Active Learning: A Toolkit for Teachers

This toolkit was created for K-12 teachers in Vermont and New Hampshire to promote physical activity in the classroom.
Dear Teachers,

The Dartmouth-Hitchcock Norris Cotton Cancer Center, New Hampshire Department of Health and Human Services, and Vermont Department of Health are pleased to provide you with Active Learning: A Toolkit for Teachers to help you incorporate physical activity into your classroom. Our three organizations partnered together to give you this resource because we all recognize the benefits of physically active students:

- Heightened attention and engagement
- Better on-task behavior
- Enhanced retention of information
- Improved test scores
- Less absenteeism
- Reduced chances of getting diabetes, heart disease, lung disease, and cancer

Realizing all of these great reasons for students to be active, more and more schools in New Hampshire and Vermont are doing what they can to add physical activity throughout the day. In fact, Vermont schools are required by the Education Quality Standards to offer students in grades K-12 students at least 30 minutes of physical activity every day, in addition to their PE class time.

While there are a variety of ways to get students moving during the school day, teachers in New Hampshire and Vermont find that adding movement into their classrooms is one of the greatest opportunities for increasing physical activity. As you look through this toolkit, you’ll see quotes from local teachers showing that it doesn’t take extra effort; it’s just part of what they do to maximize their students’ learning potential.

We hope this toolkit will inspire you to incorporate movement into your teaching, try new activities with your students, and talk with other teachers about how they can have physically active classrooms too. Keep in mind that including physical activity in your classroom is just one small part of a healthy school environment. If you’re interested in doing even more, check out the last section of this toolkit to learn about school wellness policies; wellness committees; and the Whole School, Whole Community, Whole Child model for healthier schools.

If you have questions or comments, want more copies of this toolkit, or need support with your school wellness efforts, give us a call. We’re here to help.

New Hampshire: (603) 271-4628  Vermont: (802) 863-7393

Sincerely,

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Physical Activity Trends

Children ages 6 to 17 should engage in at least 60 minutes of physical activity daily. Unfortunately, most are not meeting these recommendations.²

Percent of U.S. high school students who reported 60 minutes of physical activity on five or more days in the past week¹

Photo courtesy of U.S. Department of Health and Human Services: http://www.hhs.gov/ash/oah/adolescent-health-topics/americasadolescents/picture.html

New Hampshire and Vermont students are no exception when it comes to trends in lack of physical activity.

New Hampshire

- 48% of kids ages 6 to 17 don’t engage in physical activity at least 5 days a week.⁴
- 78% of high school students aren’t physically active for at least 60 minutes per day.⁵

Vermont

- 37% of kids ages 6 to 17 don’t engage in physical activity at least 5 days a week.⁴
- 77% of high school students aren’t physically active for at least 60 minutes per day.⁶
Health and Academic Outcomes

One in every five children 12 to 19 years old were obese in 2011-2012.¹

By engaging in the recommended amount of physical activity, children can prevent health problems—both now and later in adulthood.²

**Kids who are active may:**²

- have stronger muscles and bones
- be less likely to become overweight or obese
- decrease their risk of developing type 2 diabetes
- lower their blood pressure and blood cholesterol levels
- have higher self-esteem

**Physical activity is not just about being healthy or fit.**
Physical activity is strongly correlated with academic achievement.³

*Elementary students’ on-task classroom behavior improves with physical activity breaks*

“Movement breaks at our school have decreased disciplinary referrals for students with ADHD.”
- Erica Salamy
School Based Clinician
(Brattleboro, VT)

According to the Centers for Disease Control and Prevention (CDC), students who participate in physical activity typically have:³

- Higher grades
- Increased memory
- Greater school attendance
- Stronger ability to remain focused
- Better overall classroom behaviors
The Teacher’s Role

I’m a teacher. How can I help?

Being physically active is one of the most important steps to being healthy. Schools are an ideal setting for teaching how to adopt and maintain a healthy, active lifestyle, and because nearly all youth in the Vermont and New Hampshire are enrolled in schools, the classroom can offer multiple opportunities for students to engage in physical activity.

Classroom physical activity includes any physical activity performed in the classroom during the school day. Classroom physical activities can last from 5 to 15 minutes and can be done all at one time or several times during the school day. These short bouts of movement can increase students’ overall physical activity and improve their attention, classroom behavior, and test scores.

