

## O&M and Low Vision

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### Common Problems: Lighting and Glare

- The most frequently reported mobility problem.
- Issues include:
  - Glare
  - Light adaptation (indoors/outdoors)
  - Dim & night lighting
  - Changes in lighting within and between environments

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2

### Changes in Terrain & Depth



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### Unwanted Contacts (bumping)



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### Street Crossings



<http://www.rrib.org.uk/sites/default/files/Pedestrian%20crossings.JPG>

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### Assessing the Environment



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## Assessing the Environment

- Type of light:
  - Different light sources – natural, incandescent, fluorescent.
  - Type of light source individual prefers and types that hinder performance.

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7

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## Assessing the Environment

- Light angle and location:
  - Relationship of natural and artificial light sources to individual.
  - Effect of different light positions on mobility performance.

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## Assessing the Environment

- Light adaptation:
  - Changes in functional vision from indoors to outdoors and vice versa.
  - Changes in functional vision from one level of lighting to another.
  - Amount of time individual needs to adapt to change.

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### Assessing the Environment



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### Assessing the Environment



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### O & M and Low Vision



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### Improving Functional Use of Vision



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### Improving Functional Use of Vision

- Structured basic visual motor skills:
  - Tracing – visually following a stationary line
  - Tracking – visually following a moving target
  - Scanning – systematic use of head and eye movement to search for targets

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14

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### Functional Exercises



[https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GqH7N0meest\\_N8rHf5Echzb\\_j39K98AwK32G8mVv\\_aoCG0Y6](https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GqH7N0meest_N8rHf5Echzb_j39K98AwK32G8mVv_aoCG0Y6)

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### Functional Exercises



<https://immediatecourage.com/ie2/wp-content/uploads/2016/07/16/young-people-back-view.png>

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16

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### Functional Exercises



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### Scanning

- Ask the student to scan for a series of visual landmarks in a new area.
- At street crossings, scan for traffic lights, vehicles, pedestrian traffic.



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18

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## Visual Landmarks



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## Visual Landmarks

- Distinctive Colours:
  - Bright doors
  - 'stand-out' colours in the supermarket of particular products
  - Coloured lines etc. on floors



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## Key Points

- O&M is just as important for individuals with low vision as for those with no vision!

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