CHAPTER 2

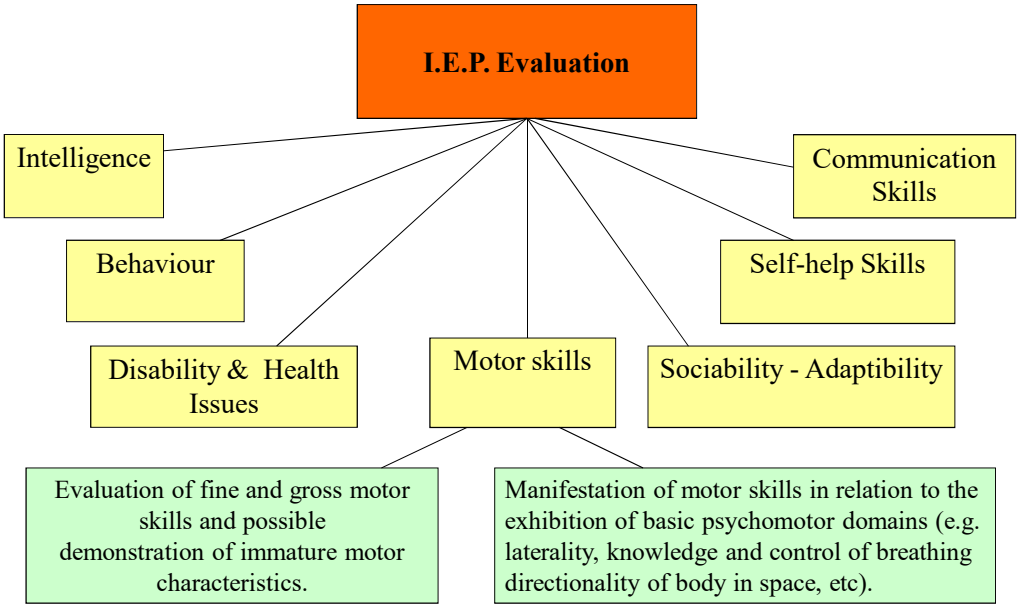
INDIVIDUALIZED EDUCATION PROGRAM (I.E.P.) OF ADAPTED PE AND SPORTS FOR ATHLETES WITH INTELLECTUAL DISABILITIES

Reading this chapter, you will understand how to:

- Provide a clear description of the present level of performance of your athlete with ID, following a holistic approach of psychomotor evaluation.
- Choose representative adaptations of teaching, activities and environment in each PE lesson, with short, middle and long-term objectives identified and lesson planning.
- Evaluate overall progress and set future goals

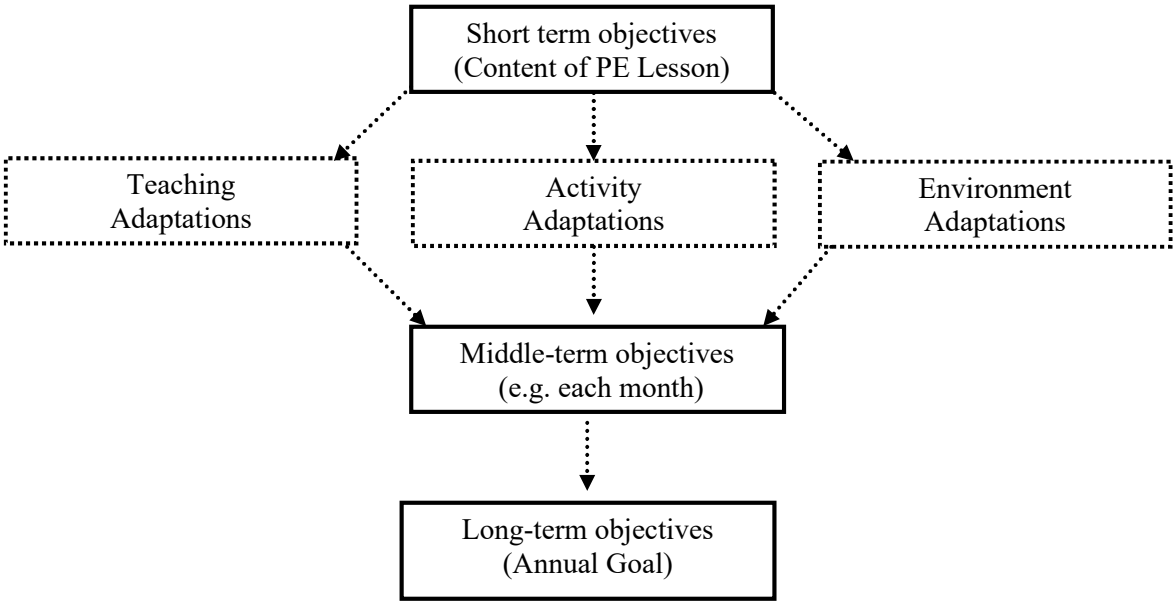
"Individualized Education Program (I.E.P) of adapted physical education (PE) and Sports" is a written statement - document designed to help the coach/adapted PE teacher to meet the unique needs of the athlete with intellectual disabilities. The I.E.P. provides a clear description of the athletes's current level of achievement and helps to develop an adapted PE program and lesson planning with short-term, middle-term and long-term goals and objectives identified.

