ORGANIZING ADAPTED PHYSICAL EDUCATION FOR CHILDREN WITH VISUAL IMPAIRMENTS IN SCHOOL SETTINGS

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Abstract. *This article outlines practical, evidence-informed approaches to organizing adapted physical education (APE) for children with visual impairments in school contexts. The core objective is to ensure safe, inclusive participation while developing motor skills, physical fitness, and social competence through structured lesson design, environmental adaptation, multi-sensory instruction, and individualized progression. The approach is aligned with international physical activity recommendations for school-aged children (≥60 minutes/day of moderate-to-vigorous activity, including muscle- and bone-strengthening activities at least 3 days/week) and inclusive-quality physical education principles.*

Keywords*: adapted physical education; visual impairment; inclusive physical education; school-based physical activity; safety management; multi-sensory instruction; task modification; orientation and mobility; motor skill development; individualized progression.*

INTRODUCTION

Adapted physical education for students with visual impairments (including blind and low-vision learners) should be planned as a structured, barrier-reducing learning environment rather than as a simplified version of regular PE. Quality physical education emphasizes inclusion, appropriate frequency and variety of activity, and meaningful learning outcomes, meaning that participation is not "presence in the gym," but active engagement with achievable tasks and clear progress goals. In parallel, children and adolescents should accumulate at least 60 minutes daily of moderate-to-vigorous physical activity and regularly include muscle- and bone-strengthening activities; well-designed school PE is one of the most reliable platforms for reaching these targets, especially for learners who face access barriers outside school.

The starting point for organization is a brief functional profile of each learner: what the student can see (contrast sensitivity, visual field limitations, glare sensitivity), how they move in space (orientation and mobility skills), balance control, confidence, and any medical restrictions communicated by parents/health professionals. Because visual impairment exists on a spectrum, APE should be built around differentiation—the same lesson goal delivered with different task constraints (e.g., closer distance, slower tempo, larger target, more auditory cues). Practical guidance for including children with visual impairments in general PE consistently stresses that teachers should avoid assumptions, provide equal

opportunities, and plan instruction so students can meet learning standards through appropriate adaptations.

Methodology. Safety and learning quality depend heavily on environmental design. In school gyms and outdoor areas, clutter-free lanes, predictable layouts, and “fixed reference points” reduce anxiety and collisions. Boundaries can be made tactile (mats, low foam edging, textured tape) and orientation cues can be made audible (teacher’s voice anchor, clap/whistle cues, beepers). For low-vision students, contrast and lighting control matter: strong contrast between equipment and background, reduced glare, and consistent lighting can substantially improve performance and confidence. These adjustments reflect a broader inclusive PE principle: when the environment is designed to reduce barriers, students require fewer “special exceptions” and can participate more independently.

Instruction should rely on multi-sensory teaching. Verbal cues must be short, sequential, and concrete (“feet shoulder-width,” “soft knees,” “step–plant–jump”), supported by auditory timing (counting, rhythm claps) and, where appropriate and consented, tactile demonstration (student feels arm position or body alignment). A consistent strategy is to replace vague directions (“over there,” “to the left”) with stable references (“toward the wall,” “toward the door,” “two steps from the mat edge”). The SHAPE America guidance highlights that systematic cueing, clear structure, and planned modifications enable children with visual impairments to progress toward full participation and self-determination.

A practical way to structure lessons is to keep the same learning objective but modify the TASK constraints: equipment, space, rules, and time. For example, ball skills can shift from a standard ball to a larger ball with sound, from fast throws to controlled rolling, and from open space to a tactile “lane” between cones. Locomotor skill work can be organized as short stations: guided warm-up in a defined corridor; balance tasks on stable surfaces progressing to softer mats; jumping and landing mechanics using audible “stick” signals; then simple small-sided games with reduced speed and clear roles. Peer-support systems (“buddy/peer tutoring”) can be added to increase safety and social inclusion, but the goal should remain independence, not permanent dependence on a helper.

Discussion. Progression should follow a simple logic: accuracy and control first, then speed and complexity. This is especially important because fear of collision or falling can limit effort and reduce the health benefits of participation. When tasks are safe and predictable, intensity can be increased gradually to contribute to recommended activity levels. Monitoring should prioritize individual improvement over comparison with sighted norms: balance stability, movement quality, successful repetitions, time-on-task, and confidence indicators (willingness to try, reduced hesitation). This aligns with inclusive education principles: meaningful assessment shows progress and informs the next adaptation rather than excluding learners from the standard curriculum.

Conclusion. In summary, organizing APE for children with visual impairments in school settings is most effective when it combines (1) safe, structured environments, (2) multi-

sensory instruction, (3) systematic task modifications, and (4) individualized progression and assessment. This approach supports both health-oriented goals (daily physical activity recommendations) and educational outcomes (motor competence, social participation, and self-efficacy).

REFERENCES:

1. UNESCO. (2015). Quality Physical Education (QPE): Guidelines for Policy-Makers.
2. UNESCO. (n.d.). Promoting Quality Physical Education (QPE).
3. World Health Organization. (n.d.). Physical activity: Children and adolescents aged 5–17 years.
4. Bull, F. C., et al. (2020). WHO guidelines on physical activity and sedentary behaviour / supporting publication.