

4 Paws for Ability Educational Module Design Plan

Service Dogs: What you need to know.

Nancy P Hemenway

## Table of Contents

<b>Executive Summary</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
Content Analysis .....	6
<b>Aligned Learning Outcomes: Instructional Strategies &amp; Assessments</b> .....	<b>9</b>
Learning Objectives Table 2 .....	10
<b>Learner Analysis</b> .....	<b>10</b>
Needs Analysis .....	10
Stakeholders .....	12
<b>Performance &amp; Learning Context Analysis</b> .....	<b>16</b>
Managing Cognition, Physical and Technical Abilities .....	16
<b>Development Challenges, Constraints &amp; Resources</b> .....	<b>19</b>
<b>Media Plan</b> .....	<b>20</b>
<b>Implementation &amp; Evaluation Plan</b> .....	<b>24</b>
<b>References</b> .....	<b>30</b>

### **Executive Summary**

4 Paws for Ability, Inc., a U.S. based charity was founded in 1998 by Karen Shirk after she tried unsuccessfully for years to obtain a service dog from traditional service dog agencies. The 4 Paws agency purpose breeds, trains and places service dogs with individuals who “fall through the cracks.” 4 Paws primarily places dogs with children and also a limited number of veterans.

The general public as the target audience provided anonymous comments through surveys, emails and public comments gathered from open and closed discussion forums and social media sites. Analysis of the comments indicated confusion about the Americans with Disabilities Act as it pertains to the jobs service dogs do and to public access rights of individuals with disabilities to take their dogs into places of public accommodation.

To garner learner attention, and stir positive emotional reactions, storytelling narration, animation and videos gain and hold learner attention. The design places emphasis on recall and personal associations and feedback following Robert M. Gagne’s nine-step approach to learning and the learning processes as a guide for the design of the instructional module.

The confusion over public access rights (and differentiation) between service dog teams, emotional support animals, and therapy dogs poses difficulty for the public. This design document evaluates the challenges and suggests the development of an E-Learning module as a way to educate the public about the charitable, accountable and transparent work of 4 Paws for Ability and the proper handling and identification of service dog teams.

## **Introduction**

4 Paws for Ability, Inc. is a U.S. based nonprofit (501 c 3) agency that breeds, trains and places service dogs with individuals who are disabled. This charity serves with individuals who “fall through the cracks” and who are often not provided the opportunity to have a service dog although the assistance the dog would foster supports further independence. 4 Paws primarily places dogs with children and also a limited number of veterans.

The 4 Paws operations incorporate a purpose-bred dog breeding program. They have a robust foster care system staffed by volunteers who house the older puppies. Obedience training begins early (around 10 to 12 weeks), and 4 Paws also has a program where inmates at a men’s and women’s prison under strict supervision do basic dog obedience training. Because of both popularity of service dogs and needs for a wide variety of diverse clients, 4 Paws has experienced a great demand and has recently opened a 40,000 square foot training center.

The demand for trained service dogs is high, and organizations training dogs have popped up all over the country. Among the many phone calls of interest received by 4 Paws are consumers who want to know where they can get a vest or credentials or training for their pet dogs so they can take them into public places or on a plane. Furthermore, current 4 Paws clients (as well as other service dog owners) often experience challenges over their right under the Americans with Disabilities Act (ADA) to bring their dogs with them in all places of public accommodation. During service dog placement, clients undergo a 12-day training course. Trainers teach new handlers, usually parents, and their children with disabilities how to handle their dogs, veterinary care, contract obligations, taking their dogs to school and the ADA. The information is necessary to support day-to-day handling, training, and upkeep of a service dog. An easily accessible e-learning educational module would be helpful for clients and interested

consumers (including business owners, managers, personnel and the general public). Reaching consumers within the general population who are confused about access and appropriate treatment of service dog teams remains a significant challenge. 4 Paws has a very informative and well-put-together website that would benefit interested parties and enhance their mission to educate the public clearing up some of the confusion surrounding access rights for service dog teams. Clients, prospective clients, and consumers with interest who call 4 Paws would benefit from an easily accessible and mobile-oriented e-learning module. Interaction such as inquiries by phone and email can be directed to the module.

The purpose of this proposed E-Learning Module, *Service Dogs: What you need to know* is to create an education program for the general public about 4 Paws service dogs and the work they do for their humans. *The module proposes to* provide 4 Paws for Ability clients, prospective clients and interested members of the general public a thorough understanding of how service dog teams are used to mitigate an individual's disability and the importance of proper approaches to teams to adhere to the ADA.

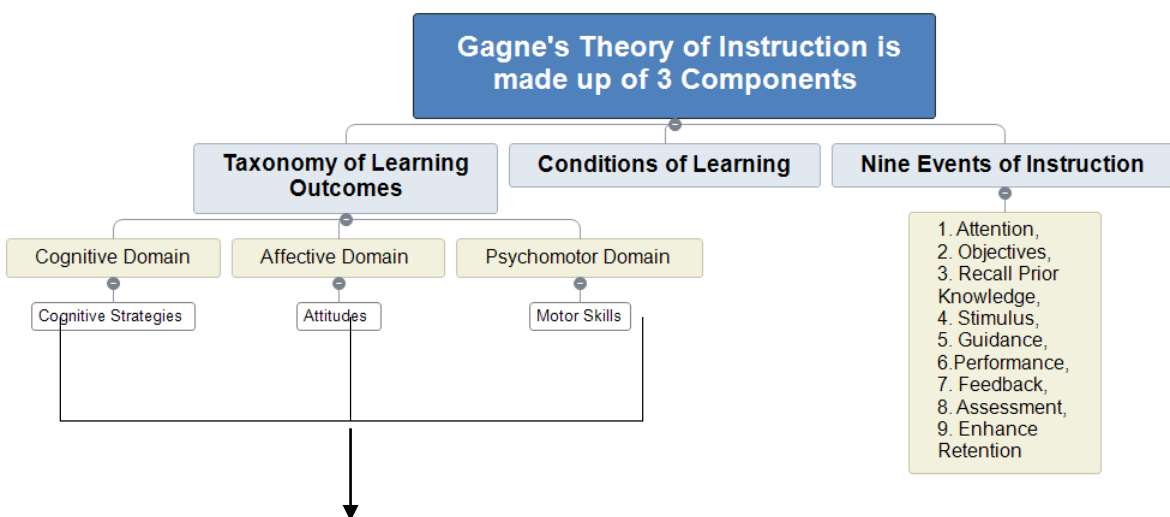
The training module will consist of four scalable lessons within one continuous learning module designed in Storyline 360. The average time to complete the module will be between 15 to 20 minutes. The module will be developed to provide an instructionally sound interactive multimedia approach to support the modules objective and appropriate experience for the target audience.

