

Further guidance for MYP physical and health education

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Middle Years Programme
Further guidance for MYP physical and health education

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IB mission statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.



IB learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB learners we strive to be:

INQUIRERS

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

KNOWLEDGEABLE

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

THINKERS

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

PRINCIPLED

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

RISK-TAKERS

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

BALANCED

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.

Physical and health education in the MYP

In the MYP: Next chapter programme review, the physical education subject group was redeveloped as physical and health education (PHE). The review's intent has been to integrate the intimately related areas of physical education and health education. This integration supports student well-being and implements an important principle of holistic education in the middle years. The aim of physical and health education in the MYP is to empower students to understand and appreciate the value of being physically active and develop the motivation for making healthy life choices.

Physical activity is essential to well-being and is deeply imbedded in personal health. Physical education and health are both vital to the development of healthy young people and healthy lives. Research is replete with evidence to demonstrate that physical education can help students develop positive attitudes. Physical movement and the personal health it supports have important impacts on academic performance.

Health education in performance-oriented courses

Physical education remains a focus of MYP physical and health education, including the programme requirement that MYP schools must engage students in physical education activities **for at least 50 per cent** (50%) of the total teaching time allocated to all PHE courses. In the Physical and health education guide, notes in the "Planning for performance" section state: "Criterion B can be assessed through units that require students to inquire and plan. Examples include: composition of aesthetic movement routines (such as gymnastics, dance, sport aerobics, martial arts), fitness training programmes, coaching programmes, game creation and laboratory investigations (such as fitness, skill acquisition, energy systems)" (p. 38). Similarly, objective C focuses on applying and performing through physical activity. The organization of balanced PHE courses includes a wide range of sports and movement activities.

However, another characteristic of balanced, closely coordinated, or fully integrated PHE courses is that they address both physical education **and** health education plans/ performances. For courses organized mainly around physical activity, teachers focus on movement and skills for games and sports. Yet all physical activity impacts health and well-being, so teachers in activity-focused physical education courses also have many opportunities to address multiple dimensions of personal and community health. Students can formulate health-related goals that involve personal, social, and emotional development; affective skills; and psychological dimensions of performance.

Table 1 suggests some of the many dimensions of health education that teachers can develop in activity-oriented PHE courses.

Activity/physical performance	Possible dimensions of health education
Table tennis	<ul style="list-style-type: none">• Develop perception (mental health)• Improve reflexes and burn calories (physical health)• Offer a social outlet (social health)
Gymnastics	<ul style="list-style-type: none">• Promote self-esteem (mental health)• Prevent disease (physical health)• Improve cardiovascular health (physical health)• Develop flexibility (physical health)
Football	<ul style="list-style-type: none">• Make new friends (social health)• Cope with success and failure (emotional/mental health)• Increase strength and endurance (physical health)• Improve mood, relieve stress, accept responsibility and manage risk (emotional/mental health)

	<ul style="list-style-type: none"> • Celebrate teamwork and individual contributions to group goals (social health) • Appreciate the demands and benefits of teamwork (social health)
Dance	<ul style="list-style-type: none"> • Reduce stress (emotional/mental health) • Improve condition of heart and lungs, muscle tone and strength (physical health) • Manage weight (physical health) • Build tolerance (social health)

Table 1: Some possible aspects of health education associated with common physical education activities

Conceptual understanding and inquiry in performance-oriented courses

Physical and health education is a multi-dimensional subject whose focus combines kinaesthetic knowledge and skills with broader educational goals for personal and social development.

In a movement-based PHE courses, teachers can help students develop understanding through many physical and health education concepts. Related concepts in PHE provide a rich resource for helping students structure their thinking and experience. Concepts are a vehicle for driving students' inquiry into issues and ideas of personal, local and global significance. They help students and teachers to think with increasing complexity as they organize and relate facts and topics about physical and health education. Table 2 outlines part of the Inquiry section of an MYP unit plan that demonstrates conceptual development in an activity-based PHE course.

