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Design Document prepared for:  
**National Sports Center for the Disabled - NSCD  
Volunteer Ski Instructor Training Program**

*Presented by:*  
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## OVERVIEW

This document outlines the instructional design plan for training new and novice volunteer ski instructors at the National Sports Center for the Disabled (NSCD). Currently new volunteers and novice ski instructors, hereafter referred to as students, demonstrate inconsistent degrees of performance in areas of on-mountain skills, safety, preparation of adaptive equipment and process management.

This plan is intended to raise performance (skills) and knowledge levels for new and novice NSCF volunteer ski instructors utilizing gap analysis in a newly developed learning model, and establish clear, standardized instructional objectives, expectations, and performance evaluations for students within each learning model.

## NSCD MISSION STATEMENT

“We enable the human spirit through therapeutic sports and recreation.”

## SUMMARY OF ANALYSIS

### ABOUT THE NATIONAL SPORTS CENTER FOR THE DISABLED - NSCD

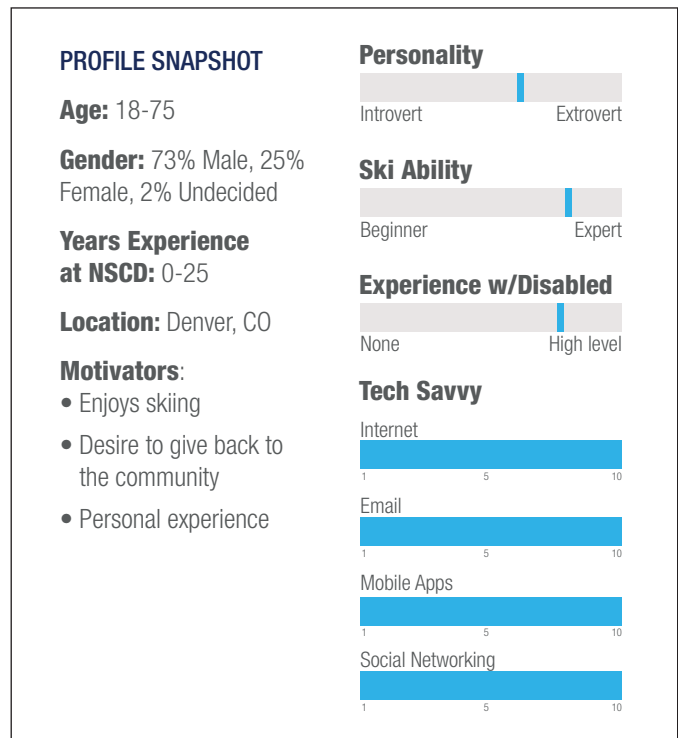
The NSCD is recognized around the world as a premier therapeutic recreation organization, providing leadership and expertise in adaptive sports. NSCD participant disabilities vary across a wide range of cognitive, physical, visual and emotional impairments from slight to profound, and often in combination. The NSCD offers a variety of year-round sports and recreational adventures. In the winter participants enjoy Alpine and Nordic skiing, snowboarding, Nordic hut trips, snowshoeing and ski racing. This document focuses on the standing and seated skiing program, based out of Winter Park Resort in Winter Park, Colorado.

### WHO ARE THE LEARNERS?

#### NSCD Volunteer Ski Instructors

There are in excess of 800 NSCD volunteer ski instructors who range in experience from 0-25+ years. The age range varies significantly and runs from 18-75 years old, the average age being 55.3 years. There is a gender mix but weighted heavily towards males; 73% male, 25% female, 2% undecided. Almost all NSCD volunteer ski instructors were experienced and accomplished skiers prior to joining the NSCD volunteer program. Also it is common that an NSCD volunteer ski instructor has had a personal experience with a disabled person in their life that motivated them to join the organization. Volunteers universally have a strong desire to make a contribution to the community and give back in a tangible way.

