STEP-BY-STEP

An Interactive Guide to Mobility Techniques
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Objectives


• Integrate curriculum into professional preparation of vision professionals and within existing programming for direct service professionals.

• Demonstrate use of materials with individuals who are not vision professionals but assist in practicing selected skills with a traveler who is visually impaired. (e.g., family members, friends, regular education and rehabilitation professionals, nursing home staff, assisted living staff, parks/recreation staff, and others).
Step-By-Step

Interactive instructional computer program

Combines text, full-motion video, stop-action video & photographs

• To demonstrate and describe basic, intermediate, and advanced mobility skills used by travelers who are blind.
Why Was Step-by-Step Developed?

Need for tools to more efficiently prepare O&M specialists

Call by some who prepare O&M specialists for more curricular uniformity
Interactive Features Enable User To…

1. Test understanding of the techniques
2. Identify performance errors commonly made by those who are learning to travel
3. Determine appropriate measures to correct each error
Unique Computer-Assisted Learning Design

1. Provides self-paced instruction and Immediate feedback on performance

2. Fosters skills in visual assessment analysis, task analysis, and instruction

3. Lends itself to individual use and collaborative learning
Instructional Theories Behind Step-by-Step (1)

• Interactive multimedia instruction has proven track record in effectively preparing educators and other professionals

• Simulations are recognized as efficient and effective way of teaching and learning complex dynamic systems

• Experience shows this approach reduces stress of learners & increases learning of techniques.
Instructional Theories
Behind Step-by-Step (2)

Learner Control, individualized pacing allows user to:

• Work at one’s own speed and review material as often, & whenever, one wishes

• "Stop the world" and "step outside" of the simulated process to review and to better understand material

• Break instructional into manageable chunks of subtopics or review an entire skill in one sitting
How Was Step-by-Step Developed?

• Development began as a single-university effort to address needs for visual tool to use outside of class time to learn, review, and practice the skills they were learning to teach mobility techniques.

• Field test results revealed significant differences among the universities in how students were taught to perform mobility skills.

• A symposium held at San Francisco State University
How Was Step-by-Step Developed (continued)?

• Participants demonstrated their individual methods for performing each technique

• As a nationally representative group, we came to a general consensus on acceptable standard and alternative methods for performing each technique.

• Techniques included do NOT represent all possible variation but DO represent those that were generally endorsed this nationally representative group.
International Use

• Based upon international responses, it appears that mobility skills are performed with striking similarity everywhere.

• The program has thus been found to be applicable in many parts of the world.
Who Can Use Step-By-Step?

- University Programs (students and faculty)
- Teachers of the Visually Impaired
- Vision Rehabilitation Therapists
- Orientation and Mobility Assistants
- Vision professionals returning to field after extended absence
Who Else Can Use Step-By-Step?

- Regular and special education teachers
- Rehabilitation professionals
- Health care professionals
- Health care volunteers
- Public service personnel
- Anyone who may wish to learn guiding skills in order to become more effective guides
The Seven Modules of Step-By-Step

Each module covers mobility techniques related to either:

- A specific method of travel or
- Travel in specific environments
Guide Techniques

With and Without a Cane

- Basic Guiding
- Negotiating Narrow Spaces
- Reversing Direction
- Transferring Sides
- Negotiating Doors & Stairs
Non-Cane Techniques

Directional
- Trailing
- Direction Taking (Tactual)
- Traversing Open Spaces

Self-Protective
- Lower Hand & Forearm
- Upper Hand & Forearm
Special Techniques

Exploration
• Search Patterns / Dropped Objects
• Contacting & Exploring Objects
• Seating

Handling Unsolicited Assistance
• When Not Carrying a Cane
• When Carrying a Cane
Long Cane Techniques

- **Detection**: Diagonal, touch, touch & slide, and shortened cane
- **Negotiating Door and Stairs**: Sidewalk recovery; obstacles in the travel path; vehicles across the travel path
- **Shorelining**: Diagonal trailing, three point, touch & drag, and touch trailing
Street Crossings

- **Approach**: Standard Approach; curb ramps & blended curbs; negotiating an obstacle at the corner; multiple crossings at an approach; crossing perpendicular to line of travel; curb contact (at corner vs. mid-block)
- **Alignment**: Parallel and perpendicular traffic; skewed intersections
- **Timing**: Unsignalized and signalized intersections
- **Executing**: Basic crossing; recovery from a veer; vehicle in the travel path; negotiating median strip
- **Signaling drivers**: Ready to cross (extra arc); traveler is not ready to cross
Transportation

- Automobile Travel
- City Bus Travel
- Subway Travel
Environment-Specific

- Escalators
  - With guide
  - With cane
- Revolving doors
- Areas without sidewalks
- Gas stations
STEP-BY-STEP
A Sample Technique
Additional Features

• Detailed user manual includes technical aspects of using program.

• Comprehensive study guide includes techniques; instructional strategies; teaching tips; prerequisite skills and appropriate teaching environments; limited modifications for travelers with special needs; and more.

• Special introduction and appendices includes glossary of terms and matrix of prerequisite/related techniques

• Comprehensive review guide includes a quick reference tool and brief descriptions
How to Order Step-By-Step

• Part 1 (Guiding, Non-Cane, Special Techniques)
  • Catalog Number: 8-75981-00
  • Part 2 (Long Cane, Street Crossings, Environment-Specific, Transportation)
  • Catalog Number: 8-75982-00
• Cost: $15 each
• Federal Quota Eligible