



Guidelines for Facilities, Equipment and Instructional Materials in Elementary Education

***Council of Physical Education for Children
A Position Paper from
The National Association for Sport and Physical Education***

The Council on Physical Education for Children (COPEC) of the National Association for Sport and Physical Education (NASPE) recommends quality, daily physical education that is developmentally and instructionally appropriate be available to all children. Appropriate instructional practices in physical education recognize children's development and movement abilities. Quality physical education incorporates practices, derived from current research and documented teaching experiences, into a method of instruction that maximizes opportunities for learning and success. NASPE's publication *Appropriate Practices for Elementary School Physical Education* (2000) highlights these best known practices. National content standards, specifying what students "should know and be able to do" are featured within the NASPE publication, *Moving into the Future: National Physical Education Standards: A Guide to Content and Assessment* (1995). Together these documents provide programmatic support with the ultimate goal of ensuring that children are physically educated.

In addition to appropriate instructional practices, relevant content and ongoing assessment of student learning, there are other areas critical to the design and implementation of a quality elementary physical education program. The purpose of this document is to provide *guidelines* relevant to *facilities, equipment and instructional materials* that support and facilitate the design and implementation of quality elementary physical education programs and enhance children's opportunities to learn (see *Opportunities to Learn Standards for Quality Elementary Physical Education Document*, NASPE/COPEC).

Guidelines for Facilities:

1. Boards of Education, through their school budget process, fund:
 - a) the purchase and maintenance of appropriate and sufficient physical education supplies and equipment; and
 - b) equitable physical education facilities and maintenance of these facilities for each school.
2. Physical education teachers, physical education program administrator, and school administrators should jointly:
 - a) develop standards for appropriate supplies and equipment; and procedures for purchasing.
 - b) provide input to plans for new physical education facilities.
3. School and community facilities and programs are designed and implemented to support and complement one another in serving children's needs.
4. There is a dedicated facility for the physical education instructional program.
5. Adequate space, ranging from 110 sq. ft. to 150 sq. ft. per child, for learning movement activities in which children can move freely and safely. The student/teacher ratio should be 25:1 per class. Intact classes should not interfere with one another.
6. Adequate space, ranging from 400 to 600 sq. ft. with a height of 12' – 15', is available for safe and proper storage of physical education equipment.

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7. Physical activity space is designed to facilitate instruction free of distractions and “pass-through traffic patterns”.
8. Restrooms and drinking fountains should be located close to the instructional facilities; if drinking fountains are in the instructional area they should be recessed.
9. Office space, ranging from 120 to 240 sq. ft. in size, for the physical education teacher is provided to allow students convenient access to their teacher for consultation and/or assistance.
10. A learning environment with adequate acoustics (“sound baffles”) permits children to safely participate in all phases of instruction.
11. Indoor facilities, with proper flooring and lighting, are clean and sanitized on a daily basis. Floor surface should be either hardwood with cushion, or a roll out synthetic product. The minimum amount of light should be 30-foot candles.
12. All-weather outdoor surfaces are properly marked with circles, lines, courts, etc. to permit participation in a wide variety of activities and are appropriate for students with varied ability levels.
13. Outdoor areas are available for teaching and:
 - a) are free from safety hazards (such as glass, debris, water),
 - b) located away from occupied classrooms,
 - c) have clearly defined physical boundaries,
 - d) are far away from parking lots or streets [i.e., no closer than 100 yards], or are separated by barriers that prevent vehicles from entering the area.
 - e) are close enough to school building to permit access to equipment, and
 - f) provide shelter in case of inclement weather.
14. Natural play areas are available to facilitate and encourage creative and exploratory play.

Features of Outdoor Facilities for Physical Education

Outdoor facilities, playgrounds, and/or activity areas for an elementary physical education class should be accessible for all children. An outdoor area includes field space and surfaced areas, which allow accessibility and safe participation for all children.

A separate hard surface area, either asphalt or a synthetic product, (50 x 80 square feet; 110 square feet per child) is available only for outdoor physical education instruction. Isolation from the general playground should be facilitated to insure physical education instruction without recess interruptions.

Field space is available for physical education use and allows for instruction without recess interruption. Fields are leveled, drained, and turfed and regular maintenance is scheduled. Permanent structures such as backstops, volleyball standards, benches, and goals are inspected and serviced on a regularly schedule plan.

Outdoor Facilities for Recess and Other Activities

Outdoor areas may also include apparatus areas, play courts, covered play space, and age-specific play areas with appropriate ground cover. Standards for outdoor activity areas call for a minimum of 8 to 10 acres of available space. Student exploration, creative and imaginative play can be fostered when space for developmental playgrounds are provided and the landscape features hills or valleys.

