**Association for Education and Rehabilitation of the Blind**

**and Visually Impaired (AER) Position Paper:**

# **Orientation and Mobility in Natural Environments**

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Assessment and instruction of safe, efficient, purposeful travel for people who are blind or have low vision (known as orientation and mobility instruction) are provided in a wide variety of natural settings. Unlike conventional classroom instruction, orientation and mobility (O&M) assessment and instruction must occur in the environments in which the skills will be used (the natural setting). Lessons take place in all areas of the community, at all times of the day and in all kinds of weather, including at night or in dim lighting.

Variations in the environment affect the abilities of people with vision loss and require different strategies and techniques. A rich physical environment versus a restricted environment and encouragement to engage the environment rather than being protected from it positively affects development.

### Why teach in the natural environment?

* Orientation and mobility instruction through the interaction with the natural environment provides many opportunities for problem solving.
* Teaching and assessing O&M skills in isolation or simulated settings risks the propagation of abstract, academic knowledge. Safe, effective use of skills, and the confidence to use them, can come only from instruction which includes practice in the real world.
* Assessment and instruction in natural settings will allow students to become active participants in their environment instead of only passively receiving stimulation from others. When control can be exerted over the environment, the learner is less likely to develop “learned helplessness”.
* The built environment continues to become more complex and difficult to navigate.

The Academy for Certification of Vision Rehabilitation & Education Professionals (ACVREP) certifies O&M specialists. The Scope of Practice for an ACVREP Certified O&M Specialist (COMS) includes but is not limited to the assessment of and instruction in the following skills and concepts (ACVREP, 2013). These skills must include training in natural settings.

* Concept development, which includes body image, spatial, temporal, positional, directional, and environmental concepts.
* Motor development, including motor skills needed for balance, posture, and gait, as well as the use of adaptive devices and techniques to assist those with multiple disabilities.
* Sensory development, which includes visual, auditory, vestibular, kinesthetic, tactile, olfactory, and proprioceptive senses, and the interrelationships of these systems.
* Residual vision simulation and training.
* Human guide technique.
* Upper and lower protective techniques.
* Locating dropped objects.
* Trailing.
* Squaring off.
* Cane techniques.
* Soliciting/declining assistance.
* Following directions.
* Utilizing landmarks.
* Search patterns.
* Compass directions.
* Route planning.
* Analysis and identification of intersections and traffic patterns.
* The use of traffic control devices.
* Techniques for crossing streets.
* Techniques for travel in indoor environments, outdoor residential, small and large business districts, mall travel, and rural areas.
* Problem solving.
* The use of public transportation (including rideshare, etc.)
* Evaluation with sun filters for the reduction of glare.
* Instructional use of low vision devices

#### References

References marked with an asterisk indicate studies included in the meta-analysis

ACVREP (Academy for Certification of Vision Rehabilitation & Education Professionals) (2013). *Scope of practice for orientation and mobility specialists.* http://www.acvrep.org

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