Assets will be published to the appropriate file types supported by the 4 Paws Website in an html5 format as specified under their current guides and IT department. The design is to be developed for the World Wide Web for viewing on mobile devices, tablets, and computers.

The design complies with Section 508 accessibility standards. For example, all graphics will include alt tags and available to individuals using screen readers. Audio and video components include closed captions.

The module will feature informative content, instructional graphics and media, and engaging user interactions. The final package will comply with Section 508 accessibility standards and include an accessible print version of notes (narration) for each slide. The module will reside on the 4 Paws for Ability website. At this time, 4 Paws does not have a Learning Management System (LMS). However, the software program used for the module creation (Storyline 360) conforms to a Shareable Content Object Reference Model (SCORM) platform and may be updated to function with both an LMS and SCORM simply by re-publishing the module if 4 Paws decides to use an LMS or SCORM. Learners will access the module through a link on the 4 Paws website. It is suggested 4 Paws look at some of the learning management systems if they decide to track learner progress. For now, their IT department can provide basic analytics on numbers accessing the module and track the increase of access over time.

**Content Analysis** (Nine Steps to Learning) Table 1.



Types of Learning	Internal Condition Examples	External Conditions
Cognitive Strategies	Use of repetition tied to imagery , summarizing meaning from the material , using context to analyze information and using audio and visual imagery to tie it together	Successive misrepresentation of concepts (over time) of novel problem situations (public access )
Attitude	<p>Recall of information and intellectual skills relevant to the targeted personal actions Recall of information (prior Knowledge or experiences) and application of skills relevant to the targeted actions as they relate to learning (about dogs, pets &amp; other types of working or assistance animals).</p> <p>The idea is that learners apply meaning of prior words (as they define the functions of those words.</p> <p>Reeducating learners to associate function (of a word like therapy dog) with words such as "therapy dog" vs. service dog. using verbal behavior (attaching function to words) through learning strategies outlined for the module.</p>	Establishment of 4 Paws as a respected expert and source or recall of respect for "source" (other than recall of another person they may have seen using either a service dog or a person bringing a vested pet into public areas)
Motor Skills	Every skilled response (from learning to handling or observing a dog, or accessing an online module) involves a chain of motor responses. "Recall of component motor chains."	Establishment or recall of executive,, subroutine (rules) Practicing skills.

The most important event to get the learner to spend the time to engage in an e-learning module is to garner his attention. One way to do this is by story-telling and by creating a colorful, interactive narrated introduction to keep interest with rich multimedia content throughout the module. This activity will incite and stimulate the learner. The 4 Paws title slide includes a service dog icon on a motion path set to music moving across the slide followed by the first slide in the presentation. The first slide tells the 4 Paws story. The story narration with elements of life, death, and drama about a woman who was saved both physically and emotionally by her service dog compels emotional reaction. The story pulls at the heartstring with a surprising and happy ending. Learners who are distracted or maybe even unmotivated should be drawn in by creating this emotional connection. Getting and keeping learner attention

is an important first step toward helping them learn the material. (Step 2) After the introduction, the learner takes a pretest. Objectives include what he can be expected to learn throughout the e-learning experience (see Table1). Next, a question is posed by clearly stated objectives. Posing the questions (stating objectives) activates the executive control and ties the learner into real-world experiences. This use of real everyday people and video scenarios will help to tie the learners own previous knowledge and recall to real life into the lesson or in this case the e-learning module. The approach may help the learner garner a better understanding of concepts present and see the value of the lessons. (Step 3) Most of the target audience will have some experiences either with dogs, their pets or service dog teams (having seen them in their communities) or who have pets in the home. This prior knowledge will help stimulate recall and allow further information to “stick” in memory. Prior knowledge helps learners connect. Instead of forgetting right after they complete a segment, use of prior knowledge helps commit to long-term memory. Prior knowledge and recall play a major role in learning. Learners carry mental models with them. If the learner can relate to a lesson, they can personalize it and draw on it.

(Step 4) Present a stimulus such as a video defining the relationship of the service dog to its partner. Each of these components relates to the objective and also directly back to the instructional purpose: to create an education program for the general public about 4 Paws service dogs and the work they do for their humans.

(Step 5) Although the module is self-directed and completed alone, the module guides the learner through the narratives and video examples. The module includes contact information for a designated person or the organization so if there are questions; there is a way to get them answered (feedback). (Step 6) As the learner progresses through the module, there are redundant requests to elicit responses. Information repeats in a variety of ways (through video, humor,



quizzes that may be taken multiple times, audio narration and visuals). Redundancy and repetition is key to not only absorbing new information but also retaining it and moving the new information into long-term memory for recall when needed. The module presents multiple opportunities (quizzes and interactive videos), for new-information application to real-world scenarios. This methodology gives the learner an opportunity for modified branching by presenting him with service dog video scenarios to analyze. (Step 7) Each of the quizzes or other assessments throughout the module provides immediate feedback for each question and opportunities to repeat until the learner is comfortable with the outcome. Storyline 360 also allows for the creation of personalized feedback to keep the learner engaged. (Step 8) Assessing often and throughout the module allows for troubleshooting for difficulties learners may have with the module. The design plan for this module is self-assessing. However, tracking the scoring through use of an LMS or SCORM could provide insights into difficulties and support revisions or updates to the module. (Step 9) Throughout the module, scenarios, stories, and narrators are all tied to real-world situations encouraging the learner to practice good service dog etiquette the next time they encounter a service dog team. Of primary importance in the execution of the module is to engage learners and provide them with information to improve understanding and enrich some aspect of their lives by providing a practical learning experience to which they can personally relate.