The I.E.P consists of three sections. The first section of the I.E.P concerns athlete's evaluation following a holistic approach of assessing all domains that constitute the psychomotor development of each individual so as to define the present level of performance of each athlete with ID.

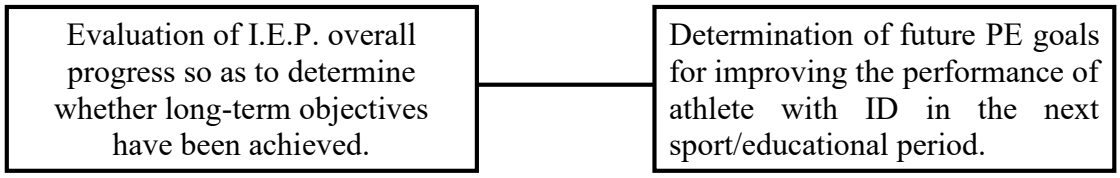


In addition to this I.E.P. evaluation, every sport coach is strongly advised to always seek for additional test sources specifically designed to assess participants with ID, such as the Brockport Physical Fitness Test (Winnick & Short, 1999), and the Special Olympics Motor Activities Training Program (MATP) Coaching Guide. The overall purpose of this I.E.P. is not to replace well known assessment tests. Rather, through its specific form is to provide an overall picture to sport coaches/physical educators who are not necessarily familiar with intellectual disability issues of how they can set their thoughts and actions in a logical order, develop exercise adaptations and goals and monitor progress of their athlete with intellectual disability throughout the whole -education or sport- season.

The second section of this I.E.P. corresponds to the intervention phase, that is, the time period from the moment the athlete with ID begins his first PA session until the moment where either the PA program is concluded or athlete's participation in the program ends and includes representative adaptations of teaching, activities and environment in each PE lesson, short, middle and long-term objectives and a blank lesson plan form for sport coaches to fill in.



Finally, the third section of this I.E.P. concerns the post-intervention phase and represents the time period commencing after the end of the last PE lesson that includes:



Connecting these three sections, the "Individualized Education Program (I.E.P) of adapted PE and Sports" can be presented in detail as follows:

Individualized Education Program (I.E.P.) of adapted PE and Sports for Athletes with Intellectual Disabilities

TeamUp Project – IO2

University of Thessaly
Department of Physical Education and Sport Science

Your Name: _____

Date of Completion: ___/___/___ Location: _____

Instructions: The present Individualized Exercise Program (I.E.P.) of adapted PE and sports is a written document created to help you cope with the teaching of the athlete with intellectual disability you are responsible for instructing and supporting within your sport/PE environment. The I.E.P. provides a clear description of the athlete's current level of achievement and helps you develop an adapted PE program and lesson planning with short-term, middle-term and long-term goals and objectives identified. When you answer each question / section please indicate the response which most closely reflects your assessment regarding athlete's abilities. You are the person who knows best how to answer these questions but also remember that every participant with ID is surrounded by a support network and 'significant others', including parents, social workers, classroom teachers, therapy specialists, etc who are important and potential resources of information. Thus, in case you would like someone to help you in filling out this report, please……

Indicate who helped: _____

Relationship to you (e.g. fellow teacher, current position, specialty etc.): _____

_____

I.E.P. EVALUATION

GENERAL INFORMATION

Name/Surname of athlete: _____

Gender: Male ☐ Female ☐

Date of Birth: _____/_____/_____

Nationality:

Name of Parent/ Guardian: _____

Address: _____

Socioeconomic status of athlete's family (tick one of the following)

Low ☐
Middle ☐
High ☐

In case the athlete is also a school student, please specify his/her instructional placement at school/physical education (PE) class: (tick one of the following)

