

Abstracts of the 2018 Southeastern Orientation and Mobility Association (SOMA) Conference

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The Southeastern Orientation and Mobility Association (SOMA) started more than 50 years ago with informal gatherings of O&Ms, and has grown to annual/biannual conferences hosting hundreds of O&Ms. Until 2016, when SOMA was incorporated and a board was established, SOMA conferences were organized entirely by individuals who volunteered at the final session of the previous conference.

SOMA's unique traditions include: an emphasis on hands-on workshops (SOMA conferences were the first to feature feet-in-the-street sessions); introducing new ideas (this year's SOMA unveiled the establishment of the O&M Specialist Association); having a general session 'Exhibitors' Highlight' to preview the vendor tables; offering each session twice so that participants have a greater selection; and welcoming and mentoring newbies doing their first presentation.

The most recent SOMA conference, held December 8–11, in Tampa, Florida, USA, had 40 presentations done by 48 presenters – the following abstracts summarize some of these presentations.

Maximizing O&M Services in Rural and Remote Areas through Distance Consultation

Amy T. Parker and Mary J. Tellefson
Portland State University

The region served by Portland State University's Orientation and Mobility (O&M) and Visually Impaired Learner (VIL) hybrid preparation program is geographically vast. The states of OR, WA, ID, MT, AK, and HI comprise 28% of the US's geography, covering more than 1,061,000 square miles. Because of regional personnel shortages, faculty must prepare candidates to serve geographically dispersed children and adults with visual impairment or deaf-blindness using technologies that support distance-based consultation.

As a part of a federally funded grant from the US Department of Education, faculty in the O&M program developed an online learning module for candidates to use as a part of their practicum experiences. Through a systematic review of the literature and consultation with professionals in the field of blindness and deafblindness, PSU faculty synthesized findings on distance consultation practices and have begun to further validate and refine module content through field-testing. At SOMA workshop, participants gained knowledge of approaches that may be used to maximize services to those in remote communities. During the conference, faculty sought to increase the content validity of the ideas presented in the module by engaging interested stakeholders in evaluating the quality, relevance, and usefulness of the distance consultation approaches. While at SOMA, O&M, and TVI specialists engaged in conversation about equity, their own distance consultation practices, as well as any ethical concerns regarding telepractice. As the module is field-tested and refined with PSU students and clinical partners, a validated framework for maximizing services to those in remote communities will be shared with the field.

How Can You Impact Change?

JoAnne Chalom
In Focus Mobility

The conference presentation addressed several intertwined topics: accessibility, advocacy, and working with stakeholders to achieve lasting change.

A deep dive explored how Orientation and Mobility Instructors, Guide Dog Mobility Instructors, Researchers, Administrators, and Professors could use their expertise while developing a rapport with transportation engineers, traffic engineers, local, city, county, or state planners.

Multiple options to move forward accessibility challenges were presented. One was joining the Environmental Access Committee of the Association for the

Education and Rehabilitation of the Blind and Visually Impaired. This could include attending the Transportation Research Board Annual Meeting which provides opportunities to demonstrate how alternative intersections would impact individuals with visual impairments.

Another idea included participation in walking audits hosted by Metropolitan Planning Organizations or Rural Planning Organizations. It is an informal event that provided a venue to define how planned changes to the built environment could impact individuals with visual impairments.

Another segment of the presentation involved communicating to individuals with visual impairments methods to advocate for treatments to roadways to make them accessible. Clients should understand which entity maintains the roadway and what procedures should be followed to encourage completion of the request.

During the breakout session, attendees were able to work collaboratively and determine which opportunities to influence change would be most beneficial to their environments. A representative from each small group was able to express ways they could reach out to stakeholders. This project brought together many methods to impact accessibility to environments at many levels: cities, counties, states, and nationally.