Activity	Martial arts
Key concept	Relationships
Related concepts	Energy, choice, movement
Global context	Globalization and sustainability (commonality, diversity and interconnection)
Statement of inquiry	Controlling energy through carefully planned and practiced movements improves performance in martial arts.
Inquiry questions:	
Factual	What is grappling? What are some classic systems of martial arts? What form of energy is needed to deflect an attack?
Conceptual	How do movements express different types of energy? What is the relationship between potential and kinetic energy in a punching movement? What are similarities and differences in the way various cultural traditions of martial arts manage energy through movement?

Debatable	What is the best way to manage your energy level (mentally and physically) when you are defending yourself over an extended period of time, like a sparring match? Should middle level students learn Krav Maga?
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Table 2: Example of conceptual development in an activity-based PHE course

Clarifying assessment criteria for PHE

In order to create consistency between the general information about PHE objectives/criteria and the level descriptors beneath them, the MYP Physical and health education guide has been corrected.

Criterion A: Knowing and understanding

Achievement level	Level descriptor
5–6	<p>The student:</p> <ul style="list-style-type: none"> i. identifies physical and health education factual, procedural and conceptual knowledge ii. applies physical and health education knowledge to analyse issues and to solve problems set in familiar and unfamiliar situations iii. applies physical and health terminology consistently to communicate understanding.
7–8	<p>The student:</p> <ul style="list-style-type: none"> i. explains physical and health education factual, procedural and conceptual knowledge ii. applies physical and health education knowledge to analyse complex issues and to solve complex problems set in familiar and unfamiliar situations iii. applies physical and health terminology consistently and effectively to communicate understanding.

Criterion B: Planning for performance

Achievement level	Level descriptor
1–2	<p>The student:</p> <ul style="list-style-type: none"> i. constructs and outlines a plan to improve physical and health performance
3–4	<p>The student:</p> <ul style="list-style-type: none"> i. constructs and describes a plan to improve physical and health performance
5–6	<p>The student:</p> <ul style="list-style-type: none"> i. designs and explains a plan to improve physical and health performance
7–8	<p>The student:</p>

	i. designs, explains and justifies a plan to improve physical and health performance
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Unfamiliar situations in physical performance

To reach higher levels of achievement, students must be able to apply their physical and health education knowledge to analyse issues and to solve problems in unfamiliar situations. Unfamiliar situations provide students opportunities to make new connections; create new movements, combinations of movements, activities and routines; perform more complex skills; and resolve tactical and strategic situations that they have not previously encountered. Table 3 describes some typical unfamiliar situations in which students can demonstrate their achievement in physical and health education:

<p>Unfamiliar contexts in PHE assessment might include:</p> <ul style="list-style-type: none"> • communicating physical and health knowledge for different purposes and to diverse audiences • applying biomechanical fundamentals to a novel activity • using a known way of learning or training design to develop a new skill • using data to determine new measures of nutrition, fitness, movement or performance • using skills learned in individual play for doubles or team play • transferring a movement skill to a new sport or activity • competing “against the clock” versus competing against other participants in a race • playing in different environments (indoor versus outdoor surfaces) • practicing or playing friendly games versus competing in a single-elimination tournament • introducing new rules or playing conditions in a game or sport.
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Table 3: Examples of unfamiliar contexts in physical and health education

Distinguishing analysis, synthesis and evaluation

Command term	Definition
Analyse	Break down in order to bring out the essential elements or structure. (To identify parts and relationships, and to interpret information to reach conclusions.)
Evaluate	Make an appraisal by weighing up the strengths and limitations.
Synthesize	Combine different ideas in order to create new understanding.

