

Supplemental Material

Introduction

To the casual observer, the confident strides of a blind person with a guide dog seem almost effortless. But in reality, it's not as easy as it looks. Guide work requires the dog to know many different skills to safely and effectively guide someone who is blind.

Those skills can vary greatly from one place to the next. On any given day, guide dogs can encounter many different situations such as roads without sidewalks, parking lots and other open spaces, stairs going up or down, and crowded stores.

Despite extensive training, the responsibility for safe travel does not fall on the guide dog alone. Both the dog and the blind person work together as a team. The person decides where to go and how to get there, while the dog safely guides its handler along the chosen route.

Guide dogs also depend on their handlers to provide direction, support and feedback. Handlers communicate with the dog through verbal cues, hand gestures, foot and body positioning, praise, physical affection, and sometimes reprimands. The dog's special harness enables handlers to sense what the dog is doing, such as slowing down, speeding up, stopping, or maneuvering around obstacles.

In short, the success of a guide dog is not a matter of luck or chance. To do their job right, guide dogs must master a variety of skills that ultimately contribute to a successful working partnership between the blind person and the dog.

Skill 1: Roads without Sidewalks

Many rural and suburban areas often have roads without sidewalks. These roads may be narrow or wide, and made up of asphalt, gravel, or dirt. They may be lined with curbs, grass, hedges, or other surfaces including snow. In these instances, guide dogs generally walk along the left side of the road to make it easier to more closely follow the road's edge. Staying on the left side also prevents the dog from being startled when cars suddenly come up from behind. Handlers often stop and check for the edge at periodic intervals to make sure they remain close to the side without drifting into the street. Some handlers find that a lightweight, compact white cane comes in handy for this purpose.

Encountering Obstacles

Obstacles are common in areas without sidewalks. There may be parked vehicles, delivery trucks, storm drains, trash cans, low hanging tree limbs, leaf piles, snow banks and more. Getting around these obstacles requires the dog to go out further into the road to get by. In some instances, the handler may have the dog stop at larger barriers, such as a car parked on the side of the road, in order to assess the traffic before stepping out to go around. With smaller objects, the dog remains watchful for near traffic but generally negotiates the obstacle without stopping.

Intersections

When traveling in areas without sidewalks, there are no tactile cues to alert handlers when they reach a crossroad. Therefore, as the team approaches an intersection, the dog is conditioned to automatically round the corner. This turning motion is what alerts handlers about the presence of the new road. At this point, handlers may choose to continue straight along the new road, or they can cross it and round the other corner to return to their original line of travel.

Knowing when an intersecting road is present is vital for obvious safety reasons, but also because blind people typically use street crossings as a way to map their route. Some handlers memorize the number of blocks, street crossings and turns to be made, while others use cardinal directions, a compass and a GPS to travel. Still others may use a combination of both strategies.

Other Hazards

Salt and chemicals used for melting the ice on the roadways can be irritating and even painful for the dog's paws. Hot pavement can also cause problems. Many handlers will use dog booties or spread a thick, non-toxic wax-like substance on the dog's paws for protection.

Skill 2: Open spaces

Generally speaking, handlers walk with their guide dogs on an imaginary straight line. Unlike pets that tend to meander about or stop to sniff every few feet or so, guide dogs move out at a steady, consistent pace. Sometimes they must leave their line of travel to go around an obstacle but within a few strides, they resume their original direction.

Keeping on course is especially important when working in large, open spaces. Area such as shopping plazas, college campuses, beaches, and parking lots can be difficult for blind people to navigate given the lack of tactile or audible cues typically use to determine their direction of travel. Sometimes handlers will request the aid of a sighted person or use their white cane to get a general idea of the overall layout and to identify possible destinations that can later be taught to the dog. This can be especially valuable when the handler plans to return to the same place on a routine basis.

Destinations

In order to get about safely and effectively, guide dog handlers must know where they are and how to direct their dogs to get where they want to go. When navigating wide open spaces, handlers often find it helpful to identify and train their dogs to go to a specific destination within that area. This not only creates a reference point for the blind person, but also serves as a focus point for the dog. For instance, training the dog to go to a set of stairs that lead into a local store gives the dog a known destination to aim for when crossing a wide open parking lot. The stairs also provide handlers with a tactile way of identifying where they are at on the route.

Skill 3: Going Up stairs

Guide dogs are taught to go up the stairs at a steady, consistent pace without skipping steps. When they arrive at the first stair, they pause while the handler reaches out with a foot to check for the step. In some instances, the dog will place its two front paws on the first step and wait for further instruction from the handler. When ready to proceed, handlers will either hold the harness handle or ask the dog to work up the stairs with a "forward" command, or they may opt to hold the leash and simply ask the dog to heel up the stairs. Some handlers prefer to use the handrail while others do not.

Skill 4: Clearance

Many stores and other indoor locations have obstacles that can present clearance issues for guide dog teams. There may be shopping carts, displays, narrow aisles, merchandise, check-out lines, boxes, shoppers, and more. These obstacles may be stationary or moving. They may be present on the left, on the right, over the handler's head, or even completely blocking the path forward.

When encountering obstacles, guide dogs must make clearance decisions with little to no direction from the handler. They use their initiative, creativity, and judgement to scan ahead and choose a safe path of travel. As the dog negotiates the obstacle, the handler closely follows, side stepping with the dog while still maintaining alignment. Sometimes the dog will be faced with multiple obstacles all at once, and when the path ahead is completely blocked, the guide dog must change direction and locate an open pathway before resuming travel.

Skill 5: Going down stairs

Stopping to call attention to changes in elevation is a routine, but important part of a guide dog's work. These changes can occur inside or out, and commonly include Stairs, ramps, curbs, broken sidewalks, and more. When approaching a set of stairs going down, guide dogs stop with their front paws right at the edge of the top step. This allows their handlers to reach out with their foot to detect the edge before stepping down. Similar to going up the stairs, handlers may use the handrail if desired, and opt to work or heel their dog down the stairs.

Additional Information

The Guide Dogs in Action Educational Series was created by Pine tree Guide Dog Users (PTGDU), a nonprofit membership organization serving Maine's blind and visually impaired residents who are partnered with specially trained guide dogs. The skills mentioned in this document are only but a few of the many tasks required for a guide dog's work. For more information, please visit www.PineTreeGuideDogUsers.org or email us at newgow.pineTreeGuideDogUsers.org