In this Toolkit

Introducing physical activity breaks into your classroom doesn’t need to be hard or time consuming. There are several resources available to use, and they only take a few minutes.

This toolkit provides you with a variety of activities, resources, and links to online videos to use in your classroom. This toolkit breaks down the two common methods for making a classroom more active for elementary, middle, and high school students:

1. Active Academics:
   - Incorporating movement into lesson plans

2. Physical Activity Breaks:
   - Taking short breaks between lessons to give students the opportunity to move around

Choose what works best for your class!
Elementary School

Grades K-5
10 Examples at the Elementary School Level:

1. **Mobile Math:**
   Have students stand at their desks with pencil and paper. Call out a math problem (e.g., $2 \times 3$) and have the class jump the number of the answer (e.g., 6), then write down the answer. Repeat with different math problems and movements.

2. **Opposite Hunt:**
   Divide the class in half. Hand half the students cards with words. Give the other half the definitions. Students then move around the classroom to match the words and definitions. **Variations:** words and pictures, math problems, states and capitals

3. **Make it Creative:**
   Assign a creative assignment that encourages physical activity. Have students draw a picture, write a short story, or create a poem about a physical activity they did that day. Hang them up in the classroom and encourage students to take pride in their daily movement!

4. **Quiz Me:**
   When reviewing for a test, ask students a variety of true or false questions. If the answer is true, have the students jump to the sky; if they answer is false, have the students touch their toes. **Variation:** Have students practice spelling words out loud to a partner in preparation for a spelling quiz. After each word they finish, have them do a movement of their choice.

5. **Measure it:**
   Have students measure distances around the classroom or around the school property.
10 Examples at the Elementary School Level (cont.)

6. Spelling Challenge:  
Print-out each letter of the alphabet on a piece of paper in large font and laminate them, if possible. Spread these around the room on the floor. During spelling lessons, have students practice spelling words by walking from letter to letter.

7. Take a Tour:  
Teaching a geography lesson? Have the students “tour” different states. Have them go fishing in Alaska, hiking in Colorado, swimming in the Gulf of Mexico, and other adventures

8. Nature Walk:  
Have the class go for a walk outside. Point out objects related to science lessons, have students draw pictures of observations, or complete an educational scavenger hunt.

9. Active Verbs:  
Have students read out loud to the class. Each time a verb is read, have the students do the action.

10. Walking Worksheets:  
Tape worksheets on the wall. Get the students up from their desks by having them walk around to each worksheet to answer questions corresponding with the lesson being taught.

Check out this active classroom set-up!  
third grade classroom at the Glover Community School in Vermont!

TIP: Think beyond the classroom too! Encourage physical activity at home by assigning activity-inspired homework. Adapt the assignment based on subject.
Combine Active Academics with health lessons to strengthen understanding of the connection between physical activity and health.

**Example: Heart Smart**

Discuss the heart: size, location, function, etc.
Call-out activities that strengthen or weaken the heart.

If activity strengthens the heart, have students jump.
If activity weakens the heart, have students fall/shrink.

**Suggestions of Activities to Call Out:**

- Riding bike—Jump
- Smoking—Fall/Shrink
- Exercising—Jump
- Playing video games—Fall/Shrink
- Playing outside—Jump
- Eating 5 pizzas—Fall/Shrink
- Swimming—Jump
- Watching TV all day—Fall/Shrink

**Safety Tip**

Have students fall in slow motion or shrink into a small ball shape.
Physical Activity Breaks

10 Examples at the Elementary School Level:

1. **Future Trainer**: Pick a student to lead the class with a 3-5 minute physical activity break. Let the student select movements, games, or activities to engage the class. Support the student by following along with the rest of the class.

2. **Activity Cup**: At the beginning of the school year, give every student in your class a tongue depressor and have them write a movement on the tongue depressors (e.g., jumping jacks, lunging, marching), then put the tongue depressors in a cup. Each day, have a student pull a tongue depressor from the cup and lead the class through that activity ten times.

   **Variation**: Have the students repeat the activity the number of times corresponding with the date of the month (e.g., on March 13th, students would do 13 repetitions).

3. **Yoga**: Take a mini break and do yoga or stretch. Have students focus on breathing and relaxing. Not sure where to start? Search for kids yoga videos and tutorials online!

4. **Physical Activity Alarm**: Create an alarm that goes off at various times during the day, signaling students to get up out of their chairs for a short walk, jump, skip, or other activity.