General Class ☐
General class with suplementary assistance ☐
Inclusion class ☐
Special class in: a) primary school education ☐
: b) secondary school education ☐
Treatment centers or home ☐

DISABILITY & HEALTH ISSUES

Athlete's Primary disability: _____

In case of ID syndrome, please tick /specify as appropriate:			
Fetal alcohol syndrome	☐	Turner syndrome	☐
Down Syndrome	☐	Klineferter (XXY) syndrome	☐
Fragile X syndrome	☐	XYY syndrome	☐
Prader-Willi syndrome	☐	Noonan syndrome	☐
Apert syndrome	☐	Other (please specify)	
Williams syndrome	☐	……	
Phenylketonuria (PKU)	☐		

According to all information available, please specify athlete's:

a) Intelligence Quotient (IQ): _____

b) Intellectual disability level (mild, moderate, severe, profound): _____

c) Educational classification: _____

(educable, trainable or dependent)

Athlete's secondary disabilities: _____

_____

_____

Other health concerns: No ☐ Yes ☐ (if 'yes', e.g. concerning vision, hearing, allergies, health issues occurring during exercise, other, please specify) _____

_____

_____

_____

Medication: No ☐ Yes ☐ (If yes, please specify medication provided and possible side effects): _____

_____

_____

Physical Measures

Brain formation disorders: No ☐ Yes ☐ (If yes, please specify e.g. microcephalus, hydrocephalus, spina bifida) _____

Weight: _____

Height: _____

Body Mass Index (BMI): _____

According to BMI, the athlete is:

Underweight	☐
Normal	☐
Overweight	☐
Obese	☐

BEHAVIOR

The athlete exhibits:

Inattention (poor concentration, short attention span, apathy, tendency to answer without thinking).	Yes ☐	No ☐
Hyperactivity – Impulsivity (difficulty to relax and remain seated as expected).	Yes ☐	No ☐
Antisocial Behavior (aggressiveness, irritability, violation).	Yes ☐	No ☐
Neurotic behavior (anxiety, isolation, tendency to appear miserable or unhappy).	Yes ☐	No ☐
Psychotic behavior (repetition of same things again and again, expression of bizarre or excessive ideas).	Yes ☐	No ☐

Please describe any other behavioural issues related to the athlete_____

_____

_____

_____

SOCIABILITY - ADAPTABILITY

The athlete…

…is interested for group games/activities.	Yes ☐	No ☐
…plays in cooperation with others (social play)	Yes ☐	No ☐
…understands that games have rules and respects them	Yes ☐	No ☐
…searches actively and properly for a toy/object	Yes ☐	No ☐
...engages in pretend play with proper actions	Yes ☐	No ☐
…imitates properly a series of simple activities	Yes ☐	No ☐
…Uses gestures to show what he/she wants (e.g. pretends filling a glass to show that he/she wants to drink water).	Yes ☐	No ☐
…can bring two-three objects each time, when asked	Yes ☐	No ☐
…responds to his/her name.	Yes ☐	No ☐
…recognizes differences in self and others (e.g. gender, color of eyes and hair etc.)	Yes ☐	No ☐
…can be trusted to play outside alone or with others	Yes ☐	No ☐
…he/she often has "best friends"	Yes ☐	No ☐

SELF-HELP SKILLS

The athlete…

…is capable to use toilet	Yes ☐	No ☐
…washes self sufficiently without help	Yes ☐	No ☐
…gets dressed and undressed unassisted	Yes ☐	No ☐
…uses knife, spoon and fork adequately	Yes ☐	No ☐
…can drink from an almost full glass without pouring the content	Yes ☐	No ☐
…ties up his/her shoes	Yes ☐	No ☐
…knows home address	Yes ☐	No ☐
…comprehends money use as a mean of transaction	Yes ☐	No ☐

COMMUNICATION SKILLS

The athlete…

…uses correct grammar rules in sentences	Yes ☐	No ☐
…uses four to five clear words in a sentence	Yes ☐	No ☐
…uses fifty clear words	Yes ☐	No ☐
… asks "why", "when" and "how" questions	Yes ☐	No ☐
....responds to "yes" or "no" questions	Yes ☐	No ☐
… performs simple problem solving	Yes ☐	No ☐
…understands and performs simple directions	Yes ☐	No ☐
…identifies at least five objects according to their use	Yes ☐	No ☐
…knows/ can compare words such as "small – big", "short-tall" etc	Yes ☐	No ☐
…knows colors	Yes ☐	No ☐

