

**Washington State Association of School Psychologists  
Professional Practice Standards Guidelines in Evaluation and Identification of  
Students with Orthopedic Impairment**

**Background**

The category of Orthopedic Impairment was developed to provide a means for identifying and serving those students whose motor functioning was significantly different from that of their peers to the extent that it adversely affects their school performance. This category has been in the federal regulations since initial development of PL 94-142 and was derived from the field of orthopedics. The term orthopedia (orthos, meaning straight: paidos, meaning child) was first used in the title of a book about childhood deformities by Nicholas Audrey in 1741 (Cassidy JT, Perry RE 1990)(Tecklin's book). Typically students considered for this category have a history of chronic disability diagnosed by the medical community through routine care as infants and young children. In addition, students who are permanently injured, involving muscles, joints or bones, usually are diagnosed and receive rehabilitation services.

The purpose of this paper is to clarify both appropriate identification and appropriate evaluation procedures to demonstrate an adverse educational affect attributable to the disabling condition and to determine the need for special education services, including specially designed instruction, related services and supplementary aids and services.

**WAC 392-172-122**

The definition of orthopedically impaired in WAC 392-172-122 states: "students who are orthopedically impaired are those who lack normal function of muscles, joint or bones due to congenital anomaly, disease or permanent injury, and such conditions adversely affect their educational performance and require specially designed instruction."

According to the Federal Regulations orthopedic impairment means "a severe orthopedic impairment that adversely affects a child's educational performance. The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of member, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures)." Federal Regulations part 300 – Assistance to states for the education of children with disabilities – Subpart A-general –definitions – 300.7

The current professional practice standards suggest that students who are orthopedically impaired are those who are unable to perform one or more of the physical activities/task within the following areas, which adversely affects their educational performance and requires specially designed instruction:

Self care

Mobility  
Self determination  
Physical development  
Health & Fitness

The difficulty performing physical tasks/activities must be related to their orthopedic condition.

## **Specific Eligibility Components**

### **Definitions:**

*Adversely affects educational performance:* demonstrating a link between the perceived disability and a particular aspect of educational performance. Domains of educational function include social functioning, school participation and attendance, academic achievement, and performance in school related non-academic and extracurricular activities: e.g., inability to access school at rate of their peers – such as from bus to classroom, within classroom, classroom to playground, to lunchroom, to specialists, etc; inability to handle and manipulate classroom materials at level of peers; difficulty performing typical age appropriate self-care routines and /or two handed activities, etc.

*Specially designed instruction:* organized and planned instructional activities which adapt, as appropriate, to the needs of eligible students under this chapter, the content, methodology or delivery of instruction (WAC 392-172-045)

*Self care:* e.g., eating, oral motor, personal hygiene, dressing, toileting, etc.

*Mobility:* e.g., transfers, gait, locomotion on various terrains, with or without assistive devices (wheelchair, crutches, canes, walkers), rolling, crawling, scooting, walking, etc.

*Self-determination:* e.g., self-management, self-efficacy (judgement of what one can do with whatever skills one has), self-advocacy (being able to speak for one's self), student's knowledge of the disability, etc.

*Physical development:* e.g., fine and gross motor, postural control, PE performance, recreational/leisure activities, motor coordination, muscle strength, balance, etc.

*Health & Fitness:* e.g., endurance, respiratory capacity, cardio-pulmonary, skin health, body alignment and joint movement, etc.

### **Recommended Measures and Procedures for Orthopedic Impairments:**

All students being considered for special education and related services as orthopedically impaired shall be evaluated and determined eligible for special education (specially designed instruction) and/or related services with the following criteria:

- Disability : a statement by a qualified health care professional which confirms the student's existing condition (diagnosis)
- Adverse affect on educational performance: a current physical therapy and/or occupational therapy evaluation to include systems review and description of motor performance demonstrating a link between disability and performance in educational program (adverse affect) with implications for therapy services as part of educational planning and program(need for specially designed instruction)

- Need for specially designed instruction: The evaluation group presents evidence of a dual discrepancy:
  - The student performs at a physical performance level below their peers; and
  - The student demonstrates a learning rate of physical activities/tasks below that of their peers.

