TIMETABLING

Timetabling and scheduling are very closely related. Timetabling generally consists of charting subjects in a planned order according to available times, and scheduling refers to master planning and programming for all subjects and activities. Scheduling creates a plan for the school day, cycles, and school year. It is the overall planning, arranging, and controlling of times, places, personnel, and sequence of activities. For the purposes of this document, timetabling and scheduling will be treated as one (using the term timetabling) since the influencing factors and challenges are similar for both.

Challenges
The main timetabling challenge involves getting all the required class time for PE/HE into the available time slots while considering all of the relevant factors such as

• curricular expectations and time allotments
• number of courses at each grade level being offered (compulsory, optional)
• school day starting and finishing times that may be affected by the number of bussed students
• number of grades and classes
• class sizes that are practical and safe and conform to space availability and supervision requirements
• length and number of periods per day per cycle
• number of teaching spaces in or outside of the school suitable for PE and/or HE
• staffing for PE and/or HE
• preparation time for teachers
• staffing for other subject areas
• safety and liability

Strategies
Since the percentages outlined in the time allotment guidelines total 100%, meeting the 11% (Kindergarten to Grade 6) or 9% (Grade 7 to Grade 8) requirement for Kindergarten to Grade 8 PE/HE respectively should be possible. As well, many of the strategies provided may assist where it is difficult to timetable a credit each for Grades 9 and 10. Staffing pressures or local curricular considerations, such as timetabling second and third language requirements or other optional course offerings, may make it difficult to schedule everything into the school day. Therefore, a variety of strategies are provided to suit local jurisdictions.

Spreading out instructional periods evenly over a five- or six-day cycle to accommodate regular physical activity is preferred for developing movement skills and healthy bodies. Generally speaking for Kindergarten to Grade 8, physical education class time should be a minimum of 30 minutes. The 30-minute class is workable at the lower grades (e.g., Kindergarten to Grade 3 level), but a 38- to 45-minute class time is more desirable for instructional purposes for the higher grades. With two 15-minute recess breaks, two 45-minute periods and two 30-minute periods for physical education work well for the instructional day.
1. **Instructional Period and Instructional Day Adjustments**

   The length of school year is defined by the Minister of Education, Citizenship and Youth, and typically includes 33.5 six-day cycles or 40 five-day cycles. School-based special events may reduce the actual total. These are not reflected in the timetabling but may affect scheduling.

   To establish the best length for an instructional period and the configuration for the day, the length of time for quality instruction needs to be balanced with the number of instructional periods in a cycle. Note that a five-day cycle can have the same organization with fewer periods in a cycle, but the same amount of time over the course of the school year, as a six-day cycle. Timetabling also needs to consider who is responsible for teaching PE and/or HE (PE teacher, classroom teacher, school counsellor, etc.) and safety regulations.

   If adequate gym space for all the classes and all the grades to be scheduled is not available, it may be possible to

   - timetable two teaching spaces in the gym (depends on the size and type of the gym in the school as well as student/teacher ratio)
   - determine what other teaching spaces could be used (outdoors, multi-purpose room, empty classroom)
   - conduct planned individual class or whole-school fitness breaks on a regular basis that align with the teaching and assessment of the learning outcomes

   Instructional time per day for Kindergarten to Grade 8 is defined as 300 minutes (classes with recess) or 330 minutes (without recess). The length of the instructional period typically ranges from 30 to 55 minutes. There are many possible lengths for instructional periods that have an impact on the number of periods per day.

   - In Kindergarten to Grade 3, 30 minutes with 10 time slots in a day is common practice.
   - For Grades 4 to 8, 38 to 40 minutes with eight periods in the day is common practice.