MOTOR SKILLS

Overall functional ability

The athlete:

- …..can maintain a standing position — Yes ☐ No ☐
- ……can maintain a seated position — Yes ☐ No ☐

Gross Motor Skills

The athlete:

- Sits on floor unsupported — Yes ☐ No ☐
- Walks with confidence — Yes ☐ No ☐
- Walks heel-to-toe on a straight line — Yes ☐ No ☐
- Walks tip-toe — Yes ☐ No ☐
- Runs around obstacles — Yes ☐ No ☐
- Hops on one foot — Yes ☐ No ☐
- Jumps forward with two feet without falling — Yes ☐ No ☐
- Jumps over six inch high rope and lands on both feet together — Yes ☐ No ☐
- Balances on one foot for at least 5 seconds — Yes ☐ No ☐
- Walks up and down stairs alternating feet — Yes ☐ No ☐
- Catches a ball thrown to him by a distance of 2-3 metres — Yes ☐ No ☐
- Bounces a ball to the floor and catches it with both hands. — Yes ☐ No ☐
- Throws ball one metre overhead and catches it with both hands — Yes ☐ No ☐
- Throws with one hand a small ball forward with relative accuracy — Yes ☐ No ☐
- Kicks ball forward while running — Yes ☐ No ☐
- Rides bicycle with or without helping wheels — Yes ☐ No ☐

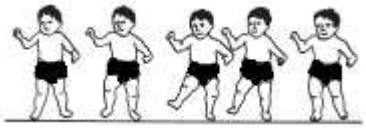
Fine Motor Skills

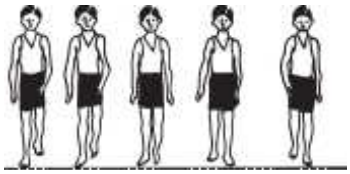
The athlete:

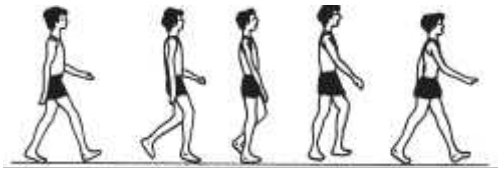
- Reaches and picks up small objects with one movement — Yes ☐ No ☐
- Picks things up with pincer grasp (thumb and one finger) — Yes ☐ No ☐
- Grasps and moves small objects away from body — Yes ☐ No ☐
- Cuts with scissor with relative accuracy — Yes ☐ No ☐
- Has adult grasp on pencil — Yes ☐ No ☐
- Copies cross, triangle, square fairly well — Yes ☐ No ☐
- Builds tower of ten small blocks — Yes ☐ No ☐
- Colors within lines satisfactorily — Yes ☐ No ☐
- Completes puzzle of 6 holes in 20 seconds — Yes ☐ No ☐

Basic Motor Skills

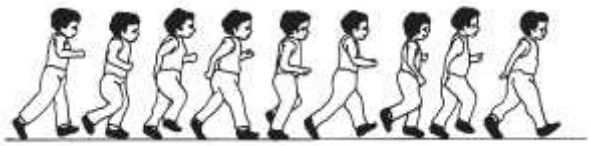
In each one of the following group of pictures, please tick **one** box - which most closely reflects athlete's ability to perform each basic motor skill according to your observation so far:



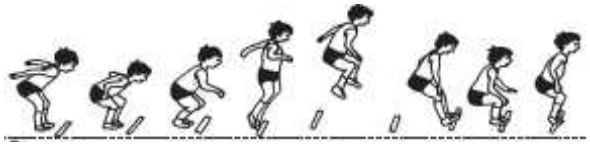




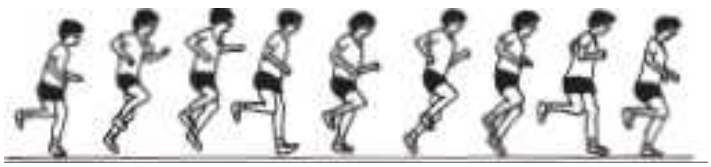
Stage		
□	Initial	**Walking**
□	Elementary	
□	Mature	