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Features of Indoor Facilities

Every elementary school should include indoor physical education facilities configured as either a gymnasium or a multi-purpose room. The gymnasium or multi-purpose room should measure approximately 70' x 100' feet with a minimum of 110 square feet allotted per child. The primary use of the indoor facility is for physical education instruction. If the indoor facility is used for other purposes (e.g., school lunches, school convocations) the instructional program in physical education should be scheduled to maximize use of the facility for instructional time.

It is of utmost importance that the gymnasium be free from potential safety hazards [such as protruding structures]. If the gymnasium also serves as a cafeteria, lunch tables should be recessed into walls. Boundaries of the gymnasium should be clearly defined to exclude the area in which tables or other equipment is stored. There should be a minimum of 7-9 foot area between stored items and the instructional area.

The flooring of the gymnasium should be kept clean. Safe flooring surfaces include hardwood or tile with adequate cushioning or a synthetic composition that has a resilient surface. Floor markings facilitate a variety of activities, but the number of different markings (e.g., lines, circles, shapes) should be limited. Temporary markings for specific purposes should be removed when no longer needed.

Wall and ceiling acoustical treatments should be included to create adequate sound quality. Children should be able to fully participate in physical education activities and simultaneously hear their peers and teacher at all times. The gymnasium should be well lighted [minimum of 30 foot candles] and free from shadows. Lights should be covered with protective grids. The ceiling should be a minimum of 20' and illumination should be sufficient to facilitate the instructional program (e.g., ball handling activities: striking with the body; striking w/paddles; volleyball). Gymnasium walls should have a smooth or flat surface from the floor up to 10 to 15 feet of height. Walls can then be used for a variety of instructional purposes (e.g., using the wall to throw toward or to strike toward). The indoor physical education facility should have easy access to outdoor instructional areas in order to facilitate quick transitions from indoor to outdoor facilities.

Equipment Storage, Marking and Inventory

Careful consideration should be given to adequate storage space [400 to 600 sq. ft.; 12'-15' height]. Storage areas are planned to allow for adequate space with reasonable ease of access to needed equipment. All physical education equipment should be marked for purposes of keeping an updated inventory and to guard against loss or theft. Equipment used by classroom teachers and/or for recess should be kept separate from the physical education inventory.

Features of Indoor Equipment

The National Standards for Physical Education Content Standard Number 1 states: "A physically educated person demonstrates competency in many movement forms and proficiency in a few movement forms" (see *Moving Into the Future - National Standards for Physical Education - A Guide to Content and Assessment*, a publication of AAHPERD/NASPE, 1995). To successfully address this standard, sufficient and developmentally appropriate equipment is essential.

The following equipment list provides a foundation for an elementary physical education curriculum based on the National Standards for Physical Education (see *Moving Into the Future - National Standards for Physical Education - A Guide to Content and Assessment*, a publication of AAHPERD/NASPE, 1995). Skill themes (i.e., throwing, catching, kicking, striking, bouncing, jumping/landing, skipping, etc.) and movement concepts (i.e., spatial, effort and relationship awareness) establish the base for educational game, dance, and gymnastic experiences. The size, texture, weight, and/or color of equipment should be varied to accommodate children's level of motor development and physical growth. Colors can also be used for organizational and instructional purposes.

General Equipment**Quantity**

| | |
|---|-----------------------|
| Chalk or white board | 1 |
| Bags To Carry Balls | 6 |
| Ball Inflator | 1 |
| Ball Repair Kit | 1 |
| Bulletin Board | 1 - 2 |
| Clipboards | enough for ½ of class |
| First Aid Kit | 1 |
| Measuring Tape 100', 50' | 1 |
| CD/Tape Player | 1 |
| Crates or Baskets for Storage | 5 |
| Field marker (for chalking lines) | 1 |
| AV Cart with electrical outlet for CD/tape player | 1 |