To reach the highest level of achievement in PHE, MYP Year 5 students must be able to analyse and evaluate plans and performances. Analysis involves breaking down the subject of the analysis into its component parts. When students **analyse** issues, plans and performances, they examine the significance and interrelationships of essential elements in order to reassemble or **synthesize** these component parts into a meaningful whole. Evaluation involves making a judgment, an appraisal or proving a point. When students **evaluate**, they interpret information and ideas, considering their strengths and limitations for solving a particular problem. Evaluation often represents higher cognitive demand. It involves making informed judgments about the value, validity and reliability of facts and opinions. Knowledge and understanding are involved in all three processes. However, evaluation requires students to go beyond describing, summarizing or explaining as they use evidence in order to draw a conclusion.

Developing ePortfolios for external moderation in PHE

Models for implementing coach-client working relationships for assessments that integrate physical and health education

The coach-client model in physical and health education is a peer-facilitated strategy in which students are assessed both as a coach and as a client (coached player or performer). This model articulates with DP topics in Sports, health and exercise science, including movement analysis, skill in sport, and the measurement and analysis of human performance.

For MYP ePortfolio tasks in PHE, **students have to work in pairs**. By working closely with another student in this way, candidates can demonstrate their achievement against all PHE criteria—including demonstration of strategies that enhance interpersonal skills.

All MYP PHE ePortfolios comprise tasks that require candidates to produce evidence or work products as both coach and client. Table 4 shows the close relationship between PHE assessment tasks, roles, ePortfolio evidence and PHE assessment criteria.

Student X's achievement is being assessed				
Assessment task	Role	ePortfolio evidence		Criteria
1	Coach for student Y	client interview, video analysis, benchmark testing		A: Knowing and understanding D: Reflecting and improving performance
2	Coach for student Y	training plan and interim analysis of results		A: Knowing and understanding B: Planning for performance D: Reflecting and improving performance
3	Client (personal performance)	demonstration of skills, techniques, strategies		C: Applying and performing
4	Coach for Student Y	evaluation of coaching plan	evaluation of interpersonal skills (as coach)	A: Knowing and understanding B: Planning for performance
	Client (personal performance)	analysis of performance	evaluation of plan's effectiveness (as client)	D: Reflecting and improving performance
	Client (personal performance)	evaluation of performance	evaluation of interpersonal skills (as client)	

Teachers can choose designated partners, or allow students to create their own two-person coach-client partnerships. Good coach-client relationships might consider students':

- individual learning needs, learning support requirements, or inclusive assessment arrangements
- competence in approaches to learning skills (especially communication, social and self-management skills)
- physical and health education knowledge, understanding, skills and attitudes.

Coach-client pairs can pursue the same activity, performance or sport as both coach and client, or they can perform as a client in one activity and serve a coach for a partner who is performing as a client in different activity. Teachers can develop a variety of models for implementing coach-client scenarios for MYP eAssessment, including:

- all students in the class pursue the same activity as both coaches and clients
- students choose from a menu of two or more activities based on personal interest
- teachers assign students to one of several activities based on personal ability or the availability of facilities and equipment
- students develop personal inquiries, forming coach-client relationships that offer both partners opportunities to learn new skills or improve performance.

Local resources may limit teachers' ability to implement some models. Each model offers advantages and disadvantages. When all students work together on the same activity, they can take advantage of opportunities to learn and practice together, and they can develop shared knowledge and understanding. However, a broad range of skill development may set up unhelpful competition or other classroom management challenges as students compare themselves with others. When coaches and clients are pursuing different activities, student may be able to pursue individual inquiries that they find very engaging. However, managing multiple performances and the development of highly diverse skill development can present logistical challenges for teaching, learning and managing assessment.

Establishing goals for physical *and* health education

For MYP eAssessment in PHE, students produce an ePortfolio, providing evidence that they have successfully completed a performance improvement task that includes aspects of both physical and health education. Although the number of goals in planning for performance within the coach-client assessment model could vary according to the need, the student coach must develop and present realistic goals that include at least one goal aiming at improving physical performance, and one aimed at enhancing health and well-being. Detailed information (including possible structures and formats) about PHE ePortfolios is available in the *Guide to MYP eAssessment*.