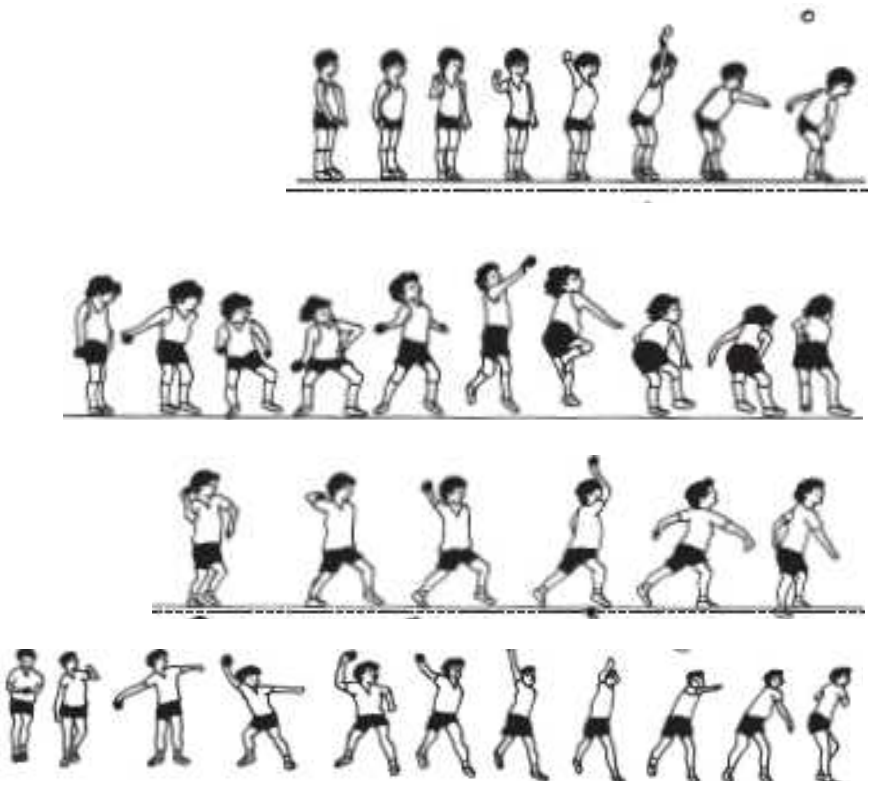
Stage		
□	Initial	**Running**
□ □	Elementary	
□	Mature	



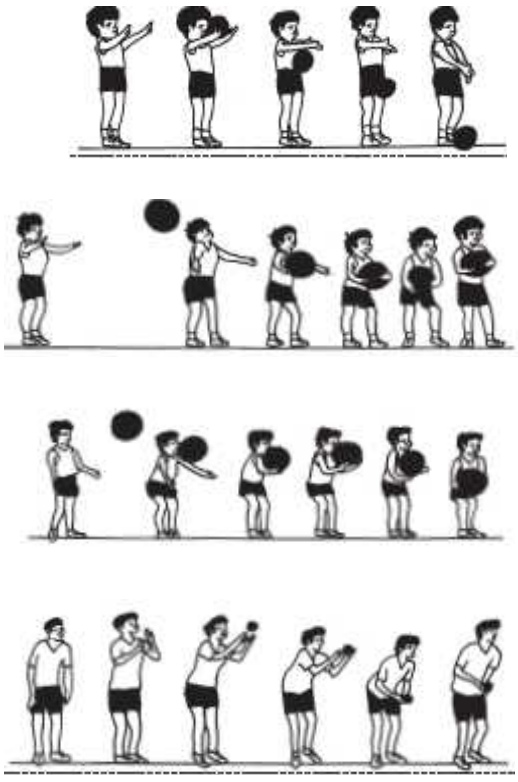
Stage		
☐	Initial	**Jumping**
☐	Elementary	
☐	Mature	