### **Aligned Learning Outcomes: Instructional Strategies and Assessments**

LEARNING OBJECTIVES E-LEARNING MODULE: 4 SECTIONS TABLE 2.

LESSON		OBJECTIVES	STRATEGIES/ACTIVITIES	ASSESSMENTS
1	Intro	<p>The learner will identify the 4 Paws mission to provide service dogs to an underserved population (children and veterans)</p> <p>The learner reacts with strong emotion to the 4 Paws mission and Story</p>	<p>Musical Title with dog icon motion path animation</p> <p>The 4 Paws Story (narrated)</p> <p>Karen's compelling Story narrate (Ben saving her life)</p> <ul style="list-style-type: none"> <li>- 4 Paws Programs through graphics and narration</li> <li>- Training the dogs (Video Prison Program)</li> </ul>	<ul style="list-style-type: none"> <li>- Pretest (may take only once)</li> <li>- Survey</li> </ul>
2	Dogs	<p>Identify the six categories of working dogs</p> <p>Define Service Dog</p> <p>Define Therapy Dog</p> <p>Define Emotional Support Dog (ESA)</p> <p>Analyze the differences between a pet, Service Dog, ESA, and a Therapy Dog</p>	<p>Using graphics, videos, and video clip scenarios, learners will watch and then decide if the dog featured is a service dog or a pet.</p> <p>(All appropriate slides throughout the module are narrated without timings so learners can repeat go backward and forwards taking more or less time as needed)</p> <p>The module includes Resources and a glossary accessible through all sections of the module.</p>	<p>Interactive Quiz with a variety of question types and immediate feedback on why or why not the dog is or is not a service dog vs. a pet (therapy dog, ESA or another working animal)</p>
3	The ADA	<p>Using the ADA definition of a service dog, the learner will compare and contrast the differences in the ADA definition of a service dog with a pet, emotional support dog, and a therapy dog.</p> <p>The learner will recognize good service dog etiquette and apply it to video scenarios</p> <p>Define places of public accommodation</p> <p>Identify public access rights of an SD Team</p> <p>Review Access denial as inappropriate and against federal and state laws</p>	<p>Present an Overview of the ADA (narrated) with graphics</p> <p>Static graphics with narration</p> <p>Highlights of the ADA Business brief (narration)</p> <p>Video clips of the different type of service dog jobs.</p> <p>Video - Using humor (Nathan Selove's Video "HiJacked") helps learners visualize service dog etiquette from a humorous but very different perspective.</p> <p>Video of an ADA violation that went viral over the internet when a Veteran was attacked by a patron in a restaurant</p> <p>Differences between Therapy, ESA and Service Dogs (Video)</p>	<p>Using Interactive Quizzes (and a variety of question types) the learner will analyze the 7 categories of dog plus ESA (Emotional support Animals). The learner will compare and contrast applying the definitions correctly with a final post test of at least 80%.</p> <p>Question types include: Multiple answer and one choice multiple choice. Also T/F and use of video clip scenarios with T/F and matching questions with visual clues (puzzle pieces that fit together)</p>
4	4 Paws Charity	<p>4. The learner will compare and contrast the quality of charities providing service dog training and placement</p>	<p>Screencast or video on Guidestar and Great Nonprofits and how they rate charity transparency and accountability.</p>	<p>Post-test (may be taken multiple times) Scores will compare to pre-test.</p>

		<ul style="list-style-type: none"> <li>- Define Transparency</li> <li>- Define Accountability</li> <li>- Identify Cost to obtain a service dog</li> <li>- Review the 4 Paws Application Process</li> </ul>		<p>Feedback on questions personalized</p> <p>Final Survey (Survey Monkey)</p>
--	--	--	--	---

### **Learner Analysis**

#### **Needs Analysis**

The target audience for the module is a portion of the general public with interest in dogs and particularly service or therapy dogs. The body of prospective learners surveyed or who call 4 Paws and ask about putting a vest their pet, or training their pet dog to access places of public accommodation is significant. Non-client consumers that call to get information may ask how they can bring their pet dog onto an airplane. Others looking for answers to access questions may include business owners, managers or consumers and even clients who call asking about the rules and regulations that businesses or schools or other public places need to follow as dictated by the ADA. The comments by consumers through email, surveys, and phone calls indicate that many members of the general public have very little experience or good information about service dog use, the ADA or appropriate etiquette when working with service dog teams. There also exists confusion to differentiate between service dogs, emotional support animals, and therapy dogs. For example, often consumers will call any form of dog used for comfort a service dog. 4 Paws hypothesizes that as there is an increase in popularity and visibility of service dog more confusion and questions arise among consumers. Some in the general public confused may observe service dog teams (particularly those with hidden disabilities) as taking their “pets” with them. Dog owners go online and find illegitimate organizations such as “the Official Service Dog Registry” who will sell “credentials” and send dog owners a vest (for a fee). (Official

Service Dog Registry, 2017) Selling credentials to pet owners to encourages them to take their untrained dogs into public placing the public at risk.

It is further thought much of the time challenges are due to lack of training and education about the rights of a person with disabilities to move about in public unencumbered or challenged and treated as any other person in the public arena.