Educational Games**Skill Themes: Bouncing, Striking, Kicking, Catching, Throwing**

| <u>Equipment Items</u> | <u>Equipment Size</u> | <u>Quantity for Class Size of 20-25</u> |
|--|---------------------------------|--|
| Playground Balls | 5", 6" and 8-1/2" | 17, 17, and 30 |
| Balls for Striking w/body | 8 & 9" | 15-18 of each |
| Beach Balls | 24", 45" | 18, 25 |
| Foam Balls | 7 or 8 " | 25 |
| Fleece or Yarn Balls | 3" (get washable) | 25 |
| Balloons | 11" | 36-72 |
| Squish Balls | 3" | 17-18 |
| Foam Balls-Bounceable | 4 & ¾ " | 30 |
| Bean Bags | 4", 5" | 30 |
| Flying Disks | 11" | 30 |
| Deck Rings | 7" diameter | 17-18 |
| Rag Balls | 9" | 17-18 |
| Plastic Bottle Bats | 11 & ½ " handles | 17-18 |
| Soft-Bat | 24", 27" & 29" | 5 of each |
| Lollipop Paddles (Styrofoam Heads) | 8" & 10" diameter w/12" handles | 17-18 each |
| Scoops | | 30 |
| Youth Tennis Racquets | 21" & 24" | 30, 30 |
| Foam Blade Hockey Sticks w/Styrofoam pucks | 40", 45" sticks | 30 of each |
| Portable Gym Standards | 150 lb. minimum | 8 (or 4 pairs) |
| Nets for Standards | | 4 |
| Cones Or Jug Markers | 12", 18", 24" | 26, 14, 14 |
| Pinnies, Sashes or Vest (3 or more colors) | | 30 |
| Scooter boards w/handles | | 30 |
| Spotmarkers | | 20 |
| Basketballs (junior size) | | 30 |
| Adjustable Basketball Goals | 7' - 10' | 4 - 6 |
| Soccer Balls | Sizes 4 & 5 | 18 & 30 |
| Parachute | | 1 |

Educational Dance
Skills Themes: Locomotor & Non-locomotor Skills

| <u>Equipment Items</u> | <u>Equipment Size</u> | <u>Quantity for Class Size of 20-25</u> |
|--|-----------------------|---|
| Plastic Hoops | 30" and 36" diameter | 20, 20 |
| Styrofoam Hoops Holders (2 per hoop) | | 30 |
| Rhythmic Equipment – | | |
| -ankle wrist bells | | |
| -rain stick | | |
| -rap stick | | |
| -drum w/mallet | | |
| -lumi sticks | 12" L & ¾" diameter | 30 |
| Stretchy Material Bands | 36"L & 6" W | 30 |
| Nylon Scarves | 54" x 54" | 30 |
| Tinikling Sticks/Boards and Jump Bands | | 15 pairs |
| CD/Tape Player | | 1 |
| Cordless Microphone | | 1 |
| Sound System | | 1 |

Educational Gymnastics
Skill Themes: Rolling, Jumping/Landing, Balance, Transfer of Weight, Hanging/Swinging

| <u>Equipment Items</u> | <u>Equipment Size</u> | <u>Quantity for Class Size of 20-25</u> |
|---|--|---|
| Foam Vaulting Trapezoid | 3-4 sections | 1 |
| Styrofoam Shapes (circles, triangles, ovals, wedge, etc.) | | 8 |
| Mats | 4' x 6' or 5' x 10' 2" thick, 100ILD foam | 3-4 students per mat ; 7-8 mats |
| Landing Mats | 4" Thick | Minimum of 1 |
| Incline Mats | 36"W x 72"L | 1 |
| Balance Beams/Benches | 12' L, 12" W | 1 or more |
| Balance Boards | 9"@ x 29 1/2" L | 12-13 |
| Jumping Boxes (Foam Shapes of Varying Heights) | 12"-24" | 4-6 |
| Trestles | 5', 6' & 7' | 2 of |
| each | | |
| Sliding Boards to Connect to Trestles | 12" L, 10-12" W | 2 |
| Connecting Ladder | | 1 |
| Hanging Ropes | | 1-2 |
| Jump Ropes | 7', 8', 9' & 16' length (plastic Segments for beginners; speed rope for experienced jumpers) | 13, 13, 13, 13 |
| Stretch Jump ropes "Magic Ropes" | | 8-12 |
| Wands | | 12-13 |

Physical Fitness Assessment

| | |
|---|-----|
| Sit and reach box for measuring flexibility | 2-4 |
| Stopwatches | 4-6 |
| Skinfold Calipers | 6 |
| Modified Chin Up Bar & Standards | |
| Fitness Assessment Package | |

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Resources

NASPE Documents

Appropriate Practices for Elementary School Physical Education (2000). Developed by Council on Physical Education for Children (COPEC) of the National Association for Sport and Physical Education. AAHPERD Publications: Reston, VA.

Moving into the Future, National Standards for Physical Education: A Guide to Content and Assessment. (1995). Developed by the National Association for Sport and Physical Education. Mosby-Year Book, Inc.: St Louis, MO

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