

# **Implementation Manual**

- 2021-

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## **Table of Contents**

Introduction	3
BEPA 2.0 Toolkit Inventory	4
How to Implement BEPA 2.0 in Your Classroom	5
Physical Activity Intensity	9
Classroom Management	10
Inclusive Physical Activity Guide	12
Physical and Health Education Standards	13
Physical Activity Guidelines for Americans	14
Additional Resources	14
BEPA 2.0 Glossary of Terms	15
References	19





#### Introduction

#### The Importance of Physical Activity

Regular physical activity in childhood and adolescence has been linked to healthy bones and muscles, improved blood pressure and cholesterol levels, reduced stress and anxiety, and increased self-esteem.¹ More recently, evidence shows that even short activity breaks convey immediate transient benefits in cognition, including memory, attention, and executive functioning.² Nevertheless, far too few children and adolescents are obtaining the recommended amounts of daily physical activity.³

#### **Toolkit Overview**

The **BE** Physically Active **2**-Day (**BEPA 2.0**) Toolkit includes over 50 unique activity cards aligned to physical education (PE) and health education (HE) standards. The full toolkit includes implementation guidance cards, a set of portable play items such as beanbags, buckets, chalk, cones, floor tape, and scarves, policy and reporting templates, and an implementation manual. Oregon State University also offers BEPA 2.0 trainings.

BEPA 2.0 is an accessible, low-cost resource that enables schools to increase physical activity levels in elementary classrooms. BEPA 2.0 activities align with National PE and HE standards to support educators in delivering classroom-based physical activity that aligns with standards, laws, and policies. BEPA 2.0 enables opportunities to integrate grade-level competencies into core subject areas and a offers a reporting tool that supports reporting of physical education minutes. The BEPA 2.0 Toolkit engaged Oregon Department of Education stakeholders, local school districts, physical education specialists, and members of Oregon State University (OSU) Cooperative Extension and OSU's College of Public Health and Human Sciences to address a need for a classroom-based, physical activity curriculum aligned with standards, laws, and policies.







#### The BEPA 2.0 Toolkit is...

*Innovative.* Conceptual messages about physical activity and healthy lifestyles are reinforced through developmentally appropriate activities and discussions about relevant key physical activity and nutrition concepts.

*Inclusive*. BEPA 2.0 activities can be adapted to fit the unique needs of all children, enabling everyone to be able to fully participate in physical activity at school.

**Versatile.** BEPA 2.0 can be implemented before, during, and after school, both indoors and outdoors. BEPA 2.0 can be used as a stand-alone, PE-aligned curriculum, or can be combined with age-appropriate educational curriculum to increase and integrate physical activity into existing lesson plans.

**Practical.** The Toolkit provides all the materials necessary to get children active and reinforce the importance of active living. BEPA 2.0 can help schools meet PE requirements because it is aligned to National PE standards.

**Supportive.** BEPA 2.0 aligns to elementary PE and HE standards, reinforcing concepts and skills taught by PE specialists. BEPA 2.0 activities can also be used to support learning competencies in other core subject areas.

The BEPA Toolkit is NOT an "exercise program" designed to build strength, endurance, or physical performance skills. Although these things may occur as a result of delivering activities, the primary goals of BEPA 2.0 are to increase children's physical activity levels and reinforce the skills and competencies demonstrated in PE classes that are needed for students to lead physically active lives.