*To the right is a profile snapshot of a typical NSCD volunteer ski instructor. A full Learner Persona about John is shown in Appendix A.*



## SUMMARY OF ANALYSIS (continued)



### NSCD Volunteer Ski Instructor Skills and Knowledge Gaps

Although NSCD volunteers are highly motivated, gaps in knowledge and skills with new and novice volunteers pose challenges to the quality of the experience and safety of NSCD ski program participants. Volunteers' skiing ability and knowledge provide an excellent frame of reference, but usually there is little or no experience with setting up and/or operating adaptive ski equipment, providing ski instruction or NSCD procedures. Beyond whatever limited personal experience volunteers have, there are also knowledge gaps regarding the types and levels of disability, (cognitive, physical, visual or emotional) that program participants may have. Safety concerns and dealing successfully with this broad range of disabilities also represents a gap in knowledge for new and novice volunteer.

### NSCD Volunteer Ski Instructor Learner Audit

An extensive audit process was conducted in order to understand and evaluate existing NSCD program learning resources, new and novice NSCD volunteer ski instructors (the learners) and NSCD staff instructors of the volunteer ski instructor program (the teachers).

Online resources were examined including the NSCD web site, Volgistics web site (dedicated to the development of NSCD volunteer ski instructors), NSCD YouTube channel, online articles and other published online content. Interviews were conducted with both NSCD staff and volunteers to gather real time input and information regarding perceived opportunities for improvement in training. NSCD training curriculum and materials were gathered and analyzed to examine pedagogy, content, and methodology. Finally, a series of 6 focus groups were conducted, 3 current NSCD ski instructor volunteers and 3 with NSCD ski training staff to understand what's working, what's missing, and identify opportunities for improvement in the current training program.

## INSTRUCTIONAL DESIGN MODEL



### ADDIE

The ADDIE model (Analyze, Design, Develop, Implement, Evaluate) has been selected to guide this project for several reasons. In addition to the basic strength of ADDIE as an ID model, it is a model we could easily describe to NSCD leadership so they could see the value in this organizational and development methodology. Using the ADDIE step by step framework allows for NSCD organizational buy-in, provides a methodology that meets the ski instructor volunteers (learners) needs, accomplishes training objectives, provides opportunities for evaluation, guides design and development of appropriate training materials and allows for the evaluation of the efficacy of the over-all training program.

## ASSUMPTIONS

- NSCD staff is in agreement that new training solutions are necessary for the success of the volunteer ski instructor program and for retention
- Time expectation for an NSCD ski instructor volunteer to successfully complete 5 training modules is 45 hours. (breaks down into five 8-hour on-site training sessions with 1 hour of pre-training homework for each module)
- Completion of project will be no later than October 31, 2017 in order to be prepared for the 2018 ski season
- Based on need, budget and timing, additional videos will be created and added to the library on the volunteer portal in the NSCD web site
- Curriculum will be standardized for each module and sufficient training-the-trainer sessions will occur for NSCD staff so that all volunteers will learn the same material regardless of who is training them
- Pricing is not an issue for this project. All instructional design, video production and post production, web development are done pro bono. NSCD staff development and collateral material costs are born by NSCD.



## INSTRUCTIONAL OBJECTIVES

Instructional objectives for the NSCD volunteer ski instructor training were created using Bloom's Taxonomy.

*Upon completion of training, volunteers will be able to:*

- **Complete online safety assessment with a passing evaluation (determined by trainer/instructor).**
- **Complete online process assessment with a passing evaluation (determined by trainer/instructor).**
- **Demonstrate ability to set-up and prepare specific adaptive ski equipment.**
- **Demonstrate ability and competency to load and unload adaptive ski equipment from ski lifts with live participant substitute.**
- **Demonstrate ability and competency using adaptive ski equipment on the mountain with a live participant substitute.**

### Methods to present objectives

The first exposure to NSCD volunteer ski instructor training objectives will be in the Fall of 2017 at an orientation held in Denver (location TBD). All those who are interested at the event will be given a copy of the Learning Roadmap (Appendix B) providing an overview of what NSCD volunteer ski instructor training is about.