5. **The Wave**: Have one student stand up and each student then follow along like a wave. Repeat with different motions until the break is over.

**TIP**: Check out GoNoodle for short videos to get students moving!

[www.gonoodle.com](http://www.gonoodle.com)
10 Examples at the Elementary School Level (cont.):

6. Look Ma, No Hands!¹⁵
   Have each student set an object on the ground, like a pencil or ruler. Call out different body parts they need to try to pick the object up with, such as elbows, feet, and knees.

7. Animal Instincts:¹⁵
   Call on one student to pick an animal. Have the class act-out how that animal moves. Continue calling on each student one at a time until all students have picked an animal.

8. Just Dance:
   Don’t want to lead a structured workout? Have your students dance instead. Simply pull up a Just Dance YouTube video and have your students follow along. Save this link to your computer for a quick dance break: https://www.youtube.com/user/justdancegame

9. Fitness Dice:¹⁰
   Get two dice. Assign a different physical activity to each number on one of them. Roll the first die to determine the activity for the break. Roll the second die to determine how many times the activity must be done.

10. Mix It Up:
    Create a unique dance by calling-out one move at a time. Moves can include stomping, foot tapping, jumping, spinning, high-fiving, and plenty of other moves!

TIP: Check out these websites for even more ideas!
www.jamschoolprogram.com
www.movetolearnms.org
Teacher Highlights

“I do yoga with my students twice a day—once in the morning for 5 minutes, and again in the afternoon. I’ve noticed a huge impact, especially with one of my students with ADHD. Yoga helps give the kids a break and stay more focused throughout the day.”
- Stephen Greenwood
  (Laconia, NH)

“Integrating physical activity into my daily classroom routine has really changed my classroom atmosphere. It has increased student engagement, makes them eager to come to school every morning, and creates an environment that encourages healthy lifestyles.”
- Erin Young
  (St. Albans City, VT)
Middle School

Grades 6-8
10 Examples at the Middle School Level:

1. Opposite Hunt:
   Divide the class in half. Hand half the students cards with words. Give the other half the definitions. Students then move around the classroom to match the words and definitions. **Variations:** words and pictures, math problems, states and capitals

2. Make it Creative:
   Assign a creative assignment that encourages physical activity. Have students draw a picture, write a short story, or create a poem about a physical activity they did that day. Hang them up in the classroom and encourage students to take pride in their daily movement!

3. Quiz Me:
   When reviewing for a test, ask students a variety of true or false questions. Before getting started, have the students pick two movements they’d like to do, such as jumping jacks or lunges. Then assign ‘true’ questions to one of the activities and ‘false’ questions to the other. Ask students the questions and have them perform 1-5 of each movement corresponding to each question’s answer.

4. Measure it:
   Have students measure distances around the classroom and school property and complete math problems.

5. Flash up, Flash Down:
   Review for a test while moving: Pass around pieces of scrap paper. Read questions out loud, and ask the students to write their answers on the scrap pieces. Say, “3—2—1—Flash Up!” When you say that, the students should jump up from their desks and reveal their answers. Then say, “Flash Down!” which prompts students to sit.

**TIP:** The American Heart Association has tons of 6th-8th grade lesson plans that incorporate movement! Check them out: [http://bit.ly/2dWwaZW](http://bit.ly/2dWwaZW)
10 Examples at the Middle School Level (cont.):

6. Health Report
   For a health or science lesson, have students write a report about an exercise and demonstrate the movement to the class. To make sure that each student selects a different exercise, have students pull options from a hat/basket.

7. Nature Walk:
   Take lessons about environmental or earth science outside on school property or on local field trips.

8. Active Verbs:
   Teaching a foreign language? Have students read out loud to the class. Each time a verb is read, have the students do the action.

9. Walking Worksheets:
   Tape worksheets on the wall. Get the students up from their desks by having them walk around to each worksheet to answer questions corresponding with the lesson being taught.

10. Beyond the Classroom:
    Encourage physical activity at home by assigning physical activity-inspired homework. Personalize based on subject and grade.

Have you ever read a book and pedaled at the same time?
Physical Activity Breaks

10 Examples at the Middle School Level:

1. **Future Trainer:**
   Pick a student to lead the class with a 3-5 minute physical activity break. Let the student select movements, games, or activities to engage the class. Support the student by following along with the rest of the class.