   Following are some possible PE/HE time allocations that can meet the mandated time minimum expectations. This gymnasium schedule for PE/HE instructional time is based on

   - a six-day cycle
   - mandated time allotments for PE/HE
   - Kindergarten to Grade 6: 11% (75/25% PE/HE) which translates into 198 minutes (150/48 PE/HE split) for full-day Kindergarten as well as Grades 1 to 6 and into 99 minutes (75/25 PE/HE split) for half-day Kindergarten
   - Grades 7 to 8: 9% (75/25% PE/HE) = 178 minutes (134/44 PE/HE split)
   - Teachers with special training in PE and/or HE could be scheduled to teach all or some of the classes.
### Examples

<table>
<thead>
<tr>
<th>Length of Instructional Period</th>
<th>K to 6 Time Allotment</th>
<th>7 to 8 Time Allotment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 40-minute periods x 4</td>
<td>PE: 4x 40-minute periods = 160 minutes of class time (includes 10 minutes of HE)</td>
<td>PE: 4 x 40-minute periods = 160 minutes of class time (includes 25 minutes of HE)</td>
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<td>HE: 38 to 40 minutes</td>
<td>HE: 18 to 20 minutes</td>
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<tr>
<td>2 40-minute periods x 3 + 1 x 30-minute period</td>
<td>PE: 3 x 40-minute periods + 1 x 30-minute period = 150 minutes of PE</td>
<td>PE: 3 x 40-minute periods + 1 x 30-minute period = 150 minutes of PE (includes 25 minutes of HE)</td>
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<tr>
<td></td>
<td>HE: 48 minutes</td>
<td>HE: 28 to 30 minutes</td>
</tr>
<tr>
<td>3 40-minute periods x 4 plus wellness days</td>
<td>PE: 4 x 40-minute periods = 160 minutes of class time (includes 10-minute HE)</td>
<td>PE: 4 x 40-minute periods = 160 minutes of class time (includes 25 minutes of HE)</td>
</tr>
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<td></td>
<td>HE: 4 full Health curriculum wellness days (or 8 half days) in the school year</td>
<td>HE: 2 full Health curriculum wellness days (or 4 half days) in the school year</td>
</tr>
<tr>
<td>4 30-minute periods x 5</td>
<td>PE: 5 x 30-minute periods = 150 minutes</td>
<td>PE: 5 x 30-minute periods = 150 minutes (includes 15 minutes of HE)</td>
</tr>
<tr>
<td></td>
<td>HE: 48 minutes</td>
<td>HE: 30 minutes</td>
</tr>
<tr>
<td>5 45-minute periods x 2 plus 30 minute-periods x 2</td>
<td>PE: 2 x 45-minute periods plus 2 x 30-minute periods = 150 minutes</td>
<td>PE: 2 x 45-minute periods plus 2 x 30-minute periods = 150 minutes which (includes 15 minutes of HE)</td>
</tr>
<tr>
<td></td>
<td>HE: 48 minutes</td>
<td>HE: 28 minutes</td>
</tr>
<tr>
<td>6 50-minute periods x 3</td>
<td>PE: 3 x 50-minute periods = 150 minutes of PE</td>
<td>PE: 3 x 50-minute periods = 150 minutes of PE (includes 15 minutes of HE for 7-8)</td>
</tr>
<tr>
<td></td>
<td>HE: 48 minutes</td>
<td>HE: 28 minutes</td>
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</table>
2. **Integration**

Administrators can encourage teachers to make more effective use of their scheduled time by integrating subjects and making curricular connections. Suggestions for the applicable learning outcomes can be found in each grade level curriculum implementation document. Encourage classroom teachers and physical education teachers to

- work together to develop an implementation plan identifying which HE learning outcomes can be taught in a PE setting and which can be taught within the classroom. In a shared delivery model, it is important to determine who is doing what where and when.
- examine ways to include learning outcomes from HE in other subject areas to help make student learning more relevant and meaningful.

3. **Strategic Timetabling**

There are creative ways to timetable PE classes to allow for more effective use of time, flexible programming, and ease of equipment or facility use.

- Timetabling groups of classes at the beginning or end of the day, before or after lunch, or on either side of an afternoon break can accommodate PE/HE activities requiring alternate facilities, guest instructors or speakers, or programming choices needing more time than a typical period allows.
- Timetabling similar grade groups one after the other saves time since the same or similar grade groups often use the same equipment. Whether they are scheduled in the same morning, afternoon, or full day depends on the number of classes involved.
- Having the administrator collaborate with the PE/HE teacher about timetabling (length of periods for different grades, activities, order of grades/classes) can enhance programming for PE. Often it is advantageous to timetable the subject areas like PE/HE that require special facilities or staffing first.