Volunteers who sign up at, or after, the event will receive an on-boarding email 2 weeks prior to the start of training which will also contain volunteer web site information and log-in, a reminder timetable for completion and the objectives of each module. An email will be sent to volunteers at the completion of each learning module to remind them of the focus of the next module and which objective(s) will be covered at that session.

The on-site training portion of each module will relate to and focus on the specific objective(s) for each module.



### Post module skills practice, reference material and evaluation

After completion of the 5 learning modules, NSCD volunteer ski instructors will be certified and able to work with NSCD ski program participants. New and novice volunteers will initially work with experienced, skilled volunteers and NSCD staff to receive coaching and to continue developing their skill levels. Staff and lead volunteers will make formal and informal recommendations to the NSCD program coordinator about serious skill deficiencies that are observed so additional training can be provided.

Demonstration videos of adaptive ski equipment set-up, proper on-mountain skills and instructional techniques, safety issues and process management used in the 5 training modules are available 24/7/365 for review and reference as needed. The NSCD Ski Instructors Manual is also available in the volunteer web site as a reference.

## PROPOSED LEARNING SOLUTION

Both knowledge and skills are imperative gaps to fill in for NSCD volunteer ski instructors to ensure safety for participants and themselves. Dirksen (2016) appropriately states that “Information is the equipment your learners need to have in order to perform” (p.4) and that is especially true here. She goes on to suggest that when determining if something is a skill gap rather than a knowledge gap, to ask “Is it reasonable to think that someone can be proficient without practice?” (p.7) If the answer is “no,” the gap is a skill gap and will require practice to gain expertise. Our learners will be required to attain and retain great deal of skills related to adaptive ski equipment and instruction.

Two weeks before training begins, volunteer ski instructors will be sent an on-boarding email which will outline overall training objectives, log-in information for the training web site, the Instructors Guide, staff contact information and other important details related to the program. Once logged in to the web site, volunteers will access a calendar with multiple training dates for the on-mountain portions of each of 5 training modules. In the on-boarding email and on the web site a required date of completion for all 5 modules will be clearly stated. Prior to attending each of the 5 training modules, there will be brief mandatory homework required and a link with directions on what to do for each assignment on the homepage of the website.

The proposed learning solution for the NSCD volunteer ski instructor training is a hybrid training and educational methodology consisting of reading, video, knowledge assessment, live skills training and demonstrations, volunteer skills practice and demonstration, and skills proficiency assessment.

## MODULES

On the website each of the 5 modules will be described in detail including which objective(s) will be covered at the on-site training, expectations of volunteers at training, as well as pre-training homework consisting of required reading from a portion of the Instructors Guide and a video(s) to watch. Volunteers will receive reminder emails of progress and completion status as they proceed through the training.

*Each module will be composed of:*

- **Email stating module objectives and homework assignment one week prior to on-site training**
- **Pre-on-site training homework (reading and watch video)**
- **Quiz based on homework assignment prior to each session**
- **On-site training (full day)**
  - Equipment set-up and preparation session (1 hour)
  - On-mountain skills demonstration and development (2.5 hours)
  - Lunch break (45 minutes)
  - On-mountain skills development training, continued (2.5 hours)
  - Equipment return and equipment paperwork process (.5 hours)
  - Debrief/discussion session and instructors paperwork completion (.5 hours)
- **Staff evaluation of each volunteer to determine if they are ready to proceed to the next module occurs throughout the on-mountain skills development portion of the day**

## PROPOSED LEARNING SOLUTION (continued)

### NSCD VOLUNTEER PORTAL

The proposed learning solution for the NSCD volunteer ski instructor training will be conducted in 5 modules. The graphic below shows what the volunteer portal would look like that houses module information, resources, requirements and instructions before attending the module on-site classes. This is for mock-up purposes only at this point in time.