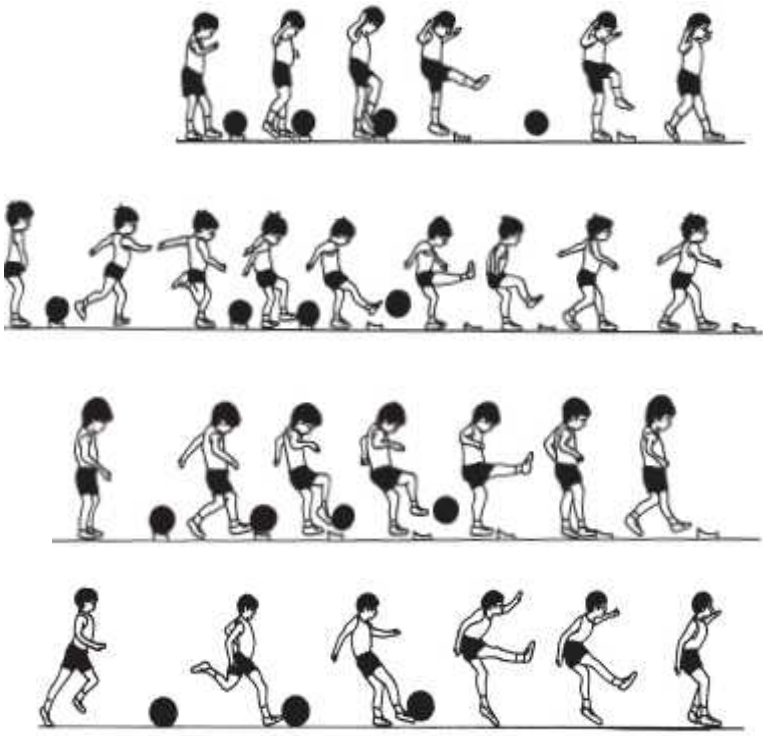
Stage		
☐	Initial	**Hopping**
☐	Elementary	
☐	Mature	



Stage		
☐	Initial	**Throwing**
☐	Elementary	
☐	Mature	



Stage		
☐	Initial	**Catching**
☐	Elementary	
☐	Mature	



Stage		
☐	Initial	**Kicking**
☐	Elementary	
☐	Mature	

Immature motor characteristics

The athlete exhibits:

▪ Inadequate motor planning in terms of: a) Control of force. b) Reaction control. c) Response to complex stimuli.	 Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐
▪ Inability to maintain rhythm during exercise.	Yes ☐ No ☐
▪ Loss of dynamic balance (fall) during activity.	Yes ☐ No ☐
▪ Instability, difference from effort in effort as for: a) Balance. b) Power. γ) Rhythm.	 Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐
▪ Continuation of movement after the end of exercise while it would be supposedly stopped.	Yes ☐ No ☐

PSYCHOMOTOR DOMAINS

The athlete exhibits:

▪ Knowledge of various parts of his body, his self and others. (if partially, please specify): ▪ Knowledge of various positions of his	Yes ☐ No ☐ Partially ☐ …….. Yes ☐ No ☐ Partially ☐

body in space (seating, standing, prone, supine, on fours). (if partially, please specify):	……..
▪ Balance ability α) Static**:** - with eyes open - with eyes closed	 Yes ☐ No ☐ Partially ☐ Yes ☐ No ☐ Partially ☐
β) Dynamic: (if partially, please specify):	Yes ☐ No ☐ Partially ☐ ……..
▪ Laterality (ability to discriminate left from right). (if partially, please specify):	Yes ☐ No ☐ Partially ☐ ……..
▪ Directionality of body in space**:** (if partially, please specify):	Yes ☐ No ☐ Partially ☐ …….
▪ Knowledge and control of breathing (inhale and exhale)**:** (if partially, please specify);	Yes ☐ No ☐ Partially ☐ ……..

In case of –manual or electric- wheelchair use:

The athlete

▪ …pushes *manual wheelchair* with assistance	Yes ☐	No ☐
▪ …pushes *manual wheelchair* forward unassisted for 2-3 meters	Yes ☐	No ☐
▪ …pushes controls of *electric wheelchair*	Yes ☐	No ☐
▪ …propels *electric wheelchair* forward for 2-3 meters	Yes ☐	No ☐

In terms of assessing people with severe to profound ID and accompanied physical disabilities, please consult the Special Olympics Motor Activities Training Program (MATP) Coaching Guide (http://media.specialolympics.org/soi/files/sports/MATP+Coaching+Guide.pdf)
Furthermore, for children with cerebral palsy having intellectual disabilities, please additionally consult the Gross Motor Function Classification System (https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-ER_English.pdf

In terms of aquatics assessment (if available), please consult the Water Orientation Alyn 1 (WOTA 1) evaluation form, developed for swimmers with cognitive difficulties in understanding and following instructions (http://www.inertiatherapy.com/wp-content/uploads/2016/02/3.-WOTA-Mr-Cools-MS.pdf)

GENERAL NOTICES

The indoor and/or outdoor sport facilities available so as to satisfy the needs of your athlete with intellectual disabilities are: Sufficient ☐ Insufficient ☐ (if insufficient, report any shortage and/or propose improvements):

_____

_____

_____

_____

_____

Please answer to the following useful assessment questions:

