language works; and learning through language—as learners use language as a tool to listen, think, discuss and reflect on information, ideas and issues (Halliday 1980). An appreciation of these aspects of language learning may help teachers better understand and enhance students’ learning. However, these three aspects are so inextricably linked they are best not thought of as discrete processes.

Language plays a vital role in the construction of meaning. It empowers the learner and provides an intellectual framework to support conceptual development and critical thinking. In the IB Primary Years Programme (PYP), it is recognized that the teaching of

language should be in response to the previous experience, needs and interests of the student, rather than the consequence of a predetermined, prescriptive model for delivering language. Fragmenting learning into the acquisition of isolated skill sets can create difficulties for learners—for example, learners may be able to read, write and spell words correctly in isolation but may not be able to read, write or spell those same words in other contexts. Learners' needs are best served when they have opportunities to engage in learning within meaningful contexts, rather than being presented with the learning of language as an incremental series of skills to be acquired.

The language profiles of students in PYP schools may be complex and diverse; however, the influence of mother-tongue development is significant for all learners. It is acknowledged that development of mother-tongue language is crucial for cognitive development, and in maintaining cultural identity. Success in mother-tongue development is a strong predictor of long-term academic achievement, including acquisition of other languages.

The complex processes involved in language learning represent a series of developmental continuums. A teacher is able to identify where on those continuums a student is positioned to better design appropriate, contextualised learning experiences—to move the student from one development phase to the next. In this way, the learner is able to build on established skills and understanding, while being supported to meet appropriate challenges to extend their learning within their “zone of proximal development” (Vygotsky 1999), which may be represented by more than one phase.

In PYP schools all students have the opportunity to learn more than one language from at least the age of 7. Every learner benefits from having access to different languages, and, through that access, to different cultures and perspectives. Acquisition of more than one language enriches personal development and helps facilitate international-mindedness. For these reasons it could be argued that bilingualism, if not multilingualism, is the hallmark of a truly internationally minded person and that this requirement should be central to all three IB programmes.

However, to accept this premise one would have to argue in support of the reciprocal position, that a monolingual person has a limited capacity to be internationally minded. This is not the position the PYP has chosen to adopt. As well as the learning of an additional language, the other elements of the PYP framework that contribute to international-mindedness are described in *Making the PYP happen: A curriculum framework for international primary education* (2007).

Most IB World Schools implementing the PYP, particularly state or national system primary schools, would struggle to create a learning community where bilingualism was a realistic goal—indeed, it would be an impossibility in most cases. Consequently, the strategic goal



of the IB to broaden access to its programmes would be in conflict with the notion of IB World Schools having bilingualism as a goal for all of their students.

Effective language teaching and learning are social acts, dependent on relationships with others, with context, with the environment, with the world, and with the self. Such learning is relevant, engaging, challenging and significant. Exposure to and experience with languages, with all their richness and diversity, creates an inquisitiveness about life and learning, and a confidence about creating new social interactions. Language provides a vehicle for learners to engage with the world and, in an IB World School, to relate to, and accept, responsibility for the mission of the IB to “help to create a better and more peaceful world”.

### **Language in a transdisciplinary programme**

Language is involved in all learning that goes on in a school, in both the effective and affective domains. Learners listen, talk, read and write their way to negotiating new meanings and understanding new concepts. In the “knowledge” area of the PYP, language is the most significant connecting element across the school’s curriculum, both within and outside its transdisciplinary programme of inquiry.

It is the school’s responsibility to provide authentic contexts for language teaching and learning in all areas of the curriculum that are a reflection of, and relevant to, the community of learners, and to the educational theories underpinning the programme.

In PYP schools there should be opportunities for students to negotiate their roles. Literacy, including oral and visual literacy as well as the ability to read and write, becomes increasingly important as greater demands are placed on learners as participants in the learning process.

Language provides a vehicle for inquiry. In an inquiry-based classroom, teachers and students enjoy using language, appreciating it both functionally and aesthetically. The love and enjoyment of language through the integration of literature into student inquiry is an indicator of good practice in a PYP classroom. For example, this may include: a series of books read as an author study; regional fairy tales as part of a unit of inquiry with a particular social studies emphasis; discussing a scientist’s biography or a newspaper article to front-load a science investigation; early years counting stories as reinforcement for mathematics development; and the comparison and practice of illustration techniques to encourage the development of art skills.

The programme of inquiry provides an authentic context for learners to develop and use language. Wherever possible, language should be taught through the relevant, authentic

context of the units of inquiry. The teacher should provide language learning opportunities that support learners' inquiries and the sharing of their learning. Regardless of whether language is being taught within or outside the programme of inquiry, it is believed that purposeful inquiry is the way in which learners learn best. The starting point should always be learners' prior experience and current understanding.