# **BEPA 2.0 Toolkit Inventory**



Toolkit Item	# of Items per Toolkit
BEPA 2.0 Duffel Bag	1
BEPA 2.0 Activity Card Set	1
Bean Bags	32
Buckets	4
Chalk	5
Cones	12
Poly Spots	18
Scarves	32





### How to Implement BEPA 2.0 into Your Classroom

- BEPA 2.0 activities can be used to provide brief activity brain-breaks with the goal of increasing children's physical activity while at school.
- Since BEPA 2.0 is aligned to National PE standards, teachers can be confident when they implement a BEPA 2.0 activity that they are delivering quality content and meeting standard requirements.
- The BEPA 2.0 Standard Alignment Guides show how each activity in the BEPA 2.0 Activity Book addresses grade-level health and physical education standards.
- To meet best practice recommendations, we suggest a goal of TWO, five-minute activity breaks each day. This provides an extra 50 minutes per week of physical activity for your students, bringing them closer to reaching the physical activity recommendations for youth and helping schools meet physical education requirements!
  - For example, in Oregon, time spent delivering BEPA 2.0 activities counts towards the required 150 minutes of physical education minutes each week!
     To learn more about Oregon PE requirements, visit the <u>Hallie E. Ford Center's</u> <u>PE Laws and Regulations website</u>.

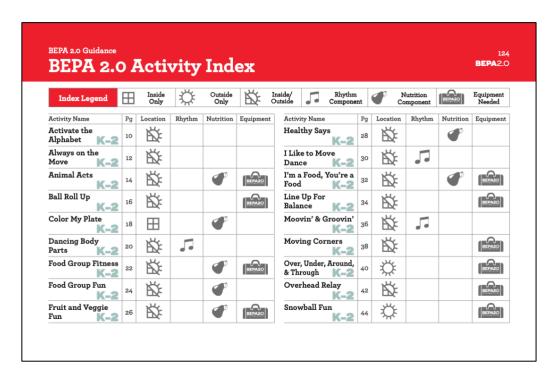






## How to Implement BEPA 2.0 into Your Classroom (cont.)

- Activities are organized by grade-level groupings to make it easy to find an activity that is developmentally appropriate for your students.
- Grade level groupings are color-coded for easy identification.
  - K-2 (teal)
  - K-5 (purple)
  - o **3-5** (red)
- The BEPA 2.0 Activity Card Set includes an index that allows you to quickly find an activity that suits your needs. The index consists of icons that reflect whether an activity is best suited for the classroom environment (represented by a window and the word "In" on individual activity cards), a large outdoor or gymnasium space (represented by a sun icon and the word "Out" on individual activity cards), or both (represented by a sun and window icon).



 In addition, we provide icons that convey whether an activity includes music or a song (musical note), a nutrition theme (pear), or requires equipment (gym bag). All equipment needed for a BEPA 2.0 activity can be found in the BEPA 2.0 Toolkit or in your classroom. Most equipment could be substituted with easily found classroom or household supplies!





## How to Implement BEPA 2.0 into Your Classroom (cont.)

 All of the information included in the index regarding a given activity is also included on that activity's page. Where applicable, the amount and type of equipment necessary to play the game is also listed.
 Top of Activity
 Bottom of Activity



- The top section of an activity card provides instruction about how to deliver the
  activity in alignment with PE and HE standards. It also provides tips and variations in
  game rules in order to increase relevance for different grade levels or better suit the
  varying developmental levels of students within a single classroom.
- The bottom section of an activity card includes the activity's Standard Connections.
  These provide opportunities to reinforce PE and HE concepts, gauge how well your students understand them, and encourage students to share what they learned in class at home with their families.
- The Standard Connections component of an activity requires about 2-3 minutes in addition to your activity time, and only needs to be done the first time you introduce an activity. It can then be used again, one or several weeks later, as a strategy to assess student progress. Elements of the Standard Connections component include:
  - Did You Know? Provide one or two reinforcing facts that relate to the activity and the PE/HE standards.
  - Show Me, Tell Me. Spend 1-2 minutes to let students share what they learned during the activity through verbal communication and/or demonstrations.
  - Try This at Home. Encourage students to engage family and friends in their learning. If you have the resources available, you can send home a PDF copy of the Take-Home Activity Sheet that corresponds to the day's activity.
  - Each card also includes a list of icons that reflect the HE and PE standards addressed by the activity (blue for PE and grayscale for HE).