Orientation and Mobility Career, College and Community Readiness Standards

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O&M Career, College and Community Readiness Standards (O&M CCCRS) were modelled on the Common Core Standards and demonstrate the relationship between vision, principles, content, and practice and result in the opportunity to collaboratively braid disciplines allowing all children to progress towards readiness expectations. Additionally, O&M CCCR Standards are likely to provide O&M professionals with evidenced-based research that supports their recommendations for instructional services to students who are blind, visually impaired, and deafblind; provide common assessment targets and increase consistency between O&M professionals. Each O&M CCCRS standard provides age/grade-level performance indicators (benchmarks) based on typical development, for age 24 months, and end of

grades 3, 7, and 12. Resources in the field that currently exist, including curriculum and checklists are easily retrofit into the standards-based model. This session articulated how the O&M CCCRS were developed and validated, how they can help justify a level of services that are age/grade-level specific, and how they will benefit children. Background in curriculum mapping provided the foundation for identifying where O&M resources fit in the O&M CCCRS. Participants worked in table groups to acquaint themselves with the layout and content of the standards and discuss how O&M CCCR Standards are likely to provide O&M professionals with evidenced-based research that supports their recommendations for instructional services to students who are blind, visually impaired, and deafblind; provide common assessment targets and increase consistency between O&M professionals.

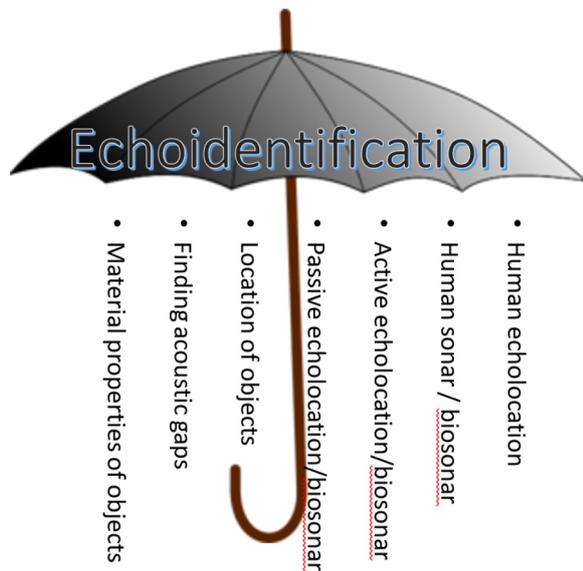
Transitioning from Teaching Basic Echolocation to Advanced Echoidentification

Sarahelizabeth J. Baguhn and Dawn L. Anderson
Western Michigan University

Teaching the use of reflected sound has always been part of the scope of practice of orientation and mobility specialists. The authors have recently published an article in JVIB on effective methods for teaching clients to refine their use of reflected sound. While historically researchers have narrowly divided the different types of reflected sound, this has not been beneficial to practitioners. The new term echoidentification was coined as an umbrella term for the many ways that reflected sound can inform a traveller who is blind about their environment.

During this workshop, participants learned about the different object characteristics that can be detected with echoidentification. Practical teaching strategies were introduced that can be used for the object properties of location, size, shape, and material properties such as hardness or solidity. Participants had experiences teaching and learning the determination of object location and shape. Young children's natural development of echoidentification can be fostered by practitioners, and adults can be taught to echoidentify even after losing their sight.

Echoidentification is never sufficient for drop-off detection and should always be used in conjunction with a primary mobility aid. All O&M specialists can include echoidentification in the skills of blindness that they teach to individuals who are blind or have low vision.



Off-Road O&M

Jay Hardwig
IFB Solutions Asheville

Most O&M instruction takes place on pavement: we spend countless hours on city streets, navigating sidewalks, locating curbs, and listening to the cars that come our way. But what do we do when the sidewalk ends? As an O&M instructor who lives in a rural area and directs the SEE Outdoor Adventure Camp for teens with blindness and visual impairment, I spend a lot of time on rougher surfaces: gravel, dirt, grass, sand, and snow. Off-Road O&M examines tricks, tips, and techniques for all-terrain O&M.

The session started with a group discussion of the challenges to both orientation and mobility in off-road settings, and continued with an inventory of low-tech and high-tech adaptations commonly used in these environments. Next, we looked at a series of off-road activities, and discussed specific adaptations for each: rural living, backcountry hiking, and paddling on open water. The presentation included video footage of all these activities, including several extended shots from the SEE Adventure Camp. We concluded with some shared reflections on the benefits of a life lived beyond the pavement, and encouraged O&M instructors to find activities that build confidence, reward curiosity, and encourage adventure in their students.