2. **Yoga:**
   Take a mini break and do yoga or stretch. Have students focus on breathing and relaxing. Not sure where to start? Search for kids yoga videos and tutorials online!

3. **Chair Action:**
   Instruct students to sit on the edge of their chairs with good, upright posture. While playing a song that has a strong beat, have students do seated movements on each beat. Example movements can include hiking, swimming, and rowing/paddling a boat.

4. **Step Team:**
   Have the class become a step team. Lead the class through movements, or ask for a student volunteer to lead the class. Start by having students rub their hands together, then start snapping, slapping their legs, clapping their hands, and stomping their feet.

5. **Physical Activity Alarm:**
   Create an alarm that goes off at various times during the day, signaling students to get up out of their chairs for a short walk, jump, skip, or other activity.

**TIP:** Check out JAMmin’ Minute® for even more ideas!
www.jamschoolprogram.com
10 Examples at the Middle School Level (cont.):

6. The Wave:
   Have one student stand up and each student then follow along like a wave. Repeat with
different motions until the break is over.

7. Activity Circuit:
   Have pairs of students pick a movement and design a poster to depict the movement. Hang
the posters around the classroom to create a fitness circuit. When using the circuit, have
students work in pairs, and each pair should start at a different poster. Every 60 seconds,
Have the pairs rotate clockwise around the room. Continue for 5-10 minutes.

8. Fitness Dice:  
   Get two dice. Assign a different physical activity to each number on one of them. Roll the first
die to determine the activity for the break. Roll the second die to determine how many times
the activity must be done.

9. Daily Challenge:  
   Have a daily fitness challenge in class. Start by making a calendar with a daily activity. Ask
students for their input or have each student create an activity for the calendar. At the end of
the month, swap calendars with another class and continue the fun.

10. Walk About:
    Give students a 2-3 minute break between lessons to talk to their classmates. The only rule
is they must walk while they talk.

TIP: Ask students what their favorite songs are. Incorporate appropriate songs into the
physical activity breaks.
Teacher Highlights

“I use bilateral aerobic activity in my middle school mathematics classroom. My classes are 90 minutes each, and although I try to switch up the activity often, I have found that taking a five minute activity break in the middle of class improves focus.”

-April Lane
(Irasburg, VT)

“Long blocks can be challenging for students. Breaking up the time with movement activities helps them remain focused. It can be as simple as playing a video on YouTube for kids to dance to. My students say they look forward to it every day.”

- Kegan Donohue
(Keene, NH)
High School

Grades 9-12
10 Examples at the High School Level:

1. **Walking Worksheets:**
   Tape worksheets on the wall. Get the students up from their desks by having them walk around to each worksheet to answer questions corresponding with the lesson being taught.

2. **Walk About:**
   Having your students work in groups? Encourage groups to get up and walk while they talk. Or, when preparing for a test, break your class into small walking groups and assign discussion questions for each group to discuss for 2-3 minutes before returning to the classroom for their next question.

3. **Active Presentations:**
   When students need to give presentations to the class, have them make active videos instead of slideshows. Give a reward to the student who can incorporate the most activity into the video.

4. **Step Team:**
   Have the class become a step team. Lead the class through movements, or ask for a student volunteer to lead the class. Start by having students rub their hands together, then start snapping, slapping their legs, clapping their hands, and stomping their feet.

5. **Charades:**
   Teaching a foreign language? Help students learn words and phrases through a game of charades—encouraging movement and active learning!

**TIP:** Teaching physics? Embed physical activity into lessons about movement, gravity, or force.
10 Examples at the High School Level (cont.):

6. No Stress Test: Before a test, give students a short break to walk around, helping to calm nerves and be focused for the exam.

7. Teacher for a Day: Do you move a lot while teaching? Take a break and give students a turn. Have them help lead lesson plans, come up to the board more often to write, or simply walk around and help each other answer questions.

8. Quiz Me: When reviewing for a test, ask students a variety of true or false questions. If the answer is true, have students walk to one side of the room. If answer is false, they must walk to opposite side.

9. Shakespeare: Reading Shakespeare? Have students take turns reading while standing, walking, or even acting out scenes.

10. Around the World: Review for a test while moving: Have students sit in circle with one student standing. Ask that student a question. If they answer correctly, they continue “around the world;” if they answer incorrectly, they sit and take the place of a seated student. Want more students to be moving? Create teams!