## **Physical Activity Intensity**

- A frequently mentioned concept throughout the BEPA 2.0 curriculum is physical activity intensity. To help teachers and students better understand and apply varying intensity levels to BEPA 2.0 games, we have included a page in the BEPA 2.0 Activity Card Set that is dedicated to discussing intensity.
  - We suggest that you go over this information with your students prior to performing BEPA 2.0 activities, revisiting it periodically to remind students how to move at an intensity level that is optimally health promoting!
- The intensity demonstration is found on page 5 in the BEPA 2.0 Activity Card Book.

BEPA 2.0 Guidance

## Activity Intensity Practice: K-5

The goal of BEPA 2.0 is to enable short bouts of moderate intensity physical activity at school. To meet this goal, students must learn the difference between light, moderate, and vigorous intensity activity.

#### Teachers, before you introduce BEPA activities to students:

- Download a metronome application that works for your circumstances.
- Practice using the metronome. You will need to vary the cadence from 100-140.
- Explain the concept of intensity using the metronome as described below:
  - Move your body to the cadence of the metronome (march in place or walk).
    - Sedentary/Inactive—the metronome is not on, everyone is sitting
    - Light Activity—the metronome is set at <100 steps per minute (spm)
    - Moderate—the metronome is set between 120 and 130 spm
    - Vigorous—the metronome is set at ≥ 140 spm

Step rate cut-points are based on current evidence. Grades 3–5 can take heart rate measurements at each intensity level and compare differences between intensity levels.

Watch the **BEPA 2.0 Intensity Demonstration** on our BEPA 2.0 Website!

5

 To see a visual representation of what various intensity levels look like, check out the <u>BEPA 2.0 Intensity Demonstration</u> on our website. The video walks students through examples of light, moderate, and vigorous intensity activities, as well as provides physiological cues for each intensity level.





## **Classroom Management**

#### **General Tips**

- Before you begin using BEPA 2.0, establish clear rules for each of your classes. Rules should focus on ensuring safety and proper use of toolkit materials.
- Before starting an activity, increase the engagement of students by getting them
  moving. Try having the students indicate that they are ready for the activity by
  jogging in place.
- As explained in the BEPA 2.0 Toolkit Instructions, be sure to demonstrate all the
  movement skills needed for an activity prior to beginning that activity. If children
  struggle with particular movements or skills, modify the activity so everyone can fully
  participate.
- While facilitating an activity, remember to utilize any "attention getters" or "freeze" words you may have established with your class that indicate to students that they should immediately stop what they are doing. This will help to ensure safety and allow you to regain control of the class at any time.
- Students who are unengaged may find the activity too easy, too hard, silly, or embarrassing. Try to gauge why children are not participating and modify the activity accordingly. To increase student engagement, try doing the activity with your students.
- After finishing an activity, try using some "cool down" movements to bring the energy levels of students down to a resting state. For example, have students take a deep breath and slowly raise their arms above their head, then have students slowly lower their arms back down to their sides and exhale.

Additional classroom management information for physical activity can be found at the <u>PE Central website</u>.







## Classroom Management (cont.)

#### **Classroom Arrangement**

Some classroom arrangements are more conducive to encouraging physical activity than others. Below are six examples of classroom layouts that support a physically active classroom environment.

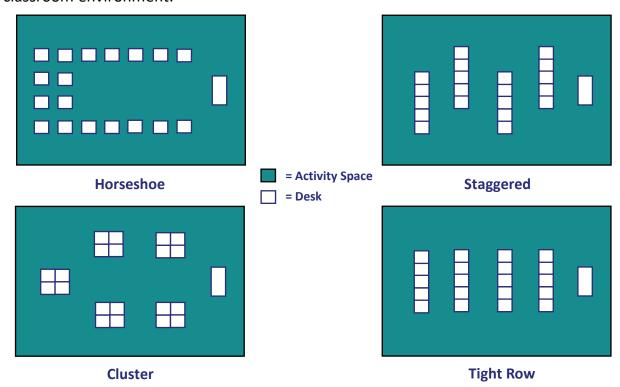


Figure 1. Adapted from the ABC for FitnessTM Teacher Manual. © 2006 David Katz, Revised September 2008.