O&M Immersion Program with Guide Dogs for the Blind

Marc Gillard
Guide Dogs for the Blind Inc. USA

Over 1,100 people apply to Guide Dogs for the Blind (GDB) each year. Of those not ready for a guide dog, the primary reason is insufficient O&M skills. In many cases, a lack of 'O&M' is only symptomatic of the true cause; an inability to access services.

Many applicants report obtaining O&M services is frustrating. Further, getting services does not always translate to receiving the instruction required to be ready for guide dog training. This presents a concerning situation for visually impaired people and for guide dog organizations.

To address the problem, GDB launched a pilot 'O&M Immersion' program in 2016 which became permanent in 2017. Taking place over 7 days it focuses on developing O&M skills particularly important for guide dog mobility. To deliver the program GDB has formed partnerships with agencies providing O&M training.

The majority of GDB's population of 2,200+ graduates has residual vision. A deterioration in vision effects confidence, independent travel abilities, and perhaps the ability to qualify for a successor guide dog. Offering these graduates the O&M immersion is an important present and future objective.

Since the program commenced 54 students have completed the program. In total, 16 have graduated with a guide dog, 5 have been accepted for training, and 10 graduates are still working their current guide dogs.

O&M specialists involved gain expanded knowledge and experience with assessing and preparing a student to work with a guide dog, as well as teaching Juno skills. GDB aims to expand the program by creating more agency partnerships.

Using Simulation Software to Teach Students How to Deal with Uncontrolled Crossings

Laura Zierer, Dona Sauerburger
American Printing House for the Blind

This workshop invited audience members to help demonstrate a software program, developed by the American Printing House for the Blind with Dona Sauerburger to help orientation and mobility specialists teach students with visual impairments how to deal with uncontrolled street crossings.

Teaching students to analyse and negotiate uncontrolled crossings may involve complex skills, such as recognizing the effect of masking sounds, or accommodating specific visual impairments to scan efficiently for approaching vehicles. However, there is one pri-

mary skill which all students need to develop for these crossings: the ability to instinctually determine whether or not they have enough warning of approaching vehicles to be confident that it is clear to cross.

Instructors can teach students this skill by providing them with lots of experiences comparing their crossing time with the warning time of approaching vehicles. However, finding appropriate sites to provide this experience can be challenging, and crossings that are suitable at one time often are not suitable at other times because of different traffic or weather or acoustic conditions, and it can be time-consuming to wait for appropriate vehicle approaches.

The APH software program – Crossings with No Traffic Control – can provide students with realistic-sounding vehicle approaches, selected on the basis of student-specific crossing times, and calculated to promote their progress. The program also provides comprehensive instruction for the O&M specialist to teach students to apply the learned skills to real situations, and assess and teach remaining skills needed to deal with these situations.

Research Validation of the Birth to 6 O&M Skills Inventory (B6OMSI)

Sarahelizabeth J. Baguhn and Dawn L. Anderson
Western Michigan University

Orientation and mobility (O&M) specialists have few choices of developed tools when assessing young children. The tools that do exist lack some of the reliability and validity measures common to other fields, and frequently required to demonstrate progress and justify funding.

Research-driven revisions to the Birth to 6 Orientation and Mobility Skills Inventory aim to fill this need, and the B6OMSI-RE now has established content validity. A Delphi Study was conducted, using a structure of repeated, anonymised interviews with expert O&M specialists from four countries, to determine the face validity and expert content validity of the assessment items. The agreement threshold was set at 90% to meet the rigor of high-stakes testing, which will allow the scores from this assessment tool to stand alone as a reasonable snapshot of student performance.

The workshop at the Southeastern O&M Association Conference began with a brief presentation of the validity research and its implications, followed by training on how to use the B6OMSI. Practitioners gained an

understanding of how to use this assessment to document the development of O&M skills in young children.