4. **Occasional Combination of Classes**

Occasionally doubling up or timetabling large numbers of students at the same time by the week, cycle, or month can increase options for meeting time allocations. A combined group of students could convene once a cycle (e.g., 60 students for 40 minutes a cycle) to meet PE/HE timetable requirements as long as safety and liability concerns are met and adequate supervision is provided (e.g., by a PE teacher, assisted by a classroom teacher and/or an educational assistant). There also needs to be an appropriate student/teacher ratio and a suitable choice of physical activity for the group.
Strategies for doubling up in PE could include mass participation games, station activities, circuits, limited-space activities such as aerobics or yoga, and rhythmic activities to accommodate the larger number of students. Teachers can focus on selected learning outcomes in this type of class.

Strategies for doubling up in HE could mean large-group presentations by medical or health unit professionals on a health topic.

The large group could be linked through an interactive video with such presenters as an Olympic athlete giving a talk about motivation or a medical doctor speaking about human sexuality.

A large group could also work independently or in smaller groups in a computer lab or library using software programs on PE/HE topics.

5. Flexible Timetabling

Flexible timetabling involves banking time. It allows teachers occasionally to timetable larger chunks of time for specific subject or thematic activities instead of using many shorter periods over the span of a week/cycle/month. Keep in mind, however, that in PE it is better to have regular periods timetabled rather than sporadic ones since it is essential for students to be active daily or on a regular basis to achieve health benefits and to develop movement skills.

One flexible timetable model creates an occasional extra half or full day for a subject. For example, language arts, mathematics, science, and social studies could use the scheduled HE time as a trade-off for a full day of health-outcome activity.

Occasionally scheduling special days is another variation of flexible timetabling and a way to augment regular timetabled time.

— For PE-related outcomes, these could be planned learning experiences as part of such events as swimming days, skating days, tabloid days, dance festivals, Wellness Wednesdays, mini-Olympics, outdoor winter carnival, or ski trips. For HE-related outcomes, these could be planned learning experiences as part of such events as monthly health-theme days.

— These days could feature a morning, afternoon, or all-day event/activity. This timetable alteration makes it possible to fulfill time allotment expectations, address subject-area learning outcomes, and provide extended periods of time for learning activity that doesn’t fit into a regularly scheduled period.

For example, if 120 minutes of PE per cycle were timetabled and an additional 30 minutes were needed to meet the mandated time of 150 minutes per cycle, then during every six-cycle period, a three-hour or half-day event could be scheduled.
6. **Occasional Block Timetabling**

Occasional block timetabling allows large student groups (grade grouping) to take a segment of time (a half day or an unscheduled double period in the timetable) to explore a special activity that aligns with the curriculum. This process is similar to flexible timetabling, but this block of time may involve other grade groupings or the whole school. Some examples of options are:

- A rock climbing session on a portable climbing wall brought to the school
- A half-day session at a ski hill or golf course
- A double period watching a play on bullying or on the use and abuse of substances
- A clinic or presentation by a sport organization
- A double period on safety by a visiting paramedic team from the local fire hall

7. **Alternative Programming Using Sport Options**

When class sizes and the availability of instructional staff and facilities reduce timetabling options for administrators, involving sport organizations as part of programming may be a solution. Sport associations can provide instructional opportunities for students at all levels to specialize in their sports. These organizations often use facilities outside of the school and have their own certified instructors, which increases the potential for timetabling more students. However, certain criteria must be met when implementing sport options. These sport instructional opportunities must

- Be aligned with PE/HE curriculum learning outcomes
- Be approved by a school administrator once factors such as staffing qualifications, procedures for instruction and assessment, safety, accessibility, and feasibility are addressed
- Be supervised by a teacher and/or school administrator, with the assessment of students continuing to be the responsibility of the teacher
- Comprise only a part of the instructional time required for PE, not the whole amount (The curriculum prescribes balanced programming and opportunities for students to learn a variety of physical activities from the five physical activity categories.)
- Provide choice to accommodate interest, ability, and inclusion of students in all programming

8. **Other**

Consider other strategies for meeting class time expectations used in other provinces or countries; however, these may require special Department and/or school board approval before implementation (e.g., balanced school day).