**Strategy 2**

### Active Minutes in Class

**“Snapshot”**

**Description:** The goal is to have the majority of PE classes in a school where at least 50 percent of the class time students have an elevated heart rate. Specific strategies will reduce attendance time, add instant activity, establish immediate routines, and vary instructional strategies. They will also utilize technology such as heart rate monitors and pedometers, and assess for moderate to vigorous physical activity.

**Resources Needed:**

<table>
<thead>
<tr>
<th>Funding</th>
<th>Staff Time</th>
<th>Prep Time/ Materials</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional technology funding may be needed.</td>
<td>Training on some of the strategies.</td>
<td>Prep time administrative and organizational.</td>
<td>Could have a specialized training on this strategy with successful samples.</td>
</tr>
</tbody>
</table>

**Facilities and Equipment Needed:**

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Equipment</th>
<th>Set up / take down time</th>
<th>Transportation</th>
<th>Custodial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gymnasion and/or outdoor fields.</td>
<td>Normal physical education materials plus technology.</td>
<td>10–15 minutes for both.</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Evaluation:** Timing sample classes to measure the amount of time most students are active.

### Description and Rationale

Effective physical educators can teach skills while students spend a majority of their time being physically active; they employ a variety of strategies, all of which may be used to increase the amount of active time. These include management strategies such as active roll call and assigned roles, and instructional strategies such as student-selected activities during the beginning and end of class. Once an analysis of active time in class is completed, new strategies are used to increase active time. The goal is to have the majority of PE classes in a school where at least 50 percent of the class time students have an elevated heart rate. Studies show that students often spend more than 50 percent of their physical education class engaged in non-activity. If students are to achieve fitness and skill development goals designated by most programs, it is important that they be successfully motor-engaged for a high percentage of class time.
Active minutes in PE class relates to NASPE Standard 3: Participates Regularly in Physical Activity.

**Action Steps**

- Analyze time spent in moderate to vigorous physical activity. Using a video of a class and a stopwatch, check how much time is spent in activities such as management (attendance, selecting equipment, grouping, etc.), transition, listening to the teacher talk, and appropriate activity. If video equipment is not available, another teacher or helper can use a stopwatch either to time what the majority of the class is doing or target a selected group of students and track their activities during the class. See the tools in Resources below.

- Use one or more of the following strategies to increase the amount of time in moderate or vigorous physical activity.
  
  – Review Class Size: Studies show that class size directly affects management. The NASPE recommends that the size of physical education class be consistent with those of other subject areas (e.g., 1:25, 1:30, 1:35) for safe and effective instruction (NASPE 2006). (See Article attached Large Class Size). If schools have large class sizes, begin to work with effective routines, instructional strategies, and equipment needs.

  – Time Spent in Locker Room: Reduce time spent in locker room. Assess the need for changing into physical education attire for each unit. Change by choice has added a calming effect on many physical education programs. Avoiding participation is not an option. Students will participate, changing is the option.

  – Implement Instant Activity: Increase moderate and vigorous physical activity time by engaging the children and students in developmentally appropriate skill, activity, recreational and fitness choices at the beginning and even the end of class. Students will actively engage in choice activities with more enthusiasm than running laps or sitting and waiting for instruction. Consider taking attendance while students are active. See the examples below.

  – Assign Routines: Establish routines for all equipment, supplies, and technology. Assign students “jobs” to assist with the care and proper storage of all physical education teaching needs. Change student jobs weekly as a part of routines.

  – Utilize PE Technology: Integrate pedometers and heart rate monitors into physical education classes. Have students record steps and time spent in the Target Heart Rate Zone.

  – Reassess the time in moderate or vigorous physical activity and use the results to refine and improve practice.

*Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity.*

—Virgil
Examples

Elementary
Assess multiple grade levels and many classes for moderate or vigorous physical activity. Following a reflection, the teacher will increase moderate to vigorous activity time by:

• Providing an instant activity for all grade levels and removing the old concept of coming into the gym and quietly sitting in squad lines.
• Adding pedometers and pedometer charts for each class.
• Creating pedometer challenges and seeking on-line challenges for use of pedometers during physical education.
• Replacing all activities where students are sitting out or eliminated with developmentally appropriate activities (e.g., relay games, elimination games, and side-line games).
• Using small sided games and student designed activities to promote skill acquisition rather than competitive two-team games.
• Integrating a greater variety of instructional strategies including learning centers and child design to promote physical activity and choice during physical education.