When teachers plan learning experiences that enable learners to develop language within meaningful and enjoyable contexts, learners are able to make connections, apply their learning, and transfer their conceptual understanding to new situations. This progressive conceptual development, together with an enjoyment of the process, provides the foundation for lifelong learning.

### **English language support – ELS**

English is the language of instruction at ISB. Students who come to ISB without fluency in English are given the help necessary to ensure that they can fully benefit from the school programme as quickly as possible. Help given may be in the form of in-class support, separate ELS lessons with a specialist teacher, an alternative programme in English Language classes, or a combination of the two.

The school's system for assessing ELS students has been developed based on the European Language Portfolio, the American WIDA (World-Class Instructional Design and Assessment) and the IB documentation.

### **Norwegian**

Norwegian is the secondary language of the school and offered at Language A and B levels starting from Grade 1. Three hours of Norwegian is mandatory for all students starting from Grade 1, which additionally has a focus on Norwegian Culture.

Norwegian A for grades 1 - 5 follows the PYP phases for the subject Language Arts in conjunction with the Norwegian National Curriculum.

Norwegian B is for students entering ISB from Grade 1 onwards with little or no Norwegian language. They receive instruction separately from Norwegian A students and are assessed using Norwegian Language Arts B objectives. The emphasis is placed on teaching the students the rudimentary language skills to enable them to function in everyday society.

The national test in reading for Grade 5 is held in November. All Language A students sit for these tests. Other Language B students may sit tests at parental request. Results of individual students are shared with parents.

There is compulsory National diagnostic testing in Grade 3 (reading and mathematics) in Norwegian. The school can choose to give dispensation to Language B students if it chooses to do so. The results from these tests are used as one of many tools to identify if a child would benefit from learning support or further differentiation in Norwegian classes.

## **Personal, Social and Physical Education**

PSPE is an integral part of students' everyday life at school and at home. It is an essential part of the curriculum and, as students engage with it across and between the subjects, they come to a deeper understanding of its relevance and applicability to their everyday lives. Appropriate attitudes and behaviours are also modelled within the school and the school community.

Students learn best when the learning experiences they engage with provide them with the motivation to achieve their personal goals. PSPE promotes transdisciplinary learning through the transdisciplinary themes, the learner profile and all elements of the programme. Schools that have local and/or national curriculum requirements should articulate how best these can be incorporated into their planning and teaching of PSPE.

Including PSPE in an integrated approach to the curriculum guides the students' learning process in all the subjects and beyond school. This approach provides opportunities for collective and coordinated implementation that can be communicated, understood and undertaken by the whole school community. PSPE offers an effective vehicle for opening up healthy dialogue between school and home. In this way, school and home may function as partners in education, making learning more relevant to the child and, therefore, more effective and enduring.

Regardless of whether aspects of PSPE are being taught within or outside the programme of inquiry, purposeful inquiry is still considered the principal way in which students learn. The starting point for all learning should always be the students' prior experience and current understanding. When teachers plan learning experiences that enable students to develop personally, socially and physically, students are able to make connections, apply learning, and transfer conceptual understanding to new situations.

Carefully selected children's literature can provide useful support to learning and teaching about PSPE. Stories and poems can be read to introduce new areas of learning or to provide a prompt for discussion among the students. Many of the attributes of the IB

learner profile are clearly visible in a range of children's literature, and students are encouraged to recognize these attributes, as well as the attitudes, in the characters of the literature selected.

Physical education in a PYP school should be more than just student participation in sports and games. Its purpose should be to develop a combination of transferable skills promoting physical, intellectual, emotional and social development; to encourage present and future choices that contribute to long-term healthy living; and to understand the cultural significance of physical activities for individuals and communities. Therefore, in the PYP, there should be specific opportunities for learning about movement and through movement in a range of contexts. Students of all abilities are challenged to improve their movement skills, but they are also supported and encouraged to enjoy physical activity and see it as part of a healthy and active lifestyle with connections to other areas of the curriculum and community. In addition, outdoor education and the skills needed to coexist in our natural environment are incorporated in the PSPE curriculum and the learning is taken outside whenever possible.

## The Arts

Arts are integral to the PYP. They are a powerful mode of communication through which students explore and construct a sense of self and develop an understanding of the world around them. Arts provide students with a wide range of opportunities and means to respond to their experiences and engage with historical, social and cultural perspectives. The students are stimulated to think and to articulate their thoughts in new ways, and through a variety of media and technologies.

The PYP recognizes that not all learning can be supported solely through language, and that arts as a medium of inquiry also provide opportunities for learning, communication and expression. Learning about and through arts is fundamental to the development of the whole child, promoting creativity, critical thinking, problem-solving skills and social interactions.