Frequently asked questions

Does the requirement to have a health goal mean that I would, for example, need to incorporate cardiovascular fitness into my PHE unit on dance?

For MYP eAssessment, the summative assessment tasks that comprise the ePortfolio must include health-related and performance-related goals. Cardiovascular fitness can be a natural aspect of many dance units since dance frequently builds aerobic capacity. Other fitness-related goals that fit with teaching and learning about dance might include balance, flexibility, muscular endurance, and strength. Dance, for example, can improve muscle tone, correct poor muscular-skeletal habits, build core strength, and help students maintain a healthy weight.

Could social and emotional health be a focus for improvement in an MYP PHE unit that focuses on both physical and health education?

Participation in individual and group activities can improve physical, social and psychological well-being. Health-related goals might include improvement in social skills, collaboration, communication, self-management and inclusion.

If an MYP Year 5 student designs a plan that focuses 95 per cent on performance and 5 per cent on health, does that address Objective B?

Summative assessment tasks for MYP should work toward a meaningful balance between physical and health-related goals, but there is no required percentage. Quality (including the natural relationship between physical and health-related goals in students' plans) is more important than a pre-defined number.

Does every PHE unit taught in Year 5 have to assess physical and health-related goals?

For MYP eAssessment, each student's summative ePortfolio must have at least one goal for improving physical performance and one goal aimed at enhancing health and well-being. In order to prepare for this assessment, which will validate MYP grades in the subject group, it is good teaching practice to allow students multiple opportunities to develop goals that have related physical and health-related dimensions.

For all other assessment, however, the MYP's "best-fit" assessment philosophy provides teachers a great deal of flexibility in meeting the requirement to assess all strands of all criteria at least twice in each year of the programme. Teachers in MYP Year 5 can continue to plan and teach individual units that focus on either physical or fitness-related knowledge and understanding—as long as they have planned assessment tasks that together, over the duration of the course, allow two judgments to be made against each kind of goal.

Since all levels descriptors for Criterion B in MYP Year 5 refer to a plan for improving health and physical performance, does that mean that students who do not include at least one health-related goal in their plan cannot reach the highest levels of achievement?

For MYP eAssessment, students' ePortfolios must provide evidence about the extent to which they have effectively planned, coached and achieved improvement in health. In classroom practice, teachers can use "best-fit" assessment practice to award the most appropriate level of achievement for Criterion B.

For schools that separate physical education and health into distinct courses, teachers in both courses can consider ways to coordinate and enrich the curriculum, helping students develop deep understanding of the complex interactions and close relationships between physical activity, movement, body, mind, relationships, emotions, health and well-being.

How can I create pairs if my class has an odd number of students?

Students can be assigned or form coach-client relationships in a “round-robin” arrangement that pairs three (or more) students in a relationship like this:

	Student	Student	Student
COACH	A	B	C
CLIENT	B	C	A

What happens if one of the members of a coach-client pair develops a problem that prevents him or her from completing required ePortfolio task(s)?

Teachers should use their professional judgment to decide at what point a student might be disadvantaged by developing an alternative coach-client relationship. If an injury or other condition prevents the client from performing as planned, in some circumstances coaches may be able to help the affected student modify goals and work to a new standard of performance that accommodates the client’s needs and abilities. Using best-fit judgment, teachers may be able to use available evidence to make an assessment of the coach’s and client’s achievement against the relevant criteria.

In some circumstances, it may be possible to delay submission of ePortfolios in order to accommodate very short term challenges. For unusual situations, please consult the annual *Handbook of procedures for the MYP* and contact IB Answers for advice. Students who are temporarily unable to complete ePortfolio tasks can also be registered for moderation of PHE in a subsequent assessment session.