Secondary
Teacher assesses multiple classes for moderate or vigorous physical activity. Following reflection, the teachers set goals to do the following:

• Reduce time in locker room to a maximum of five minutes.
• Take roll on the run and increase student responsibility during management. Take roll using alternate methods.
• Integrate some instant activity choices for students who enter the gym from the locker room. Change the instant activity choices with each unit.
• Assign student roles to help with all management duties during physical education units.
• Plan for alternative days. When the weather or unexpected circumstances remove a class from the planned teaching area, always have a back-up unit rather than a “free-day.”
• Increase student choice in all activities. Provide novice to expert choices in all activities to keep all students challenged.
• Integrate more 3-on-3 tournaments rather than large regulation size competitions. This will mimic games played with friends and family in parks and backyards.
• Integrate the use of interactive heart rate monitors. Allow students to track their heart rate over the course of a unit.
• Provide activity choices to keep students moving until the bell rings. Plan for transition to reduce waiting time.

Resources

Use of Class Time: Analysis of Management, Activity, Instruction, and Waiting Time

Purpose of the Activity: Teachers will analyze times physical education students spend in Management, Activity, Instruction, and Waiting Time during physical education lessons.

Materials Needed:
• Videotape one or more physical education lessons
• Stop watch
• Time Analysis form
• Objective for the lesson observed

Directions:
• Familiarize yourself with the directions on the time code analysis.
• Prepare your observation area so you are able to see all the students in the class.
• Videotape one or more physical education lessons or have an observer complete the Time Analysis form on one or more physical education lessons.
• Begin the stop watch as soon as the physical education class begins.
• Observe the students in the class.
• Using the Time Analysis form, record management, activity, instruction, or waiting on the timeline. Your decision should be based on what most of the students in the class are doing. Use the following time codes.
  – **M** = Management is the time when most of the students (50 percent or more) are not receiving instruction or involved in lesson activity. Examples include: Changing clothes, getting out or putting away equipment, listening to behavior rules or reminders, grouping students, and moving between activities.
  – **A** = Activity time when most of the students (over 50 percent) are involved in activity that is directly related to your lesson objectives. Examples: Catching a ball, passing a puck, tossing a Frisbee.
  – **I** = Instruction time when most students (over 50 percent) are receiving instruction about how to perform skills listed in the lesson objectives. Examples include: How to toss the Frisbee to a target; how to receive a ball on a Lacrosse stick.
– **W = Waiting time** when most students (over 50 percent) are not involved in Management, Activity, or Instruction. Examples: Group activities when only one or two students are participating, waiting for a turn, off-task behavior, waiting for the teacher to give directions. Traditional relays are a good example.

• Mark the Time Analysis Form each time the focus of the lesson changes.

• Continue your analysis until the end of the physical education class period.

• After you have finished coding the students’ activity, total the number of minutes spent in Management, Activity, Instruction, and Waiting, and record in the calculation area. Divide by the total number of minutes in the class. This will give you the total percentage of time the students spent in each category. The goal of a physical education class is to have 80 percent of the students active 80 percent of the time. NOTE: This is simply a goal. It is not realistic on the first day of the unit or a day when much instruction is needed for effective learning.

Toward the end of a unit, students should be physically active approximately 80 percent of the lesson. There are units with higher liability where the students will engage in more instruction early in the unit and more actively later in the unit. If there is, however, a pattern of great waiting time and great management time consistently in all units, the teacher has room for improvement. Students should average over 50 percent and up to 80 percent of time in moderate or vigorous physical activity in their physical education units. (Lacy, 1995, Graham 2010)
### Time Analysis Example

#### Example of time tracking:

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Management</th>
<th>Activity</th>
<th>Instruction</th>
<th>Waiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this example, the breakout by category shows 40 percent in class Management, 29 percent in Activity, 16 percent in Instruction, and 16 percent in Waiting. With only 29 percent of class time spent in Activity, there is a lot of room for improvement.

**Initial assessment:**

<table>
<thead>
<tr>
<th></th>
<th>Total # minutes</th>
<th>Percent of class time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>18</td>
<td>40 percent</td>
</tr>
<tr>
<td>Activity</td>
<td>13</td>
<td>29 percent</td>
</tr>
<tr>
<td>Instruction</td>
<td>7</td>
<td>16 percent</td>
</tr>
<tr>
<td>Waiting</td>
<td>7</td>
<td>16 percent</td>
</tr>
</tbody>
</table>

In the follow-up example, the breakout by category now shows only 16 percent in class Management, 69 percent in Activity, 13 percent in Instruction, and 2 percent in Waiting. The increase from 29 percent of class time spent in an Activity to 69 percent of time being active is significant.