Orientation through Technology

Sara Leal and Judy Porro
Miami Lighthouse for the Blind and Visually Impaired

Although technology can be very beneficial for persons who are blind or visually impaired, choosing the most appropriate type or application can also be overwhelming. This presentation offered an analysis of the client, the situation, and the type of technology available before selecting any type of device or application for clients. Analysing the client's skills includes assessing their proficiency with basic cane skills, determining additional disabilities, and respecting language differences as issues which should be considered when selecting specific technology. The situation should also be analysed including weather conditions, internet availability, data plan usage, safety concerns, and the location(s) where technology may be used. Finally, analysing the device's accessibility involves its reliability, the difficulty level, price, and type of technology under consideration. Once each of these factors has been critically considered, the most appropriate type of technology for clients should be reduced to a more advantageous amount. This process limits the multitude of technological choices and provides sensible options for clients learning to use technology on a daily basis.

Launching the Ship: Early Orientation and Mobility and Parent-Centered Education

Lisa Lind, Pam Arbeiter, Ann Cummins, Shelley Donahue and Sara Bushland
Children's Centre for the Visually Impaired

The purpose of this presentation is to share successful parent education for early orientation and mobility plus strategies to increase the skills and knowledge of families with young visually impaired children. Many families of infants and young children express fear and trepidation about safe mobility and how to support their children becoming safe and independent travellers. 'The professional's effectiveness in working with young visually impaired children is increased by a family-centered philosophy' (Cohen et al.).

Our team focuses on a strength-based approach in order to build comfort and guide families as they learn about concept development, practice trailing the wall, and experience blind-fold opportunities in the home,

school, and community. We utilize a framework based on families' level of awareness and understanding of their child's visual impairment to address their mobility needs. Participants attending the presentation will learn effective methods of parent-centered techniques for addressing travel and safety concerns and build capacity related to social-emotional development within the sphere of orientation and mobility.

Tapping into Success

Danita J. Snulligan
Oakland Meadow School

Orientation and mobility (O&M) specialists have a unique opportunity to incorporate language arts with additional components of the Expanded Core Curriculum for school-age children, in efforts to help bridge the gap between literacy and unemployment. By collaborating with classroom teachers, the O&M specialist provides practical instruction that utilizes varied teaching strategies: questioning, non-verbal representation, comparison/contrast, and summarizing techniques to aid students in becoming successful in listening, speaking, reading, and writing across core subjects.

Preparatory activity for teaching the procedures for shopping in a mall for a student with a love of fragrances and a fine sense of smell, including using a computer screen reading program to conduct research on the art and technology of perfumery. The student draws upon prior lessons in geography to pinpoint countries on a tactile map where some of the most renowned perfumery schools are located. Next, the student calls ahead to a perfume store in a nearby mall to obtain information about its exact location from the main entrance. She informs the employee when she is coming and that she would like to conduct a brief interview. With a notetaking device and the long cane in hand, the student disembarks the public bus with her O&M specialist. She follows the procedures as instructed for traveling in a mall to reach her destination, *Perfumania*. This 8th-grade student is now able to present to her classroom teacher a well-defined informational piece of writing that includes rich and descriptive language based in part, on active research.

Literacy & Mobility: Engaging Learners by Pairing Orientation and Mobility with Braille/Print Readiness Activities

Lindsey Moore
Hillsborough County Public Schools

This session presented ideas on how teachers and other professionals can utilize braille and print readiness activities to prepare students and clients for Orientation and Mobility (O&M) instruction. Through discussion of personalized strategies, the presenter outlined ways in which she had successfully utilized additional areas of the Expanded Core Curriculum, with a focus on compensatory skills and literacy preparedness activities, to drive her O&M instruction.

Participants followed a detailed outline of five lessons designed to prepare students for specific travel techniques through reading age-appropriate texts. The books mentioned in this session contained popular, fictional characters who emphasized movement around specific environments, such as a school campus. The lessons provided students the opportunity to read stories, create and execute routes, and further develop newly acquired mobility skills. This description was followed by an explanation of personal outcomes and experiences. The lessons were specifically prepared by the presenter to encourage her students' braille and print readiness in addition to promoting their understanding of concepts covered in O&M instruction. The presenter noticed that these strategies seemed to improve her students' overall engagement, participation, and comprehension levels.