Veterans, children, and others are utilizing service dogs to mitigate (often hidden) disabilities. (Yount, 2012) In a first of its kind study, researchers found that those individuals with hidden disabilities (e.g., Epilepsy, PTSD, some forms of Autism, Diabetes), were more likely to experience challenges and discrimination than those who have more obvious disabilities (e.g., individuals in wheelchairs or blind individuals). (Mills, 2017)

Some consumers in the general public are confused and see service dog teams (particularly those with hidden disabilities) as taking their “pets” with them. Dog owners go online and find illegitimate organizations such as “the Official Service Dog Registry” who will sell “credentials” and send dog owners a vest (for a fee). (Official Service Dog Registry, 2017) Selling credentials to pet owners to encourages them to take their untrained dogs into public placing the public at risk.

The federal government recognizes service dogs as medical equipment. They are not pets. 4 Paws for Ability identified a need for educating prospective clients and the public concerning the rights people with disabilities (under the ADA) to take their task-trained service dog with them in all places of public accommodation. Instruction and education may be an avenue to rectify much of the confusion surrounding service dog teams.

### **Key Stakeholders**

- The 4 Paws Board of Directors
- 4 Paws: Karen Shirk, Executive Director (SME)

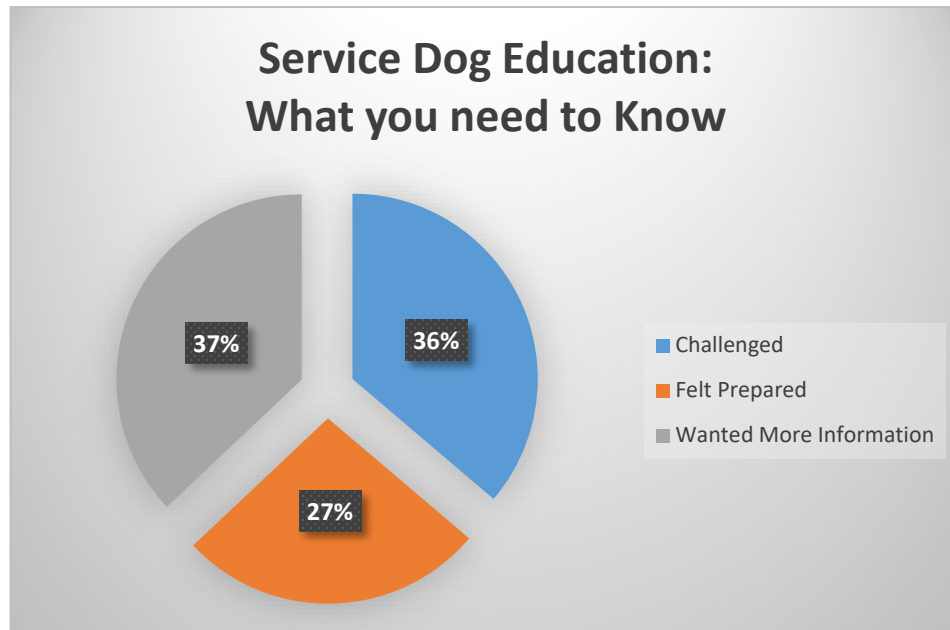
- 4 Paws: [REDACTED] Development
- 4 Paws: [REDACTED] Media Operations (SME)
- 4 Paws: Trainers Director: [REDACTED] Director (and Trainer) [REDACTED]
- 4 Paws: [REDACTED] Alaskan Training Program
- [REDACTED] Senior Trainer
- [REDACTED] DVM
- [REDACTED] DVM
- [REDACTED] Genetics, and Socialization
- [REDACTED] Operations Director
- 4 Paws Volunteers (including Puppy Raisers, Foster Parents, and others)
- [REDACTED] Head Trainer
- 4 Paws Clients and prospective clients

Contacts at other organizations may also be identified as the project progresses. 4 Paws will arrange for members of the target learner population to participate in usability testing activities.

### **Gathering Learner Information: Informal Surveys**

Using anonymous comments, social media and informal surveys, development of an informal review and needs survey commenced. 4 Paws closed network forums (for applicants and current clients only) allowed additional information supporting the need for the proposed instructional module. The general public surveys included comments from YouTubers, private hotel and chain forums, AirBnB owners, hosts, and individuals who emailed comments.

Surveyed information indicated that more than 88% of the 4 Paws clients experienced challenges to their access rights under the ADA. Many of the public comments from individuals who did not own or handle service dogs, indicated a general confusion about regulations about service dog teams.



**Figure 1.** Over 90% of service dog teams experienced challenges in entering places of public accommodation. Only 27% felt prepared for those challenges.

Access challenges by almost 90% of 4 Paws clients indicated a need for education and a desire for more information. **Table 3.** represents comments common among the general population between the ages of 18 to 70 years old (inclusive). The comments represent the most common and repeated thoughts about service dogs and came from open and closed forums on Facebook, Youtuber comments, hotel and motel chain reviews, restaurant reviews, Airbnb forums and bed and breakfast establishment reviews. Working with the general public and patrons of businesses.

See comments in Table 3.

<b>Comment Made by</b>	<b>Quotes to or about Service Dog Teams</b>
Hotel guest	If I had a guest(s) arrive who had not informed me of a disability, I would be very upset that I did not have time to prepare for what extra details might need to be taken to make their stay safe. Removing decorative nick nacks that could be hazardous or something like rugs to trip over for someone blind
Hotel chain manager	Unfortunately, it has become too simple for people to lie about the pets they travel with. It's so much cheaper to travel with the family dog than use an expensive kennel... or pawn off on a friend/neighbor/relative."
Restaurant Owner	Are you disabled? "What's wrong with you." "No one here looks disabled."
Patron Big Box Store	You're so lucky, you get to bring your dog everywhere with you.
Grocery Store Manager	Get that dog outta here.
Restaurant Mgr after being told the dog was a service dog	I don't care what kind of dog it is, get out.
Restaurant Owner	Are you Blind?
Restaurant Owner	We only allow Seeing Eye Dogs.
Major Chain - Target, Walmart)	We don't allow pets.
Shopping Mall Security Guard	Is that dog blind?

