SCPwD
Skill Council for Persons with Disabilities

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Skill Council for Persons with Disability
Expository for Locomotor Disability
E001

Definition

According to The Persons with Disabilities Act, 2016 Locomotor Disability defined as:
Locomotor disability is defined as a person's inability to execute distinctive activities associated with movement of self and objects resulting from affliction of musculoskeletal or nervous system or both including:

(a) Leprosy Cured Person means a person who has been cured of leprosy but is suffering from:
- Loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;
- Manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;
- Extreme physical deformity as well as advanced age which prevents him/her from undertaking any gainful occupation, and the expression "leprosy cured" shall construed accordingly.

(b) Dwarfism means a medical or genetic condition resulting in an adult height of 4 feet 10 inches (147 centimeters) or less.
(c) Acid Attack Victims means a person disfigured due to violent assaults by throwing of acid or similar corrosive substance.

Note: Keeping in view the diverse nature of abilities vis-a-vis training needs of individuals, a separate Expository has been created for the purpose of skilling/ training under the disability type **Cerebral Palsy & Muscular Dystrophy.**

Training Tools

Training Tools mentioned below, are Accessible Tools/Appliances/Software, which enables a Person with Disability (PwD) to carry out their training corresponding to the National Occupational Standards (NOS) of the Qualification Pack. While the learning outcomes from the Qualification Pack will remain the same, the methodology stated below will assist the trainers to train the trainees in the best suitable way according to their level of functioning. These suggested training tools facilitate the learning process of a Person with Disability to perform at par with their peers in a conducive and enabled environment.

Tools recommended for the training of Persons with Locomotor Disability

Accessible Tools/ Appliances/ Software	When to use this tool	Tools Description	How to use this tool	Tool Name
	While teaching, if it is seen that a person has difficulty in certain	It is an in-built tool in windows. It provides accessibility feature like narrator,	To use this tool following steps need to be followed: Go to "Start" button	• Narrator • Magnifier • On Screen Keyboard

Accessible Tools/ Appliances/ Software	When to use this tool	Tools Description	How to use this tool	Tool Name
Ease of Access Centre	movement then this tool can be used. This tool is recommended for those who can read and write.	magnifier, on screen keyboards. It allows a person to use the computer without display, mouse and keyboard. Based on the requirement this this feature can be enabled or disabled.	Type "Control Panel" Click on the Ease of Access Centre Then Magnifier, Narrator, On Screen Keyboard and Set up high contrast features will be displayed on the screen one can be selected based on the requirement	• Set up high contrast
Sticky Keys	While teaching, if it is seen that a person has difficulty in certain movement then this tool can be used. It helps a person whose only one or two fingers are functional or having difficulty in upper limbs to use keyboard shortcuts easily. This tool is recommended for those who can read and write.	It is an accessibility feature in windows which helps in keeping the modifier keys active. Instead of holding multiple keys simultaneously, the same task can be performed by pressing only one key at a time. For ex. Instead of using Ctrl + Alt+ Del all at once, a person could press Ctrl, then Alt and then Del to perform same task.	Sticky keys allow to use the SHIFT, CTRL, ALT or windows Logo keys by pressing one key at a time. Sticky Keys can be turned on by pressing SHIFT Key five times.	Sticky Keys
On Screen Keyboard	While teaching, if it is seen that a person has difficulty in fine motor movement then this tool can be used.	This is a built-in Ease of Access tool in the windows. A visual Keyboard displayed on the screen with all the standard keys, which	To use this tool these steps, need to be followed: Go to "Start" button Type "Control Panel" Click on the Ease of Access Centre	On Screen Keyboard

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Accessible Tools/ Appliances/ Software	When to use this tool	Tools Description	How to use this tool	Tool Name
		can be operated by clicking on the mouse. This has built-in word prediction feature which makes the typing quick and easier.	Click "On Screen Keyboard" Keyboard will be displayed on the screen and it can be move around on the screen and enter text will appear on the screen.	
One Handed Keyboard	While teaching, if it is seen that a person has difficulty in certain movement then this tool can be used. To use this tool at least one hand must be functional.	This keyboard allows to perform all the function with only one hand.	This can be connected to the computer.	
Foot Pedals	While teaching, if it is seen that a person has difficulty in upper limb movement then this tool can be used. This is recommended for those who have functional lower limb.	This allows a person to operate the computer by tapping different sections of the pedal with the foot.	This can be connected to the computer	• USB Foot Pedal • Serial Foot Pedal
Access Switches	While teaching, if it is seen that a person has difficulty in certain movement then this tool can be used. A person without upper and lower limbs can operate the computer using one of these kinds of switches	Access Switches or Adaptive Switches enable a person to use technology or electronic devices like computer tablets etc with an ease.		NA