The following are recommended procedures for evaluation of students with orthopedic impairments. The list includes measures that have been well developed and have been used by physical therapists and other qualified health care professionals in evaluation of orthopedic impairments. These measures are not exhaustive and professionals should consult additional resources for suggested methods of assessment. The following are recommended procedures:

- *File review* should include medical and developmental history, previous services and progress.
- *Direct observation*: observation of student by qualified professional in the school environment, e.g. classroom(s), hallway, playground, cafeteria, PE class, music, play skills, transportation (bus, van, etc), library, art, computer lab, etc.
- *Interview*: should include teacher(s), family, student, peers, community providers, etc. by phone, written communication and/or direct conversation. *Systems review* may include, but not be limited to, status of musculoskeletal and neuromuscular systems with specifics regarding spinal alignment, respiratory capacity, sensory integrity, range of motion (ROM), muscle tone, muscle strength, balance/equilibrium reactions, gait analysis, mobility, prosthetic and orthotic use, aerobic capacity and endurance, and functional skills as related to student's disability.
- *Functional performance* (adaptive behavior) review should come from a variety of sources and may include parents, student, teachers and other staff. Functional performance review should include self-help skills, self-determination skills, physical development, motor skills, and prevocational/vocational/occupational skills. Strengths as well as weaknesses should be considered when determining eligibility and adverse affects on educational performance.

The selection of evaluation procedures and the depth of the evaluation may vary based on the age; severity of problem; status; and other relevant factors in the school, home and/or community environment. Appropriate assessments may include the School Function Assessment (SFA), Pediatric Evaluation of Disability Inventory (PEDI), Peabody Developmental Motor Scales Revised (PDMS-2), Bruinicks-Oseretsky Test of Motor Proficiency (B&O), and Gross Motor Function Measure (GMFM).

These measures and systems review should only be administered, scored and interpreted by qualified professionals who have formal training in the administration, scoring and interpretation of motor and physical functioning test batteries for children and adolescents. When student's disability limits standardized testing, professional judgement may be used if functional performance adversely affects evaluation process and educational programming.

## **Discussion:**

Through the assessment process, the evaluation group identifies impairments, functional limitations, disabilities or changes in physical function and health status resulting from injury, disease or other causes to determine the need for specially designed instruction and related services.

Within the state of Washington, confusion has been present when qualifying student's as/or health impaired and orthopedically impaired. For clarification, the evaluation team should review the WAC for health impaired 392-172-124:

Students with health impairments are those who have limited strength, vitality or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment due to chronic or acute health problems, such as a heart condition, rheumatic fever, nephritis, asthma, attention deficit disorder or attention deficit hyperactivity disorder, sickle cell anemia, hemophilia, lead poisoning, leukemia, or diabetes, that adversely affect their educational performance and require specially designed instruction.

One distinction is health impaired students have a chronic or acute health problem, while orthopedically impaired students lack normal function of joints, bones or muscles.

The evaluation group must consider all areas and rule out those not needed for further assessment. These may include:

- a current academic achievement evaluation as measured by grade level assessments, progress in general education curriculum and/or standardized tests appropriate to age level if needed;
- adaptive behavior referring to the effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of age level and social group; and
- vision and hearing status.

**Supplemental Information:**

Eligibility for special education services as orthopedic impaired should be considered a separate issue from recommending PT and/or OT services. Orthopedic impairment and atypical motor performance confirmed by the evaluation does not automatically indicate a need for school therapy. Each school district has resources and service delivery providers who determine how services are delivered.

Application of the eligibility evaluation directly leads to the IEP development.

## **Bibliography**

APTA 1999 Guide to Physical Therapy Practice American Physical Therapy Association

Effgen SK The Educational Environment p. 910-933 in Campbell SK, Vanderlinden DW, Palisano RJ 2000 Physical Therapy for Children WB Saunders Company

Scope of School Services: Physical Therapy and Occupational Therapy 11/97 Regional Services for Students with Severe Orthopedic Impairments 1871 NE Stephens Roseburg, Oregon 97470

Tecklin JS 1994 Orthopedic Disorders in Children and Their Physical Therapy Management Pediatric Physical Therapy

**Developed by OT/PT representatives on ESA Task Force**

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