### **Target Audience**

The target learner members who could benefit from an educational module include the general public (categorized into five subgroups):

- Current working teams,

- Prospective 4 Paws clients,
- Business owners, managers, employees and other personnel
- Consumers who own dogs and
- Other consumers (18-70 years of age) located throughout the United States that may be interested

Informal surveying of the public identified learners. (See Table 2.).

Comments made by those surveyed support the issue that consumers are confused about service dogs team and how to handle public access appropriately. Some learners without service dog regular contact have prior knowledge that is erroneous including prospective 4 Paws clients not yet in the application process. Other 4 Paws clients (see Figure 1.) have good information but do not feel prepared (37%) and needed more preparation when challenged in a public space.

Prospective 4 Paws clients who have not yet acquired their service dog.

4 Paws clients are eager to learn, go to training and have a dog placed with them.

Motivation is high among prospective client learners and interested consumers and pet owners.

**Table 4. Target Audience Characteristics**

<b>Age Range 18 – 70 years</b>	The General Public and Population including Young adults (some teens) and adults including seniors.
<b>Subgroups within the same Range</b>	<ol style="list-style-type: none"> <li>1. Current 4 Paws Client (working Teams)</li> <li>2. Prospective 4 Paws clients (applying or interested in application)</li> <li>3. Business owners, managers, and Personnel (meeting and greeting the general public)</li> <li>4. Consumers with dogs (high interest)</li> <li>5. All other consumers who use places of public accommodation and are interested.</li> </ol>



<b>Reading Levels</b>	<b>Varies</b> Most newspapers written on the 7 <sup>th</sup> -grade level (e.g., Washington Post) but leisure and pleasure reading is usually two levels below (5 <sup>th</sup> grade)
<b>Technology</b>	<b>Varies:</b> Learner should have familiarity with Internet browsers and general computer literacy and access to a tablet, smartphone, tablet or Computer (Mac or PC operating system)
<b>Accessibility</b>	<b>Varies</b> from no disabilities to various disabilities. Module planned for Universal design and standard 508 accessibility.

### **Performance and Learning Context Analysis**

#### **Managing Cognitive, Physical and Technical Ability with a Large Varied Audience**

The multimedia design of the educational module is produced for website and Internet access and requires very little pre-requisite knowledge. The online presentation is accessible by smartphone, tablets or a computer, via the Internet. Learners access through an Internet connection and need some familiarity with how to use a browser. Design provides for access using either a personal computer or Mac operating system and basic (reading) literacy.

#### **Cognitive Load**

Consumers who access the multimedia module come with a variety of physical, cognitive and technical abilities. The course runs approximately 20 minutes if learners move straight through the information linearly. Learners are in charge of the progression and sequencing through the module. They may move back and forth or spend time looking at and revisiting slides they may want to repeat quizzes or watch a video more than one time. The goal is to keep the learner engaged, entertained (so they stick with the information) and to make that information visually stimulating and highlighting that information so it may stick in their memory.

Reduction of extraneous information and concentrating on the essentials of the 4 Paws mission, and disability access rights to be accommodated help learners make the connection between the multimedia presentation and application of learning goals to public encounters of service dog teams. Mayer's cognitive theory of multimedia learning makes three assumptions. The first assumes that auditory and visual are two distinct and separate channels that process information. Second, the channels are limited in their ability for processing information and three, learning is a continuous selective activity for filtering, organizing, and integrating the nonstop information. In other words, people learn better when words and pictures present close together instead of far apart. Keeping visuals and text close together in relationship to graphics and syncing the voiceovers on individual slides within the module support learning through association.

Chunking the information and multimedia into manageable segments enables matching to the learner's wide variety of levels.

The 4 Paws module plan includes access (from every slide) to a glossary of foundational terms or pre-requisites needed to understand some portions of the presentation. A glossary accessed from every slide makes the checking or refreshing memory of definitions easy. The plan also includes closed captions for each of the videos to support information processing and accessibility for learners with other special needs for accommodations. In planning for access to a wide and varied audience, videos and voiceovers are conversational and less formal to keep the learner's attention and enable them to relate to the content in a more personal way. Videos created to target a 3-minute time limit and include relatable, entertaining information to hold attention. The module and message are sustainable and scalable, optimized and redundant. Along

with the ability to go at one's own pace and repeat sections or watch a video more than once, repetition throughout the module reinforces the objectives, goals, and message to learners.

### **Cognition and Reading Levels**

The range of cognition, reading levels and access to use of computers varies greatly with the public. Based on the anonymous surveys, client information from 4 Paws organization, operating descriptions, prospective clients and those others qualifying as handlers, or interested parties from the public, the average readability within the general public ages and intelligence range from 18 to 70 and from low average cognition or to above average intelligence.

The targeted audience of adult handlers for children (usually parents) is between the ages of 25-70 with average to above average intelligence. The children who receive service dog placements range from intellectually challenged to above average intelligence. Some older children (13+) can handle their placement dogs with some help, but many child clients (approximately 70%) are not able to handle the dogs without supervision. Adults (usually parents) are certified by 4 Paws to handle the dogs and supervise the children. Some of the adults will need accommodations. Universal design will be used to develop the module with consideration to visually and hearing impairment as well as other universal design considerations.

### **Consumers (the Public)**

Educational materials creation is at a reading level geared toward the general public. Research suggests that readability and the quality of writing are what makes a piece easy or difficult to read and comprehend. A series of mathematical formulas quantifies and measures the readability of the written word. National newspaper publishers (e.g., The Washington Post) usually write their articles on a 7<sup>th</sup>-grade reading level. Pleasure or leisure reading (e.g., romance

novels) publish at the 5<sup>th</sup>-grade level. The public reads for pleasure at two grade levels below their reading level. This project will target readability at the 5<sup>th</sup>-grade level. There is a convenient and free Readability Test Tool (located here: <https://www.webpagefx.com/tools/readable/>) that analyzes text with the common readability indicators: *Flesch Kincaid Reading Ease*, *Flesch Kincaid Grade Level*, *Gunning Fog Score*, *Coleman Liau Index*, and *Automated Readability Index (ARI)*. This tool gives an overall readability score to help target an article or other written work to a comfortable reading level for the general public.