**Follow-up assessment:**

<table>
<thead>
<tr>
<th></th>
<th>Total # minutes</th>
<th>Percent of class time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>7</td>
<td>16 percent</td>
</tr>
<tr>
<td>Activity</td>
<td>31</td>
<td>69 percent</td>
</tr>
<tr>
<td>Instruction</td>
<td>6</td>
<td>13 percent</td>
</tr>
<tr>
<td>Waiting</td>
<td>1</td>
<td>2 percent</td>
</tr>
</tbody>
</table>
# Time Analysis Form

Teacher Name ___________________________________________ Class ______________________________

Date _____________________________  Grade ___________________________  # of students in class _______________

M = Management Time  A = Activity Time  I = Instruction Time  W = Waiting Time

Each box represents one minute of class time.

<table>
<thead>
<tr>
<th>Minutes</th>
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<th>Percent of class time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting</td>
<td></td>
<td></td>
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Notes: ___________________________________________________________________________________________

Teacher Name ___________________________________________ Class ______________________________

Date _____________________________  Grade ___________________________  # of students in class _______________

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Notes: ___________________________________________________________________________________________
**Question Roll Call**

Concept being taught: review, starting lessons quickly, and getting to know each other during roll call. The purpose of the activity is to quicken the process of taking roll call and providing a way to get to know others in the class. The materials needed are a bulletin board, chalkboard, or 5x8 cards.

**Description of the Activity:**

As the students enter the physical education class, have a “roll call question of the day” posted for them to read and develop a response. At the beginning of class, the teacher can verbally ask the students the question and for each of their responses as they simultaneously take role.
Examples of questions you can ask:

- True or false? Taking a brisk walk for 20 minutes, five times a week, is a good way to improve cardiovascular endurance.
- What are the three cues to striking a ball with a bat?
- Find a partner to walk or jog with around our space. What is your favorite activity and why should we participate in this activity during physical education class?

Tips for Success:

- Have the students form groups and walk around the room in different pathways or matching and mirroring movements as they discuss the topic.
- Invite the idea of diversity of opinion, knowledge, and experience in answers.
- Example: Who is your favorite role model? Which characteristics make him/her a good role model? Keep answers to one sentence (e.g., Dwight Howard is my favorite role model because…”)
- Ask questions that require quick answers and explanation of reasoning. Use topics that review cues related to past skills learned in class and can assess student learning.
Taking Roll on the Run

Roll rules:

• Develop four or five methods of taking roll that are comfortable for you and keep the students active.

• Be creative.

• Have the students come up with creative ideas—give them the opportunity to succeed and even fix methods that fail. Hold students accountable for reporting their attendance.

• Remember to A.I.M. for 80 percent activity time over the course of a unit.

  A = Activity (80 percent)
  I = Instruction (10 percent)
  M = Management (10 percent)

Roll call is considered Management time: Other Management tasks in physical education include: 1) preparing the environment, 2) getting students’ attention, 3) teaching and organizing class formations, 4) organizing groups or teams, and 5) adapting to interruptions.

A fast, effective roll call system gets class started on the right track. An effective roll call should take only one or two minutes at the most. Time spent in roll call reduces the learning time for students; therefore, efficient use of time is essential. When too much time is taken for roll call, students become bored and discipline problems may arise.

The major criteria for selection of a roll call technique are time and accuracy. Five traditional techniques are commonly used:

• **Numbers or Spots**— Students stand or sit on a number or spot.
  Advantage: very fast and accurate. Disadvantage: Impersonal and who wants to hurry out of the locker room to stand or sit on a number—no activity involved.

• **Squads**—A leader is selected and each day the leader reports who is absent. Advantage: This may be done while the students are warming up. Disadvantage: Squads need to be changed often.

• **Student Check-In**—Students check-in as they enter the gym by signing their name and time of entry or by checking in with the teacher or by handing in an assignment or by removing their name tags from a board or a box and placing them in a specified location OR wearing them until you learn their names (tags must be safe for activity). Those remaining are absent. Advantage: The students take responsibility for their attendance and little class time is taken. Disadvantage: The teacher must be very organized and use non-class time to prepare student check-in activity.
• **Silent Roll**—The teacher or teacher’s aide takes roll silently while students are participating in activity. Advantage: The students remain active. Disadvantage: The teacher must know names and it is easy to miss a student.

• **Oral Roll**—The teacher calls out a student’s name and listens for a response. Advantage: Helps with name recognition and acquaints the teacher with the student. Disadvantage: Only effective when used with very small classes, it is time consuming, and students are not actively involved with the objectives of the lesson.

**Pedometer resource:**