TIP: Give 5 minutes of quiet time to deep breathe and relax before tests begin.
Physical Activity Breaks

10 Examples at the High School Level:

1. **Physical Activity Alarm:**
   Create an alarm that goes off at various times during the day, signaling students to get up out of their chairs for a short walk or other activity.

2. **Pick a Card:**
   Make cards with physical activities written on them. Each day, have one student pick a random card and have the class perform that activity. Repeat each day with a different student.

3. **Walk to Talk:**
   Give students a 2-3 minute break between lessons to talk to their classmates. The only rule is they must walk while they talk.

4. **Musical Desks:**
   Have students leave their belongings on one side of the room, bringing only required materials to their desks. Between lessons, have students get up and switch desks with someone across the room, allowing students a short movement break.

5. **Find Your Partner:**
   When preparing to review material with the class, come up with 3-5 questions/answers. Have the students spread out in the room and read the first question out loud. Ask the students to walk to someone across the room from them and check their answers with each other. For each question read, students should walk to a new partner.

**TIP:** Yoga can be a great activity for a high school classroom! Search online for short videos and tutorials.
10 Examples at the High School Level (cont.):

6. Daily Challenge:\(^{10}\)
   Have a daily fitness challenge in class. Start by making a calendar with a daily activity. Ask students for their input or have each student create an activity for the calendar. At the end of the month, swap calendars with another class and continue the fun.

7. Future Trainer:\(^{10}\)
   Pick a student to lead the class with a 3-5 minute physical activity break. Let the student select movements, games, or activities to engage the class. Support the student by following along with the rest of the class.

8. Fitness Dice:\(^{10}\)
   Get two dice. Assign a different physical activity to each number on one of them. Roll the first die to determine the activity for the break. Roll the second die to determine how many times the activity must be done.

9. Stretch it Out:
   Sitting all day may make students stiff and tired. Have students take a short break to get up and stretch. They can do it either independently, or have a student lead the class through some stretches. Or, work with your school to do stretches in the hallway between classes!

10. Task Master:\(^{15}\)
    Ask students to stand up and push their chairs in. Tell them that a series of tasks will be read out loud to them and that they should finish each task as quickly as they can, then raise their hand when they’re done. Task 1: Students touch 10 chairs that aren’t next to each other. Task 2: Students touch elbows with 8 other students. Task 3: Students touch toes with 6 other classmates wearing different colors. Ask students to come up with more ideas!
“Getting students engaged can look very different in each and every classroom. It may be something as small as eliminating chairs at the desks for five minutes, using yoga balls instead of the traditional chair, creating a moving gallery-style assessment, or something more involved like a five minute fitness break with purposeful physical activity. We took this idea further to implement Fit4Five Fridays and asked teachers to take five minutes of each block and dedicate it to bodies in motion, whether in conjunction with their lesson, or as its own brain break. Either way, I think everyone can benefit— not only physically, but mentally and emotionally as well.”

- Nicole Laroche
(Hillsboro, NH)
Make a Lasting Impact

Now that you’ve started promoting physical activity in your classroom, help make a bigger impact in your school.

How to get started:

Talk to your Administrators.

Review your School Wellness Policy.

Becoming a member of your school’s wellness committee. If your school doesn’t have a wellness committee, get one started. Look in to adding physical activity goals to the School’s Improvement Plan (SIP).


Create a Comprehensive School Physical Activity Program (CSPAP).
Want more fun tips to get your students active?

**Check out these websites:**

1. Action for Healthy Kids  

2. Alliance for Healthier Generation  
   https://www.healthiergeneration.org/take_action/schools/physical_activity/physical_activities/

3. America Heart Association  
   http://www.heart.org/HEARTORG/Educator/Educator_UCM_001113_SubHomePage.jsp

4. Centers for Disease Control and Prevention  
   http://www.cdc.gov/healthyschools/

5. Colorado Education Initiative  

6. National Association for Sport and Physical Education  
   http://carver.nn.k12.va.us/export/sites/Carver/documents/integrating_PE_activities_in_the_school_day.pdf

7. SPARK– Classroom  
   http://www.sparkpe.org/

8. Vermont Agency of Education– Physical Activity  
   http://education.vermont.gov/student-support/healthy-and-safe-schools/physical-activity

9. Yoga for Classrooms  
   http://www.yoga4classrooms.com/

10. Fuel Up to Play 60  
    https://www.fueluptoplay60.com/playbooks/current-seasons-playbook/in-class-physical-activity-breaks
References