Activity	Activity Type	When to use Activity	Activity Description	Activity Planning	Activity Tool
Sensitization of the trainer	Sensitization Towards- Disability, Equipment, Aid & Appliances, Behaviors	It can be recommended to all persons with various degrees of locomotor disability	The trainer should understand how Persons with Disability (PwD) do different activities, Gain Knowledge of disability, assistive aids & accessibility in the environment Learn to assess candidates (before training). Make an inclusive training environment and material	Trainer should undergo training with specific disabilities and should be able to change his/her approach according to the needs of the student. Training in transfer skills and communication skills.	Any of the following methods may be used: • Communication • Hand gestures • Touch sensitivity • Behaviour • Sensitivity • Patience • Customized approach to students
Environmental Adaptability	Ramps	It can be recommended to all (especially for persons with lower limb disability) persons with various degrees of locomotor disability. Helps in easier and better movement.	Ramps/ Rails in public buildings; adaptation of toilets and drinking water point for wheel chair users to ensure easy access for all persons.	These facilities should be provided for easier access to all.	NA
Environmental Adaptability	Lifts	It can be recommended to all persons with various degrees of locomotor disability (especially for persons with lower limb disability). Helps in easier and better movement.	An elevator (lift in British English) is a type of vertical transport equipment that moves people or goods between floors (levels, decks) of a building, vessel, or other structure. Elevators are generally powered by electric motors.	These facilities should be provided for easier access to all.	NA

Lab Assessment:

Upper Limb – One limb:
- This may require re-arrangement of equipment based on nature of disability for ease of access – like placing tools on left-hand-side or right-hand-side.
- May require left-handed lab equipment (like left-handed scissors).

Upper Limb – both limbs:
- May require process changes based on the nature of the assessment – for example, if the person uses their feet for different tasks.

Lower limb – Without aids/Crutch User/Calliper User:
- The floor needs to be skid-proof and elevators need to be provided if assessment room is not on the ground floor. All staircases and steps need to have railings for support on both sides. Elevator facility would be preferred.
- Accessible restrooms must be provided.

Lower limb - Wheelchair user due to polio:
- The lab needs to have wide entries, exits and space between different tables to ensure that the wheelchair can be used without barriers.
- The floor needs to be in level with no obstacles, the building needs to have ramps, accessible elevators, and accessible restrooms meeting standard specifications.
- The floor needs to be skid-proof and elevators need to be provided if assessment room is not on the ground floor.
- All shelves must be at an appropriate height for wheelchair users.

Lower limb – Wheelchair user due to Spinal Cord Injury:
- The lab needs to have wide entries, exits and space between different tables to ensure that the wheelchair can be used without barriers.
- The floor needs to be level with no obstacles. The building needs to have ramps, accessible elevators, and accessible restrooms meeting standard specifications.
- The floor needs to be skid-proof and elevators need to be provided if assessment room is not on the ground floor.
- All shelves must be at an appropriate height for wheelchair users.
- Many persons with spinal cord injury are unable to sit for extended periods of time. This should be taken into account, and extra time should be allocated to the person for completion of the assessment.
- Persons with spinal cord injury may require helpers for personal work. This must be taken into consideration on a case-by-case basis.

Computer Assessment:

Upper Limb – One limb:
- May require modified/one-handed keyboard or mouse, based on preference
- May need computer configured with Sticky Keys for ease of using keyboard shortcuts.

Upper Limb – Both limbs:
- May require keyboard placed at foot level for persons using foot typing.
- May require computer compatibility with speech recognition software or camera-mouse.

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Lower limb – Without aids/Crutch user/Calliper User:

- The floor needs to be skid-proof and elevators need to be provided if assessment room is not on the ground floor. All staircases and steps need to have railings for support on both sides. Elevator facility would be preferred.
- Accessible restrooms must be provided.

Lower limb – Wheelchair user due to polio:

- The floor needs to be skid-proof and elevators need to be provided if assessment room is not on the ground floor.
- The floor needs to be in level with no obstacles, the building needs to have ramps, accessible elevators, and accessible restrooms meeting the standard specifications.
- The tables for the computers need to be placed at the right height for wheelchair users to be able to access the computer system.

Lower limb – Wheelchair user due to Spinal Cord Injury:

- The floor needs to be skid-proof and elevators need to be provided if assessment room is not on the ground floor.
- The floor needs to be in level with no obstacles, the building needs to have ramps, accessible elevators, and accessible restrooms meeting standard specifications.
- The table for the computers need to be placed at the right height for wheelchair users to be able to access the computer system.
- Many persons with spinal cord injury are unable to sit for extended periods of time. This should be taken into account, and extra time should be allocated to the person for completion of the assessment.
- Persons with spinal cord injury may require helpers for personal work. This must be taken into consideration on a case-by-case basis.
- In assessments, some trainees may prefer using a laptop over a desktop due to movement constraints.

General Guidelines:

- Do ask questions openly. Do not assume anything. For example, ask your trainees with disabilities if they need any change in the kind of assessment setup provided. The person with locomotor disability would prefer to have accessible environment which is suitable for access training, assessment and workplace. This would encourage honest conversation, helping you to assess the person based on their true abilities.
- Be prepared to make your assessments person-specific. For example, there may be a person with locomotor disability whose lower limbs are affected may need some kinds of adaptation during assessment. Moreover, a person with locomotor disability whose upper limbs are affected, need some kind of support during assessment. He/she may not be able to write properly then they need a writer/scriber to support his/her during assessment. Do account for these individual needs during your assessment hour?
- It should be ensured that all equipment required during the assessment are within close reach/easily accessible by the person.
- The Assessment guidelines given below are only to enable the assessor to conduct the assessment smoothly. Adherence to the guidelines is not mandatory but preferred.
- The assessor has the option to use any of the tools appropriate from the list of tools mentioned in the expository, to conduct the assessment. He/she also has the choice to use other options that will help conduct the assessment with sanctity.
- Remember that your trainees with disabilities are going to be going to work with persons without disabilities. Pitying, belittling or lowering the standards would defeat the purpose.