### **Development Challenges Constraints and Resources**

One of the most challenging constraints involved in this project is the wide range of disabilities, intellectual capability and large public audience that needs clarity and information. Clients come from every walk of life, and a plethora of diversity exists. Another issue and constraint is the detail and differences between the terminology of the kinds of working dogs. It will be a challenge to figure out the most memorable kind of impact examples to help the learners differentiate between therapy, ESA, and service dogs, so they remember and understand. Learners will be presented with scenario choices that are specifically identified by categories of jobs and then asked to put those into perspective as far as public access rights under the ADA. The use of such scenarios should expose learners to a range of issues specific to the targeted kinds of dogs and their jobs and should help maintain their motivation for learning.

**Schedule Constraints** – All prototypes to be produced by the designer must be ready to by December 6, 2017. The timeline is short, so interaction between 4 Paws SME and the designer needs to be fluid and responsive.

**Technical & Format Constraints** – The module has a short timeframe and will be developed for a web-based platform, with a mobile platform for Smartphones

The module will be completed and delivered by February 15, 2017. The projected time to complete the module, research, consulting with SME and build-out time in Storyline is approximately 90-150 hours

### **Media Plan**

#### **Technology (and Accessibility)**

Universal design (UDL) refers to the least restrictive design elements of the project. The module plan is to provide an online experience that is flexible and supportive of UDL. One of the most valuable features of technology is its use to enhance learning with those who have disabilities including cognitive needs as well as physical disabilities. The module plan designed with accessibility in mind from the beginning. All graphics will be available to screen readers (alt text) and videos to include closed captions. The length of an assignment within the module is self-regulated and paced to the needs of the learner. Adjustment of the complexity of quizzes supports the same broad skill levels as the readability scores. The learner can take the quizzes multiple times with immediate feedback. The slides are programmed for audio so a learner can listen without reading if that is his preference and the notes section (included in the resource section of the module) includes a transcript of the audio narration.

**Accessibility Considerations** – The design complies with Section 508 accessibility standards. To ensure that the course module is accessible to the majority of learners, the training will adhere to the following universal design guidelines:

- “ALT” Text descriptions will be supplied for all images to accommodate the visually challenged;
- All video materials: closed-captioned;

- Text files will be linked to video media or images to address detailed information that will not fit in the “ALT” text field; and

### **Safety and Privacy (Web-based Modules)**

Safety online is a priority even when the “classroom” is a self-contained educational module. The module housed on the 4 Paws website will be file transferred using an internal file transfer protocol (FTP) by the 4 Paws IT department or manager.

### **Multicultural and Social Approach**

The collective sum of the individual differences, life experiences, knowledge, inventiveness, innovation, self-expression, unique capabilities, and talent represents a significant part of the 4 Paws culture. The multimedia design addresses differences in age, color, disability, ethnicity, family or marital status, gender identity or expression, language, national origin, physical and mental ability, political affiliation, race, religion, sexual orientation, socio-economic status, veteran status, and other characteristics that make for an all-inclusive learning experience.

**Technical (Software) Considerations** (Software Program) Storyline 360 uses html5 technology and will also play in Flash but negates the necessity of Flash reverting to HTML 5. This platform can be used on any website even those using a content management system (CMS). Storyline 360 allows for a more accommodating platform for a quicker and more efficient and scalable build that can be updated to include use on an LMS or SCORM.

Strategy for best practice with a general audience online is to use an easy access multimedia rich module. The designer will use Storyline 360 online tools to build the course. The Storyline 360 e-learning project will be a thorough and rich look at 4 Paws, their mission, training for clients that “fall through the cracks,” and education on the ADA, types of service

team programs, charity evaluation for transparency and accountability and the application process. At the same time, the module will educate a general public audience on what a service dog is (defined by ADA) including rights for those with disabilities, intensive training and cost associated with it and the differences between service dogs, therapy dogs, and emotional support animals. Storyline 360 tools enable a rich multimedia and entertaining but informative presentation all in one place with wide accessibility. All parts of the Storyline module are scalable (e.g., photos, videos, quizzes, added, changed or replaced) and the native file provided to 4 Paws can also be re-published for an LMS or SCORM platform.

Storyline 360 supports a wide variety of learner in that a *resource section as well as a glossary* of definitions and links that can be utilized to take the learner direction to documents or pages on the 4 Paws (or other designated) places on the Internet. Documents can be directly attached to the module.

The following software programs will be used to create media assets:

- **Adobe Photoshop 2018** will be used to create and edit photographs, composite images, and other complex graphics. Files created in Photoshop exported as JPEG or PNG files for use on the 4 Paws website.
- **Microsoft PowerPoint or Excel 2016** will be used to create charts and graphs if necessary. Files created in PPT exported as PDFs
- **Adobe DC** will be used to create PDF files used as resources within the module resources section of the player.
- **Camtasia 9** will be used to create and edit audio and video

## Resources

Content for the sections of the module will be gleaned from existing 4 Paws materials, video and website as well as other client materials, and from additional resources identified by the designer and 4 Paws. For example, the designer/developers will use free and low-cost

materials available through the U.S. Department of Justice, and books and articles on service dogs.

The required Subject Matter Expertise (SMEs), for both content development and reviews, will be provided by 4 Paws, and by clients identified by 4 Paws or other resources, 4 Paws may recommend. Development of the module is in accordance with all copyright requirements. All quotations, graphs, charts, animations, photographs, images, and videos properly cited where appropriate.

**Intellectual Property, Privacy & Permissions** utilized for the learning materials will be appropriately attributed as property or permission by 4 Paws, appropriate public domain credentials, attribution for Creative Commons images, and the supporting permissions documentation from any individuals pictured (i.e., a signed media release and consent form).