USEFUL ASSESSMENT QUESTIONS	ANSWERS
▪ In what kind of environment does the athlete learn best in?	
▪ How the athlete adapts self when performing outdoors?	
▪ What kind of material/ objects the athlete chooses to play with?	
▪ What motivates, or discourages, athlete?	
▪ How complex is for the athlete to listen, follow directions or solve simple tasks with 1 or 2 efforts?	
▪ Which skills the athlete demonstrates when performs alone or with others?	
▪ How can you help athlete to communicate with others during exercise?	
▪ How can you handle student's fears/frustrations or mood changes?	
▪ How can you help student to participate in small groups?	
▪ Which mode does the student use to learn (visual, tactile, auditory)? Under which conditions the student learns best?	
▪ How the PA session look like for the athlete?	
▪ How can athlete's behavior be handled?	
▪ Is there any other information from athlete's family or friendly environment that can be useful?	

Please note anything else you observed: _____

_____

_____

_____

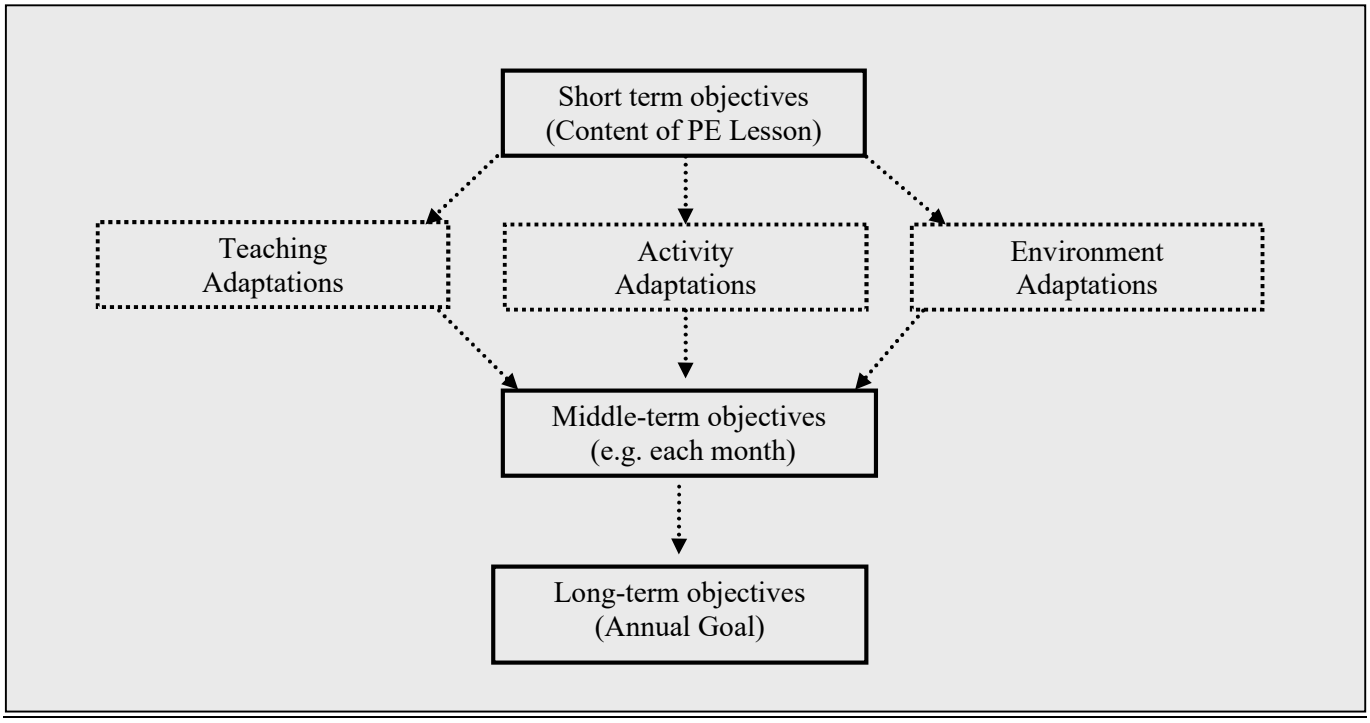
_____

Based on all previous information, use this page to provide an overall -motor, cognitive and behavior- description of your athlete's profile, specifying:

Present Level of Performance (PLEP) of the athlete with intellectual disability

I.E.P. INTERVENTION

Intervention phase represents the time period from the moment the athlete with intellectual disability begins his first PE session until the moment where either the PE program is concluded or athlete's participation in the program ends. During this phase, you should specify the content of each exercise session regarding the adaptations of teaching, activities and environment along with setting middle –term and long-term objectives according to the following figure:



Session adaptations certainly differ depending on the unique characteristics of each student with intellectual disability. For your convenience, some representative adaptations that can be adopted according to each case with intellectual disability are:

REPRESENTATIVE ADAPTATIONS

Environment adaptations

Structure of a clean and secure PE environment:

- With objects not used put aside to specific areas.
- By teaching student the rules and limitations of the exercise space used.
- With close monitoring of student during each lesson.
- By increasing attention span of the student using larger in size or brighter in colour objects.

