



Cognitive - Visual Exam Information

Revised 2011

ADAPTIVE COGNITIVE DISABILITIES (Intellectual Disabilities) EXAM INFO

DEVELOPMENTALLY DISABLED

Students in this classification comprise a widely diverse population, representing many different disabilities, which may encompass physical weaknesses and/or cognitive processing difficulties. The complexity of this classification requires knowledge of the many disabilities, their causes and effects upon skiing performance, plus commonly used medications. A complete and detailed student analysis is imperative to determine the physical, cognitive and emotional strengths/ weakness of the student. A thorough check of present medications will provide important information relative to stamina and sensitivity to the environment, as well as attentiveness, and interpersonal relations.

The ATS skill progression needs to be modified to comply with the physical and cognitive abilities of the student. Matching learning preferences with teaching styles enhances the learning environment for the student. Frequent demonstrations and a focus on small, obtainable goals, and accomplishments is one of the most successful teaching strategies. Providing individual positive feedback along the way helps to maintain the student's motivation and interest. Students who have a Developmentally Disability will benefit from an individual assessment and tailored lessons for best success!

Some examples of common developmental disabilities included:

Apraxia, Attention Deficit Disorders (ADD, ADHD), Autism Spectrum Disorder (ASD), Brain Damage, Cerebral Palsy (CP), Cystic Fibrosis, Developmental Disability (DD), Down's Syndrome, Dyslexia, Epilepsy/Seizures, Fetal Alcohol Syndrome (FAS), Fragile X, Hearing Impaired, Learning Disorders, Mental Retarded (MR), Neurological Disability (may include; spina bifida, CP, hemiplegia, stroke, muscular dystrophy), Non-Verbal Learning Disorder (NLVD), Rett Syndrome, Sensory Integration Dysfunction, Vision and/or Perception

Note: Some of the above disabilities may have no effect on an individual's cognitive ability or ability to learn new skills. EVALUATE!!!

A Student Evaluation Focus:

A thorough review of primary and secondary abilities, their cause and effect upon skill performance and cognitive processing, should be made. Students who have a cognitive or developmental disability frequently have other involvements, some apparent, some hidden. A thorough evaluation will indicate this. Often there will be medical problems, which are not evident. For example:

- 1) Past surgical procedures - Cerebral Palsy students frequently have orthopedic surgery to reduce spasticity by lengthening muscle/tendons.
- 2) Secondary or hidden disabilities (I.e. A person with Down's Syndrome may have heart complications, and/or hearing problems, or cervical weakness)
- 3) A person with Multiple Sclerosis may have intermittent sensation loss or no feeling in their legs or feet and may have hearing or visual difficulties.
- 4) A person with Diabetes may have fluctuating blood sugar levels and circulatory problems. He/she may be missing a toe(s).
- 5) A person with an acquired or traumatic brain injury may have lost their ability to judge distances, and/or may have visual perceptual or memory difficulties)

This list goes on and on. Never assume anything! Medications also create problems and need to be reviewed. Side effects of medications can, for example, make a student listless, slow to respond, nervous, sensitive to the sun, and/or muscularly weak. Medication timing is important because adverse reactions to lack of medication, or low medication levels, are common. Cancer patients, due to chemotherapy and radiation treatments, may be prone to hemorrhage upon impact and/or may have brittle bones.

Much information can be gained by asking your student about other sports and activities in which they participate. Bicycle riding indicates some balance and independent leg action; ball activities indicate eye-hand coordination and some spatial judgment. Knowledge of sports activities and interests, plus information about their daily schedule can help you to access both physical and cognitive abilities. This may also be used for teaching for transfer of skills.

Parents or significant caregivers can provide the most detailed information regarding a student's cognitive processing strengths and needs. Many schools have a Special Education Team that creates an IEP for school and parents of children in special education. This information may assist with your initial assessment of a student. One-on-one phone conversations are extremely valuable prior to the actual lesson. The more communication and assessment that can be done up front, the better!

Equipment and Physical Assists:

Students who have cognitive processing difficulties or developmental disabilities often have motor planning, balance, and fine muscle or gross motor coordination difficulties. Ski-bras, edgie-wedgies, klip-skis, hula-hoops, tethers, and sliders are utilized to increase balance and coordination. The two-point hold is often used (description of the two-point hold is found in "Bold Tracks"). Some frequently used bamboo assists are:

1. Single pole held horizontally at waist or shoulder height by both instructor and student, with instructor skiing backwards.
2. A long single pole held horizontally at waist to chest level by both student and instructor, skiing side by side.
3. Two poles, one in each hand of student and instructor, held at hip height with one person skiing in front, the other immediately in back; called horse and buggy.
4. Clam Shell - two heavy/strong poles (or two poles taped together) held by two instructors; one pole being placed under the buttocks, the other placed waist-chest height for students' hands.

TWO-TRACK PROGRESSION for DEVELOPMENTALLY DISABLED

Beginner/Novice Zone Objectives

Level 1: Welcome to Skiing/Build the Foundation

Student assessment

Medical history

Equipment selection, introduction and set up

Static balance exercises, indoor

Student / instructor communication, safety, guiding, and emergency stop

Mobility on skis and snow flat terrain

Level 2: Introduction to Flats

Mobility on skis and snow

Understand the fall line and be aware of terrain changes

Falling and getting up

Straight runs

Develop skills for skating and climbing

Refine stepping and twisting skills to turn out of the fall line

Straight runs with slight directional changes/ wedge change-ups

Stopping and slowing

Level 3: Introduction to Turning

Chair lift loading and unloading procedures

Introduction to Chair Lift and Green Terrain

Equipment and safety concerns for riding chair lift

Turn left and right

Vary turn shape, size and speed control

Skating/ Slipping

Fan progression
Linking turns
Explore different equipment and uses for hands on teaching
Master the beginner area

Level 4: Explore the beginner mountain experience
Develop greater skill blending
Vary turn shape for the terrain situation
Explore a variety of snow conditions
Ski the easiest beginner terrain on the mountain
Refine turning and edge control

Intermediate Zone Objectives

Level 5: Develop and Enhance Intermediate Movement Options
Define proper body movements and positions: fore, aft, laterally, absorption, and extension
Develop long- to medium- and medium- to long-radius turns
Carry and use poles more efficiently
Maintain an open parallel through the turn on smooth blue slopes
Develop various ways to control speed and turn shape on all green and some blue terrain
Introduction to various snow conditions and terrain

Level 6: Anchor Intermediate Skills and Movements
Medium- to short-radius turns
Link open parallel on easy blue terrain
Ski varying snow conditions
Feel carving sensations
Explore various hands-off guiding and/or teaching methods
Develop greater confidence and skill blending

Level 7: Explore Movements and Skills for Upper Level Skiing
Bump skiing on blue terrain
Short-radius turns
Total independence (keep safety in mind)
Increase and decrease speed in turns on blue and black terrain
Linked parallel turns

Advanced Zone Objectives

Level 8: Refine Advanced Movement Patterns
Carving medium- and long-radius turns
Ski short turns on the steeps

Ski blue and easy black bumps

Boot-top powder

Breaking, gliding control movements on steep terrain

Level 9: Develop Movement Options for Steep Terrain

Refine movements in short-radius turns

Develop optional movement patterns for varying speed control and conditions.

Develop optional movements and tactics for advanced bump skiing

Bumps, racing, off-piste, terrain parks and pipe.