### **Implementation and Evaluation Plan**

The final module will be due to 4 Paws by February 15, 2018, for Website deployment. The Stand-alone, self-assessing, asynchronous E-Learning Module (delivered by CD) and file transfer from Dropbox.com will include:

- Contact Information
- The working prototype
- The complete course in a native Storyline 360 zip file
- Original images created for the project
- A Style guide on font information and design color schemes
- Resource files and supplemental materials used within the native file)
- Training and technical support information (for FTPing or uploading the file to the 4 Paws Website).



4 Paws SME contact will continue to work with the designer to schedule a follow-up and a debriefing meeting with Karen Shirk and any necessary IT personnel. The 4 Paws IT personnel are responsible for creating a space on the 4 Paws website where the module will sit. Technical support directly to consumers taking the course will be 4 Paws responsibility. The designer will remain responsive to updates and editing at no cost to 4 Paws for six months from the due date of February 15, 2018. The designer will continue to work with the 4 Paws SME with any issues that arise or in completing the updates. When 4 Paws requests an edit or update, the designer will provide a timeline and support for each request.

4 Paws provided a wide array of materials directly related to the content necessary to build the module. The material gathering included government sites, research studies, and other materials in the public domain. (e.g., the ADA Business Brief, Q & A, Creative Commons) Necessary permissions were obtained for any copyrighted material, not within the public domain. Frequent communication through email and Facebook messaging with SME (Jaki Waggaman) made the project move forward without time lags.

The module is the first interactive educational program to be launched on the 4 Paws website. Best practices for effective learning require monitoring to evaluate whether the module supports the goal: *to create an education program for the general public about 4 Paws service dogs and the work they do for their humans.*

Kirkpatrick's Model of Evaluation is considered the standard for assessment of effectiveness and value of formal or informal learning across four levels (reaction, learning behavior and results). Typically, evaluations take place at each of the four levels. In **Kirkpatrick Level I**, the module provides a simple survey form (see Table 3.) In the form, 4 Paws will receive a direct response (a reaction) from consumers who take the course. The feedback enables

4 Paws to receive basic reactions on the value felt to be received by learners, and how each person felt about the information.

**A Challenge and Suggestion:** One of the challenges, for 4 Paws will be on how the data received from the feedback form in table 2 are analyzed. To gather the data from the website will necessitate the creation of a backend database. Database configuration and addition to the module is beyond the scope of this project.

One suggestion would be to create an account to provide online surveys to the 4 Paws audience. For example, Survey Monkey will provide a free account but no analytics. They do have a relatively economical nonprofit rate, however. There are some tools that allow you to define survey questions (through a link easily attached to the module) and some of these tools will provide analytics with a survey. These tools range from the basics to the very sophisticated analytics. Some of the companies that provide this service also discount to nonprofit organizations. The most popular survey programs are Survey Monkey, Zoomerang, SurveyGizmo, and PollDaddy.

4 Paws does not have an LMS. A platform called Moodle is something that the organization may want to look for future consideration. Moodle is a powerful open source course management software package. Moodle integrates website content management and online course management with survey and test-taking solutions. Moodle or a similar package may be something to consider in the future particularly if 4 Paws decides to do some distance courses (e.g., annual recertification of clients and the application process).

Table 3. Reaction Form from learners after going through the module.

Module Content	Strongly DISAGREE	Disagree	Neutral	Agree	Strongly AGREE
Interesting	1	2	3	4	5
New Information for me	1	2	3	4	5
Clarified Confusion	1	2	3	4	5
Valuable for me	1	2	3	4	5
Need more Information	1	2	3	4	5
Content was clear and useful	1	2	3	4	5
Overall Good Experience	1	2	3	4	5

**Level I evaluations** provide 4 Paws with module feedback and reactions of users. and

**Kirkpatrick Level II** (learning) Pretesting and post-testing (quizzes) will be integrated into the module. The pre-test will allow only one attempt, but the other quizzes will allow multiple attempts with immediate and personalized feedback. In this way, the learner may look at his or her improvement (self-assessment). The quizzes will be structured to relate to the objectives and for the learner, and the same post-test occurs at the end of the module. The learner will have multiple opportunities and a variety of questions, (multiple choice, true or false, matching). Passing (the quiz material) equates to answering 80% of the questions with correct answers. The learner will have multiple opportunities to take the quizzes. Because this is an asynchronous, self-paced and self-assessing learner module, Levels I and II of the Kirkpatrick Model of evaluation are used. If 4 Paws decides to incorporate an LMS or another mechanism (e.g., Moodle) they may want to incorporate further levels. For example, the module could add client focus groups and integrate the module into the 12-day placement training for clients as a homework assignment when they come to Ohio for training or as a pretesting mechanism for the

training classes. The module may be utilized (with clients) who take service dog placement training to gauge basic knowledge before the training. Tracking this information could be used by 4 Paws to garner further evidence of the success of their program.

During the development of the design and going forward, 4 Paws SME Jaki Waggaman has emailed answers to questions sometimes prompting more questions. Formative evaluation is an ongoing process; a question and answer inquiry process with 4 Paws or a phone call with Jaki Waggaman if necessary. Having easy email and Facebook access and ability to call has allowed internal formative evaluation on the “fly” as often as needed. As each question is answered and as we move ahead 4 Paws has accommodated the design process with an abundance of materials and made suggestions to foster learning for the user. The development and design progression has been an incremental building process. Prototype usability testing is planned. The completed package is due to 4 Paws on February 15, 2018. Summative (evaluation) usability testing through the use of an interactive prototype to be completed by December 6, 2017.

To test for learner reaction, and receive user feedback, the design iteration technique (usability testing) will test the interactive prototype with a small set of learners (2-4). Testing procedure: the prototype published link is sent to 2-6 users. Half of the users will be selected by Jaki Waggaman and the other half by the designer. Half of the learners will be prospective or current 4 Paws clients and the other half the general public. Evaluation of the feedback will be completed by the designer and the 4 Paws SME. Feedback will be completed by email using a survey form that includes a comment area, Using the interactive prototype will provide more realistic feedback. The feedback is helpful in getting the design closer to where it needs to be.