This session equipped participants with specific book suggestions, an overview of five lessons that can be shaped to fit the unique needs of a student or client, and strategies to incorporate additional areas of the Expanded Core Curriculum with O&M instruction. Ideas of how to encourage collaborative opportunities with other professionals were also discussed, especially for instances when direct-service time is limited.

Changing Your World, One Step at a Time: Practices for Making a Difference

Stephan Sauerburger, Dona Sauerburger
Magissa Foundation

Many blindness-related professionals want to advocate for a change in their world. This workshop introduces strategies and principles of effective advocacy, based on the works of Dr Jean-Robert Bayard, a Clinical Psychologist and Ardent Advocate for humanitarian causes.

Four of Dr Bayard's strategies for effective advocacy are shared with participants, and they are invited to discuss how these can be used in their own efforts. The principles discussed are:

- Build beliefs that support your work: Your beliefs can filter how you perceive the world and, in turn, affect the world around you and how much you can accomplish. Effective advocates create beliefs which better serve their work.
- Become invincible to defeat: Defeat is not an event, it is a feeling resulting from your interpretation of it, and your belief in what it means. Worry is a future-projection of defeat; diminish it by elaborating two plans – one for the worst-case and another for the best-case scenarios.
- Identify as The Big You: Seeing the problem from a distance can help put it into perspective. Seeing ourselves as part of a larger group (which includes our 'opponents') can give us strength to deal with opponents and inspire us to work toward shared goals.
- Gain the perspective of our 'enemies' and deal with them:

Working with our 'enemy' or 'opponent' can become easier when we realize that we share shortcomings and learn how to deal with these shortcomings in both of us, developing compassion for and understanding of our opponent and ourselves.

Technology for Training Guide Dog Mobility Instructors

Amy Gunn and Kelly Chadwick
Guide Dogs for the Blind

The Guide Dog Mobility Instructor (GDMI) job is complex and requires skills working with both dogs and people. This presentation explored how technology is used at Guide Dogs for the Blind to develop these skills in Apprentice GDMI's.

Dog training: a fixed mechanical prop was created to simulate a dog pulling in harness. Used in conjunction with a digital force gauge meter and treadmill, education is provided for posture and gait while experiencing variations in pace, pull, and dog height. Education continues in more dynamic environments via low-tech dog simulators. Implications include: conditioning new apprentices for physical aspects of the job in an effort to reduce the possibility of injury and

promote career longevity. Quantifying measurements of pace and pull could also lead to more consistent descriptors of client preferences.

Client training: education incorporates modelling and coaching by a more experienced mentor instructor alongside a client and dog. Extrapolating from the work of Munro and Stafford (2012), an audio-link system allows more distance between the mentor and apprentice to facilitate discreet communication or observation. The device can also promote a sense of independence as the apprentice gains competency. Several scenarios and outcomes were discussed. And lastly, each apprentice analyses video footage of his/her instruction with a new team, followed by collaboration with more experienced instructors. Apprentice testimonials were provided. Outcomes include: enhanced awareness of instructional delivery, development of observational skills, and increased self-confidence.

Development of Tactile Encodings for Interior Maps

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Navigation of an unknown environment is a challenge for blind and low vision individuals. It is especially critical to provide them with information to help with safe travel and evacuation routes, in case of emergencies. While tactile maps are a great method for delivering this type of important information, currently no scientifically founded design rules for maps optimized for the best user experience have been developed. Additionally, 3D-printing is a great way to produce customized tactile maps. Using this technology, we can determine how three-dimensional features, topography, and texture can be used to enrich tactile map performance. Our research is focused on providing blind and visually impaired individuals with optimized 3D-printed tactile maps to aid in navigation. We introduce a novel tactile encoding system for interior spaces and evaluate individual encoding elements and how they work in combination when integrated into the maps. The encodings and maps were designed and evaluated using an iterative development process, with blind and low vision users exploring various 3D-printed tactile maps and providing feedback. Through this process we gained a better understanding of how the users read and mentally translate the tactile properties of maps to information about the space.