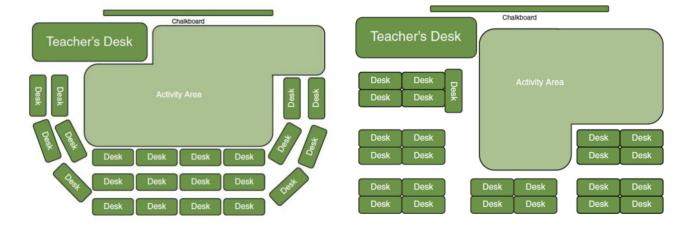


Figure 2. Educating the Student Body: Taking Physical Activity and Physical Education to School (2013). Link: https://www.nap.edu/catalog/18314/educating-the-student-body-taking-physical-activity-and-physical-education





## **Inclusive Physical Activity Guide**

BEPA 2.0 can help you provide an encouraging and accessible classroom for physical activity that enables all of your students to be physically active and meet physical and health education standards.

Watch the <u>BEPA 2.0 Modifications Webinar</u> on our website to learn more about making activities more inclusive for students of all abilities. Additionally, use the tips below to encourage participation among all students and create a welcoming activity environment.

- BEPA 2.0 has been shown to be an effective strategy to increase the minutes children are physically active while at school.
  - Tip: Create a welcoming environment by doing the movements with the students at their specific skill level. Use the *Standard Connections* section of the activity cards to encourage students that the goal for the BEPA 2.0 activities is to be physically active.
- BEPA 2.0 encourages light, moderate and vigorous physical activity.
  - Tip: Encourage students to move in whatever way is most comfortable for their individual body.
- Students can become discouraged when they believe they are unable to do physical movements.
  - Try this: Encourage students to do movements that they are capable of performing, such as slower and smaller movements.
- Every student is going move at different skill levels.
  - Try this: Acknowledge different physical abilities by demonstrating a physical movement in its most simple form as option 1, then provide a more advance version of that movement for students who need to be challenged. (E.g., Option 1: step your feet together; Option 2: small hop your feet together; Option 3: jump your feet together)

Respect individual learning styles. People learn best in many different ways. Make sure all activity instructions are *demonstrated* for visual learns, *described* clearly for auditory learners, and *practiced* for kinesthetic learners.

More information about inclusive physical activity can be found at the National Center on Health, Physical Activity, and Disability (NCHPAD) website.

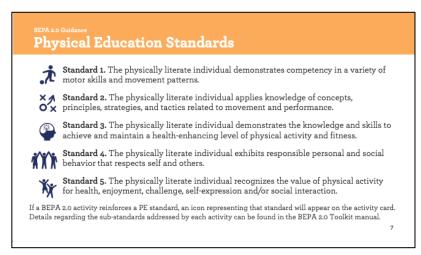


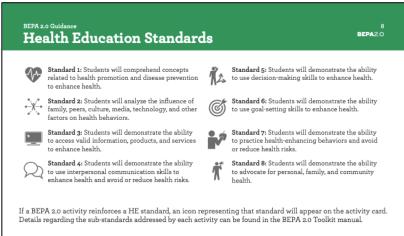


## **Physical and Health Education Standards**

The BEPA 2.0 Toolkit is a resource to provide classroom-based physical activity that aligns with <a href="Physical Education">Physical Education</a> (PE) <a href="Standards">standards</a> published by the Society of Health and Physical Educators (SHAPE) as well as <a href="Health Education">Health Education</a> (HE) <a href="Health Education">standards</a> published by the American Cancer Society and others.

The images below identify how BEPA 2.0 presents the standards. Look for these icons on each activity card's *Standard Connections* page to see which standards are being met during each activity.