The screenshot shows the NSCD Volunteer Portal interface. At the top, there is a navigation bar with five modules: MODULE 1, MODULE 2, MODULE 3 (highlighted in red), MODULE 4, and MODULE 5. The NSCD logo is in the top left, and the text 'NSCD VOLUNTEER PORTAL' is in the top right. Below the navigation bar, there are icons for Partners, World Bank, and other services. The main content area is titled 'Welcome to Module 3'. Under 'LEARNING OBJECTIVES', there are three bullet points: 'Demonstrate ability to set-up and prepare Sit Ski Type 2.', 'Demonstrate ability and competency to load and unload Sit Ski Type 2 from ski lifts with a live participant substitute.', and 'Demonstrate ability and competency using Sit Ski Type 2 on the mountain with a live participant substitute.'. Under 'REQUIREMENTS BEFORE ATTENDING MODULE 3 CLASS', there are four bullet points: 'Download, read and be prepared to discuss Module 3 Volunteer Ski Instructor Guide, "On-mountain Procedures"', 'Watch Video 03 | Sit Ski Type 3, Technique', 'Watch Video 06 | Sit Ski Type 3, Setup', and 'Take Module 3 quiz'. A 'MODULE 3 ON-SITE TRAINING AGENDA (click here)' link is at the bottom left. A large red box in the center contains the text 'MODULE 3 VOLUNTEER SKI INSTRUCTOR TRAINING On-mountain Procedures' and a 'TAKE THE QUIZ' button. On the right, there are two video thumbnails: 'Video 03 | Sit Ski Type 3, Technique' and 'Video 06 | Sit Ski Type 3, Setup'.



## PROPOSED LEARNING SOLUTION (continued)

### VIDEOS

A series of videos will be produced to aid in the learning of adaptive ski equipment and safety. These will be required to watch pre-training in order to prepare volunteers for on-site training. More importantly, videos will be housed on a volunteer portal in the NSCD web site where they can be accessed by volunteers to refresh themselves on equipment and safety at any time. Videos can be accessed via mobile and other technical devices when needed.

#### *Video library*

#### **Three Equipment Set-up and Preparation Videos - each 4 minutes long**

These videos will serve as a visual instructional guide to model set-up and preparation highlights for each NSCD bi-sit ski

- **Video 1.1:** Mountain Man bi-sit ski
- **Video 1.2:** Dynamic bi-sit ski
- **Video 1.3:** Bi-unique bi-sit ski

#### **Three Loading and Unloading Chairlift Videos - each 4 minutes long**

These videos will serve as a visual instructional guide to model on-mountain correct techniques and best practices for loading and unloading each NSCD bi-sit ski on and off of a chairlift

- **Video 2.1:** Mountain Man bi-sit ski
- **Video 2.2:** Dynamic bi-sit ski
- **Video 2.3:** Bi-unique bi-sit ski

#### **Three Technique Videos - each 4 minutes long**

These videos will serve as a visual instructional guide to model on-mountain correct techniques and best practices using each NSCD bi-sit ski

- **Video 3.1:** Mountain Man bi-sit ski
- **Video 3.2:** Dynamic bi-sit ski
- **Video 3.3:** Bi-unique bi-sit ski

#### **Safety Video - 5 minutes long**

This video will provide visual demonstration of safety procedures and emergency situations. It will link back and refer to more detailed information in the NSCD Volunteer Instructor's Guide to provide greater depth of information. The "*Diagnosis Information & Disabilities Guide*" provides more specific disability information, and emergency procedures for on-mountain situation are covered in greater detail

## PROPOSED LEARNING SOLUTION (continued)

### VIDEO SOLUTION MOCK-UPS

A series of 10 videos will be produced to aid in the learning of adaptive ski equipment and safety.

Videos will be housed on the NSCD volunteer ski instructor portal. Additional videos will be created on an as-needed basis.