Reinforcement of teaching stimuli:

- Using bright colour in specific material/ objects within a neutral in colour learning environment.
- Limiting exercise space and adapting material when necessary to promote successful execution of activities.
- Using sound (e.g. whistle, etc).
- Practicing in front of mirrors placed on the gym's wall to increase concentration.

Activity Adaptations

Exercises selected should:

- Focus more on participation and less on performance.
- Be simple and playful so as to enhance enjoyment and a feeling of success.
- Help the student develop his kinesthetic ability and directionality of body in space.
- Function within the present level of student's performance, moving progressively from familiar to unfamiliar and from simple to more difficult.
- Promote the development of basic motor skills of stabilization, locomotion and handling and student's general physical condition.
- Be rule simple.
- Include common elements so as to promote learning.
- Characterized by variability that is necessary especially in the case of students with attention deficits.

Teaching Adaptations

- Verbal instructions shortened and simplified down to specific action words.
- Proper tone of voice according to exercise.
- Performing one activity at a time and/or use of task analysis when necessary.
- Determination of mode for transmitting information (visual, tactile, auditory).
- Frequent demonstration of activities accompanying verbal instructions.
- Use of kinesthetic guidance when needed.
- Continuous encouragement and use of feedback to enhance short-term memory.
- Provision of additional time to the student to react in teaching stimuli, maintaining visual contact with the student for a few seconds after activity demonstration.
- Co-operation enhancement using peer activities and cross-age tutoring.

Based on previous information, please specify:

Representative exercise, teaching, and environment adaptations for your athlete with ID

Short-term objectives (in each PE session)

Middle-term objectives (e.g. per month)

Long-term objectives - Annual goal(s)

Based on athlete's evaluation, adaptations of exercise and main objectives fill in your lesson plan:

LESSON PLAN STRUCTURE

Name of Athlete		Disability:	Sport:
Date: / /	Day: Time:	Placement:	Equipment:

Lesson	Individualized ☐	Supervision: Full ☐ Partial ☐ Independent ☐	Ratio: 1:1
	Group ☐	Supervision: Full ☐ Partial ☐ Independent ☐	Ratio: /
Teaching Points	Communication Mode:	Auditory ☐ Visual ☐ Kinaesthetic ☐	
	Exercise Presentation:	Task Analysis ☐ Whole ☐	

Lesson Purpose:

Activities	Teaching Points	Set(s) × repetitions	Duration
Warm Up			
Main Part			
Cool Down			
		Total duration	

I.E.P. POST-INTERVENTION PHASE

Evaluation of I.E.P. overall progress so as to determine whether long-term objectives have been achieved.

Determination of future PE goals for improving the performance of athlete with ID in the next sport/educational period.

**Post-intervention phase represents the time period commencing after the end of the last PE lesson*

GENERAL COMMENTS

Please comment on the overall I.E.P. progress and the future PE goals: _____

REFERENCES

1. Davis, K. (1990). *Adapted physical education for students with autism.* Springfield, Illinois: Charles C. Thomas Publisher.
2. Gallahue, D. L., & Donnelly, F. C. (2007). *Developmental physical education for all children*. Human Kinetics.
3. Kokaridas, D. (2016). *Exercise and Disability: Individualization, Adaptations and Inclusion Issues.* Thessaloniki: Kyriakidis Publications.
4. Sherrill, C. (2004). *Adapted Physical Activity, Recreation and Sport: Crossdisciplinary and Lifespan*. WCB/McGraw Hill: Dubuque, IA.
5. Winnick, J., & Porretta, D. L. (2016). *Adapted physical education and sport*. Human Kinetics.
6. Winnick, J. P., & Short, F. X. (1999). *The Brockport physical fitness test manual*. Human Kinetics.

Links

https://www.specialolympics.org/our-work/sports/motor-activity-training-program