For a more comprehensive understanding of the specific grade-level outcomes associated with each standard that are being met (when you implement an activity as written), refer to the **PE & HE Standards Met by Each BEPA 2.0 Activity** documents located on the Educator Resources page of the BEPA 2.0 website.





## **Physical Activity Guidelines for Americans**

BEPA 2.0 physical activity promotion and best practice recommendations are informed by the 2018 Physical Activity Guidelines for Americans. The PA Guidelines provide clear recommendations regarding the amount of physical activity individuals of every age should be doing for optimal health.

Three primary components of the recommendations include, **How Much, What Type,** and **How Hard?** For children in grades K-5 who represent the BEPA 2.0 target audience, the recommendations are:

#### 60 Minutes of Aerobic activity or more every day!

 Most of the 60 or more minutes a day should be either moderate- or vigorous-intensity aerobic physical activity, and should include vigorousintensity physical activity at least 3 days a week.

#### Muscle-Strengthening activity on at least 3 days every week!

 As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least 3 days of the week.

#### Bone-strengthening activity on at least 3 days every week!

 As part of their 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days of the week.

#### **Additional Resources**

For more information about the SHAPE Standards and Guidelines, visit: https://www.shapeamerica.org/standards/default.aspx

For more information about the Physical Activity Guidelines for Americans, visit: <a href="https://health.gov/paguidelines/">https://health.gov/paguidelines/</a>

For more information about the Dietary Guidelines for Americans, visit: <a href="https://health.gov/dietaryguidelines/">https://health.gov/dietaryguidelines/</a>





## **BEPA 2.0 Glossary of Terms**

**Aerobic Physical Activity:** Promotes cardiovascular (heart) health. It is important to spend at least 60 minutes a day doing moderate to vigorous physical activity. This may include activities such as running, jogging, walking, swimming, and dancing.

Balance: The body's ability to maintain stability while stationary or moving.

**Balance Activities:** Activities that help build coordination and lower the risk of falls, especially as we get older. Balance exercises are not hard and can be a great activity for children, parents, and grandparents to do together! Practicing balance (e.g. standing on one leg, walking heel-to- toes) enables you to be able to do all activities more effectively and with greater stability.

"Benefit Dense" Activity: Activity that includes many different fitness components and benefits such as strengthening, cardiovascular, balance, flexibility, and coordination. Examples of benefit dense activities include ice-skating, gymnastics, and rock climbing.

**Bone Building (Strengthening) Activities:** Weight bearing activities such as jumping, soccer, dance, gymnastics, and running games (with lots of direction changes and stops/go's such as tag) are great for bone building. It's important to include some activities that are good for bone such as jumping and muscle strengthening exercises.

**Cardiovascular Fitness:** A health-related component of physical fitness describing the ability of the circulatory and respiratory systems to supply oxygen during sustained physical activity.

**Coordination:** Coordination in fitness refers to the ability, especially of several muscles or muscle groups, to smoothly execute complicated movements.

**Empty Calories:** Calories from solid fats and/or added sugars that provide no nutritional benefit.

**Energy Balance:** The balance of calories consumed from foods and beverages (Energy In) with calories burned from physical activity (like walking, climbing stairs, playing sports or playing at recess, getting dressed, eating, cleaning your room, reading, or sleeping (Energy Out).

**Flexibility:** The range of motion at a joint. Flexibility exercises are important because they improve the ability of a joint to move through its entire range of motion and help protect muscles.





**Flexibility Activities:** These activities may help to reduce the risk of injury when doing other activities. Flexibility exercises (e.g. stretching) keep your muscles healthy and limber and allow muscles to move through an entire range of motion.

**Food Groups:** Vegetables, Fruits, Grains, Protein and Dairy.

**Food Hero:** An online resource that provides a host of kid friendly healthy recipes for breakfast, lunch, and dinner. It was created by the OSU Extension Service as an initiative of the Oregon Supplemental Nutrition Assistance Program Education (SNAP-Ed) and is funded by the OSU Extension Service, Oregon Department of Human Services, and USDA.