*Note: Videos have not been shot at this time, so images in the video screen are for representation and placement only.*



#### Video Series 1 - Equipment Set-up and Preparation (4 min)

These videos will serve as a visual instructional guide to model setup and preparation highlights for each NSCD bi-sit ski

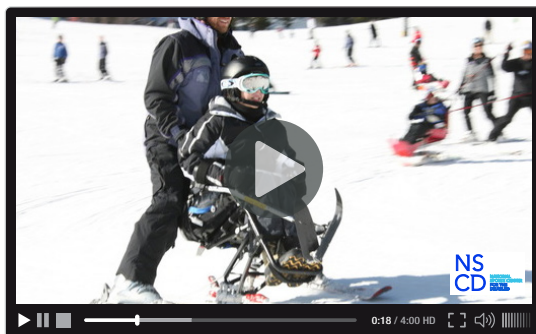
- **Video 1.1:** Mountain Man bi-sit ski
- **Video 1.2:** Dynamic bi-sit ski
- **Video 1.3:** Bi-unique bi-sit ski



#### Video Series 2 - Loading and Unloading Chairlift (4 min)

These videos will serve as a visual instructional guide to model on-mountain correct techniques and best practices for loading and unloading each NSCD bi-sit ski on and off of a chairlift

- **Video 2.1:** Mountain Man bi-sit ski
- **Video 2.2:** Dynamic bi-sit ski
- **Video 2.3:** Bi-unique bi-sit ski



#### Video Series 3 - Technique (4 min)

These videos will serve as a visual instructional guide to model on-mountain correct techniques and best practices using each NSCD bi-sit ski

- **Video 3.1:** Mountain Man bi-sit ski
- **Video 3.2:** Dynamic bi-sit ski
- **Video 3.3:** Bi-unique bi-sit ski



#### Video Series 4 - Safety (5 min)

This video will provide visual demonstration of safety procedures and emergency situations. It will link back and refer to more detailed information in the NSCD Volunteer Instructor's Guide to provide greater depth of information. The "Diagnosis Information & Disabilities Guide" provides more specific disability information, and emergency procedures for on-mountain situation are covered in greater detail.

## PROPOSED LEARNING SOLUTION (continued)

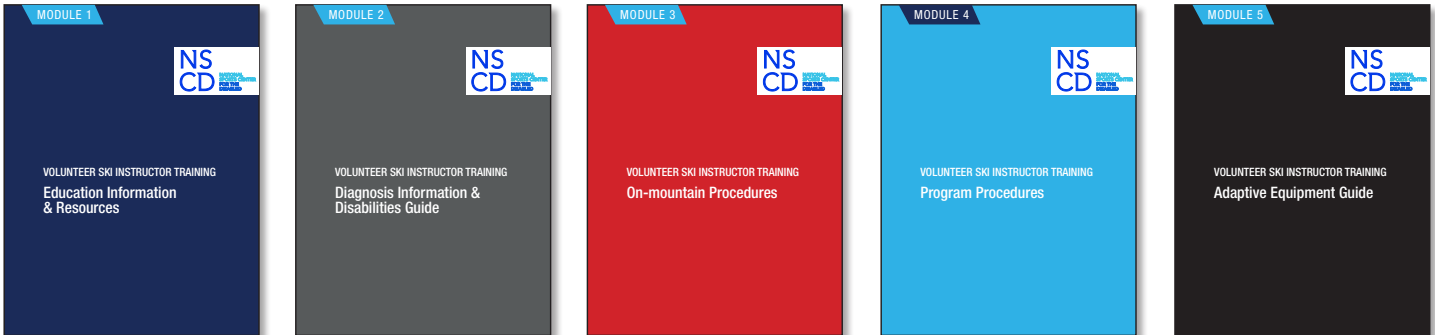
### VOLUNTEER SKI INSTRUCTORS GUIDE(S)

The Volunteer Ski Instructors Guide will be broken into 5 components, and one guide will be focused upon in each of the 5 modules. Each will be saved as a PDF and housed on the volunteer portal in the NSCD web site where they can be accessed by volunteers at any time for required reading or reference.

Components include:

- Education Information & Resources
- Diagnosis Information and Disabilities Guide
- On-mountain Procedures
- Program Procedures
- Adaptive Equipment Guide

### VOLUNTEER SKI INSTRUCTORS GUIDES SOLUTION MOCK-UPS



MODULE 3
NS CD

#### Teaching Bi-skiers

A bi-ski allows people who cannot use their legs or who have balance problems to ski safely down. Through the combination of a modified seat, or bucket, attached to two articulating side ski rods by a suspension system, and outriggers, even a person with a high level or very severe disability can ski. While some bi-skiers can ski independently, others require instructor assistance through the use of letters.