### Scope Summary

Based on the designer's analysis of the needs, learner characteristics, constraints, and resources involved, this designer proposes: To design and develop a 4 Chapter educational e-learning module as an educational aide using Storyline 360. The module: *Service Dogs: What you need to know* will be used by 4 Paws for Ability to offer the course/module to its clients, prospective clients and the general public as a learning and educational tool.

The program will be developed for the World Wide Web (Internet) for computers, tablets, and mobile devices and will consist of four linear chapters that address topics common to service dog-related topics and access challenges.

4 Paws will provide or arrange for subject matter expertise, formative usability testing participants (volunteers), and content reviewers. Specific content regarding, learning outcomes, instructional strategies, assessments, and multimedia elements will be reviewed in a thorough and timely manner by 4 Paws designees. The documents to be reviewed include:

- (1) the Design Document (with learning outcomes, assessment descriptions, instructional strategies, content outline, media plan, and plan for formative testing and summative evaluation),
- (2) Prototypes (multimedia, scripts and storyboards, and scenarios, plans, assessment items, website and mobile screen designs), and

**NOTE:** Reviewers are asked to address, *in writing*, any items in the above project scope document that should be elaborated, changed, or deleted, and sign next to the applicable statement below to indicate review and approval of this document.

Nancy P Hemenway will design, develop and supply development expertise to complete the project. 4 Paws will contract with Nancy P Hemenway on a volunteer basis (no cost for the designer expertise), with any additional the details of the contract to be decided through collaboration of the legal departments for 4 Paws and the designer.

**Signature Page**

<p><b>Sign your name next to the statement below that indicates your decision regarding this project scope</b></p>	<p><b>Signature</b></p>
<p>I have reviewed and APPROVE this project scope proposal, as written.</p>	
<p>I have reviewed and APPROVE this project scope proposal <i>with the changes I noted</i> on the following pages of the document: _____</p>	
<p>I have reviewed but do NOT approve this project scope proposal. (State reason, below.)</p>	
<p>Other: (please elaborate)</p>	

### References

- ADA, service animals and the right to refuse a guest: Business Source. (n.d.). Retrieved October 7, 2017, from <http://web.b.ebscohost.com.mutex.gmu.edu/bsi/detail/detail?vid=0&sid=76287476-ad53-4430-aa20-32312e0b7b39%40sessionmgr120&bdata=JnNpdGU9YnNpLWxpdmU%3D#AN=47616301&db=hjh>
- ADA Requirements: Service Animals. (n.d.). Retrieved October 7, 2017, from [https://www.ada.gov/service\\_animals\\_2010.htm](https://www.ada.gov/service_animals_2010.htm)
- Air Travel Just Got A Little Bit Better For Service Dogs And Their Owners | HuffPost. (n.d.). Retrieved October 7, 2017, from [http://www.huffingtonpost.com/2014/04/22/detroit-airport-dogs\\_n\\_5192681.html](http://www.huffingtonpost.com/2014/04/22/detroit-airport-dogs_n_5192681.html)
- Butterly, F., Percy, C., & Ward, G. (2013). Brief report: do service dog providers placing dogs with children with developmental disabilities use outcome measures and, if so, what are they? *Journal of Autism and Developmental Disorders*, 43(11), 2720–5. <https://doi.org/10.1007/s10803-013-1803-1>
- Friends, V., & Tourism, R. (n.d.). More Than a Family. Retrieved October 7, 2017, from <http://web.b.ebscohost.com.mutex.gmu.edu/ehost/detail/detail?vid=0&sid=bf0e3040-fa3b-444a-9402-aa4049f66b21%40sessionmgr120&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3D%3D#AN=62283114&db=f5h>
- Harris, K. I., & Sholtis, S. D. (2016). Companion Angels on a Leash: Welcoming Service Dogs

Into Classroom Communities for Children With Autism. *Childhood Education*, 92(4), 263–275. <https://doi.org/10.1080/00094056.2016.1208003>

Irvin, S. (2014). The healing role of assistance dogs: What these partnerships tell us about the human-animal bond. *Animal Frontiers*, 4(3), 66–71. <https://doi.org/10.2527/af.2014-0024>

Mader, B., Hart, L. A., & Bergin, B. (1989). Social acknowledgements for children with disabilities: effects of service dogs. *Child Development*, 60(6), 1529–34. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/2533060>

McDonald, J. J. (2006). Take Your Dog to Work Day-Everyday. *Employee Relations Law Journal*; Winter, 32(3). Retrieved from <https://search-proquest-com.mutex.gmu.edu/docview/194222975/fulltextPDF/F82AAE21109A479APQ/1?accountid=14541>

Passengers with Disabilities | US Department of Transportation. (n.d.). Retrieved October 7, 2017, from <https://www.transportation.gov/airconsumer/passengers-disabilities>

Schoenfeld-Tacher, R., Hellyer, P., Cheung, L., & Kogan, L. (2017). Public Perceptions of Service Dogs, Emotional Support Dogs, and Therapy Dogs. *International Journal of Environmental Research and Public Health*, 14(6). <https://doi.org/10.3390/ijerph14060642>

Service Dogs in the Perioperative Setting. (2017). *AORN Journal*, 105(4), 365–369. <https://doi.org/10.1016/J.AORN.2017.01.012>

Society for Research in Child Development. (n.d.). *Child development*. Published by the University of Chicago Press for the Society for Research in Child Development.

Stace, L. B. (2016). Welcoming max: Increasing pediatric provider knowledge of service dogs.



*Complementary Therapies in Clinical Practice*, 24, 57–66.

<https://doi.org/10.1016/j.ctcp.2016.05.005>

Staller, K. M. (2014). The invisibility of taken-for-granted limitations in qualitative inquiry.

*Qualitative Social Work: Research and Practice*, 13(4), 449–455.

<https://doi.org/10.1177/1473325014536957>