**Healthy Food:** Foods from plants or animal products that provide essential nutrients and energy for growth, health and life. Particularly vegetables, fruit, lean protein, whole grains, and fat free dairy items.

Moderation: Not doing something excessively. Avoiding extremes.

**Moderate Intensity Physical Activity:** Any activity done at 3 to 5.9 times the intensity of rest. Typically, you can talk during these activities but cannot sing. Moderate intensity physical activity can be very different for every individual.

**Movement Skills:** The fundamental skills involving all parts of the body that are necessary for the building of movement concepts. Examples of movement skills are walking, running, chasing, turning, balancing, jumping, throwing, kicking, and dribbling.

**Movement Concepts:** Concepts that can be applied to movement skills and can describe how a movement skill is performed. These concepts are: direction, levels, space, speed, time, force, and body shapes. Examples of these include dribbling at faster and slower speeds or pivoting while running. These concepts are key components of the PE Standards.

**Body Shapes:** The forms a body can take: Stretching, bending, curling, twisting, wide, narrow.

**Direction:** The pathway and orientation of a movement: Forward, backward, left, right, clockwise, counter-clockwise, up, down, over, under, through, straight, curved, zigzag.

**Force:** The power with which an object is moved. For example: lightly tossing a ball to a partner (low force) versus kicking a soccer ball into a goal (high force).





**Levels:** The zone where an action is performed: Low, medium, high. For example: basketball would combine medium levels (dribbling) and high levels (jumping).

**Space:** The location of objects and others in relation to one's own body.

**Speed:** The change in velocity of a movement.

**Muscle Strengthening Activities:** Activities that increase skeletal muscle strength, power, endurance, and mass. Children and adolescents should include musclestrengthening activities at least 3 days a week. Muscle strengthening activities include: playing games such as tug-of-war, push-ups, sit-ups and climbing.

**Physical Activity:** Any bodily movement produced by the skeletal muscles that uses energy.

**Physical Activity Benefits:** Benefits of physical activity include: physical benefits such as reduced risk for disease, weight management and increased energy, emotional/mental benefits such as improving your mood, and social benefits because physical activity is fun and a great way to make new friends.

**'Personal' Space:** When each child is standing, they should have enough room so that when they spread out their arms they are not touching other individuals.

**Pulse:** The rhythmical throbbing of arteries produced by the regular contractions of the heart. Your pulse can be found by placing the pointer and middle fingers of the right hand on the left wrist, in line with the left thumb, just below where the wrist bends. By counting your pulse you can determine the heart rate response during a light, moderate, and vigorous activity.

**Sedentary activities:** Sedentary activities include: sitting in front of the computer, watching TV, and playing video games. Two or more hours of inactivity are discouraged for children, especially during daytime hours.

**Strength:** The ability of a muscle, or group of muscles, to exert force.

**Tandem Walk:** A balance exercise in which the toes of the back of the foot touch the heel of the front of the foot at each step.

**Time (movement concept):** Conducting actions in a limited time period or having to complete a movement in a set time.





**Unhealthy Food:** Foods high in solid fats, added sugars, and salt. These are foods that should be avoided or eaten on very rare occasions.

**Vigorous Intensity Physical Activity:** Any physical activity done at 6 or more times the intensity of rest (on an absolute scale). These activities may include walking up hills and running games. If you are doing a vigorous activity you can only say a few words without stopping to catch your breath. It is recommended children and adolescents participate in vigorous activity at least 3 days per week. Vigorous intensity physical activity can be very different for every individual.



#### References

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- 2. 2018 Physical Activity Guidelines Advisory Committee. 2018 Physical Activity Guidelines Advisory Committee Scientific Report. Washington, DC: U.S. Department of Health and Human Services, 2018.
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