This study resulted in the creation of a tactile encoding system for maps that can be used to more effectively communicate spatial and navigational information to blind and low vision individuals. This resource helped many of the study participants' travel through the space and gave them more confidence and independence (Fig. 1).

Web-based Apprentice Instruction, Keeping Our Heads in the Cloud

Rod Haneline
Leader Dogs for the Blind

Today's apprentices enter GDMI programs from a variety of backgrounds with most having educations and back grounds that are other than canine based. Guide Dog schools should be looking for GDMI apprentices that have strong people skills and the ability to teach. Times have changed, and we are seeing candidates of future GDMI's that look for more challenges, specific learning objectives and a higher degree of instructional latitude when learning the work of a GDMI. The development of a web-based training program has allowed us to offer a more consistent method of knowledge transfer than the traditional program of senior instructors passing on techniques by word of mouth. We have developed a stepped approach using multimedia platforms that are interactive and actually interjected a little



Figure 1: Blind study participant comparing different maps.

fun through the use of staff emoji's. The content is challenging and set at a self-directed pace so the apprentice and other team members can maintain work life balance and the demands of the job. The results have been a hit with the candidates as well as our support team that take advantage of the tool. Implementation of web-based instruction allow use to change content quickly and present consistent messaging. This should give us the operational ability to keep content fresh and dynamic for years to come.



LEADER DOGS FOR THE BLIND

Menu Transcript Resources

- 1. Maintenance and Healthcare
- 2. Menu
 - 2.1. Maintenance of Dogs
 - 2.2. Health Care
 - 2.2.1. Monitoring of Health
 - 2.2.2. Vital Signs
 - 2.2.3. Identifying Dogs Who A...
 - 2.2.4. Common Medical Termi...
 - 2.2.5. Medication Administrati...
 - 2.2.6. Balanitis
 - 2.2.7. Inoculations
 - 2.2.8. Common Diagnosis
 - 2.2.9. Internal Parasites
 - 2.2.10. Fleas and Ticks
 - 3. Quiz
 - 4. Thank You

Leader Dogs_Module 6 Maintenance and Healthcare of Dogs

Medication Administration

Who doesn't like peanut butter?



Administering using food

Administering without food

If using food, always ensure dog has swallowed pill.

-  Place pill inside pill pocket (treat made specifically to hide pills)
-  Place pill on small amount of peanut butter smeared on a biscuit or tongue dispenser
- Click to watch video
-  Place pill in small amount of dry food and offer by hand
-  Place pill inside small "meatball" of canned, wet food
-  Place pill in feed. Make sure the dog eats it, if not, re-pill

Hunter and the Hound: An Adapted, Sound Localization Scavenger Hunt

Samantha Picciano

Ultimatecampresource.com

Hunter and the Hound, an adapted scavenger hunt, is an activity directly correlated to the Expanded Core Curriculum for students with visual impairments via Sensory Efficiency, Compensatory Skills, Recreation and Leisure, Social Skills, etc. It allows for introduction to, re-teaching of, or practice with sound localization, protective techniques, and systematic search patterns. Hunter and the Hound is constructed by setting up a physical layout of a space; items should be scattered to reinforce spatial vernacular related to travel. Stakeholders are then split into pairs. Each pair creates a unique 'bark'; this should be any noise that is so distinctive that it can

be heard amongst ambient noise coming from other pairs during play. All stakeholders are blindfolded and 'hunters' are anchored to a tactile identifier, with their 'hounds' on all fours at their feet. The instructor announces, 'Release the Hounds!' and hounds must crawl to locate hidden items. Once a hound finds an item, he or she must vocalize the unique call. Upon recognition, the paired hunter must use protective techniques to locate his or her hound to collect the item. The pair with the most items collected during play, wins. Hunter and the Hound is unique in that the setup of the activity is flexible to adapt to a stakeholder's individual needs. Additionally, Hunter and the Hound can be used as an in-service activity to educate and inform other service providers of the challenges individuals with visual impairments face during travel in order to foster stronger interdisciplinary model infrastructures.