In the PYP, arts are identified as dance, drama, music and visual arts. Each of these arts is a significant discipline in its own right, but the transdisciplinary nature of arts gives them relevance throughout the curriculum. Arts promote attitudes such as empathy and appreciation, and skills such as analysis, that help us to see the uniqueness of each person as well as explore the commonalities that connect us.

Work in arts is a way of conveying meaning, sharing a culture, developing one's sense of self, and expanding knowledge. It provides opportunities to reflect on aesthetic experience, to engage the imagination and explore what is uncertain. Through engaging with and

creating artworks, learners are encouraged to reconsider familiar concepts and think about issues of culture and identity.

By responding to the work of other artists, they are invited to situate their own creativity within a broader context. In our rapidly changing digital age, students inhabit a world saturated with images, sounds and performances. Students in the PYP continually explore imaginative uses of new media tools beyond their basic functional applications, discovering alternative or individual ways to conceptualise the role of digital technologies in their lives.

The arts develop innovative thinking and creative use of technologies, and in so doing prepare students to participate fully in this multifaceted world. The IB learner profile is integral to learning and teaching arts in the PYP because it represents the qualities of effective learners and internationally minded students. The learner profile, together with the other elements of the programme—knowledge, concepts, skills and action—informs planning and teaching in the arts.

Arts engage students in creative processes through which they explore and experiment in a continual cycle of action and reflection. Such creative processes are seen by the PYP as the driving force in learning through inquiry. From an early age, students have the opportunity to develop genuine interests, to give careful consideration to their learning and to become self-critical and reflective. Reflecting on and evaluating their own learning and the learning of others is vital, and empowers students to take intellectual risks.

Exposure to and experience with arts opens doors to questions about life and learning. The process of making and appreciating arts is gratifying and will encourage students to continue creating throughout their lives.

Students draw on a wide range of stimuli: the creative works of professional artists; contemporary and historical literature; music, artwork, dance and stories. Dance, drama, music and visual artwork develop naturally from students' own imaginations, observations, real-life experiences, feelings, values and beliefs. Introducing issues and concepts through appropriate media gives them meaning and allows students to take ownership of them.

Evidence of students' learning will be seen in their willingness and ability to take action in order to make a difference in the world.

## **Social Studies**

Social Studies objectives are inquired into via the units of inquiry, and include the following subject strands:

**Human systems and economic activities:** The study of how and why people construct organisations and systems; the ways in which people connect locally and globally; the distribution of power and authority.

**Social organisation and culture:** The study of people, communities, cultures and societies; the ways in which individuals, groups and societies interact with each other.

**Continuity and change through time:** The study of the relationships between people and events through time; the past, its influences on the present and its implications for the future; people who have shaped the future through their actions.

**Human and natural environments:** The study of the distinctive features that give a place its identity; how people adapt to and alter their environment; how people experience and represent a place; the impact of natural disasters on people and the built environment.

**Resources and the environment:** The interaction between people and the environment; the study of how humans allocate and manage resources; the positive and negative effects of this management; the impact of scientific and technological developments on the environment.

The Social Studies skills (from the IB PYP Social Studies Continuum) taught throughout the IB PYP are:

- Formulate and ask questions about the past, the future, places and society
- Use and analyse evidence from a variety of historical, geographical and societal sources
- Orientate in relation to place and time
- Identify roles, rights and responsibilities in society
- Assess the accuracy, validity and possible bias of sources

## Science

Science objectives are inquired into via the units of inquiry, and include the following subject strands:

**Living things:** The study of the characteristics, systems and behaviours of humans and other animals, and of plants; the interactions and relationships between and among them, and with their environment.

**Earth and space:** The study of planet Earth and its position in the universe, particularly its relationship with the sun; the natural phenomena and systems that shape the planet and the distinctive features that identify it; the infinite and finite resources of the planet.

**Materials and matter:** The study of the properties, behaviours and uses of materials, both natural and human-made; the origins of human-made materials and how they are manipulated to suit a purpose.

**Forces and energy:** The study of energy, its origins, storage and transfer, and the work it can do; the study of forces; the application of scientific understanding through inventions and machines.

The Scientific skills (from the IB PYP Science Continuum) taught throughout the IB PYP are:

- Observe carefully in order to gather data
- Use a variety of instruments and tools to measure data accurately
- Use scientific vocabulary to explain their observations and experiences
- Identify or generate a question or problem to be explored
- Plan and carry out systematic investigations, manipulating variables as necessary
- Make and test predictions
- Interpret and evaluate data gathered in order to draw conclusions
- Consider scientific models and applications of these models (including their limitations)