Anyone who can sit in the bucket can ski in a bi-ski. Therefore, the bi-ski is an excellent equipment choice for any person with a disability who cannot stand to ski, lacks the muscle control, or has minimal balance or trunk support abilities.

**The bi-ski is not intended to be a stepping stone to the snow-ski. This bi-ski requires very different skills than are used in snow-skiing. If the person is a candidate for the snow-ski, start there.**



**BI-SKI BASICS**

The bi-ski can be turned by either the skier or the tether. The participation of the instructor depends on the ability level of the skier. The bi-ski can be controlled completely by the tetherer. In many cases, a turn can be initiated in the bi-ski using a simple leaning motion, such as a head lean to one side. The change in the center of mass puts the skier on edge and makes it turn. This leaning can be initiated by the skier or the tetherer.

**STUDENT ASSESSMENT AND EQUIPMENT FITTING**

Some things to consider when assessing a bi-skier:

- Can the skier hold a pair of outriggers? If not, fixed outriggers should be used on the bi-ski. A bar is also an option if the skier is able to hold on to the bar.



- **Bucket** — This is not set back very far.
- **Bucket** — This is not set back very far.
- **Bucket** — This is not set back very far.
- **Bucket** — This is not set back very far.

- Check for other physical limitations: balance, ability to rotate the torso, arm strength. Any deficiencies may need to be compensated for. For example, a person who normally walks may lean more from the upper body workout involved in bi-skiing.
- Remember most bi-skiers have limited or no feeling in their legs. Be sure to keep the legs and body warm and protected. Make sure straps do not cause chaffing or rips!
- Is the student prone to pressure sores? Additional padding may be required to avoid sores.
- Can the student sit up straight or correct leaning on his own? If not, additional padding and strapping may be required to keep the student's body from moving around while skiing.
- Determine the level of participation the student is capable of. Encourage the student to do as much as possible, but be aware that not all bi-ski skiers will be able to control the ski. For students who are not participating at all in controlling the ski, skip the flattened levers and tether the skier down like a tandem.

**The Ski**

The bi-ski has two short, side-cut skis that are meant to turn. As a result, it is difficult to make a bi-ski go straight. The articulating mechanism that holds the skier to the bucket allows both sides to edge when the skier leans. If the skier leans too far laterally, the dampening device can be adjusted to limit the side-to-side movement.

**The Bucket**

The bucket should be snug and comfortable. The bi-ski's C-shaped bucket is designed to provide additional support to the skier and help maintain balance. Because the bi-ski turns by leaning, the higher the center of mass is off the snow, the less movement is required to turn the ski. Choose a ski that has a bucket best suited for the student. We have three basic styles of bi-ski:

- **Stable** — higher off the ground, so it bales less leaning to turn the skier. Good for a student who can't move a lot, but not great for a skier who is prone to uncontrolled movement. This ski also has a 4-bar attachment that can be used for help with balance.
- **Mountain Man** — good for almost all bi-skiers. This ski has a tandem attachment.
- **Bi-Unique** — lowest to the ground, so it takes more movement to turn the ski. This ski can be skied independently by some without fixed outriggers. The fixed outriggers are at the back instead of the front.

When loading the student into the bi-ski, make sure that the skier is balanced in the ski.

**After a fall, always recheck the straps and remove any snow that is stuck in the bucket.**

Adjust straps so that there is no movement inside the bucket. Think of it as the equivalent to a ski boot — it needs to be snug, but not painful. When tightening straps, watch out for bladder bags and sensitive areas. Note, some skiers may require additional strapping to help restrict movements or to compensate for unusual feet fit.

**Adaptations** — When necessary use additional strapping, padding, or other creative means to provide support. Be careful to limit flexibility and mobility however. The point is to use what the skier has available, and compensate for anything that is not available. Some skiers require creative padding to balance the weight equally on the ski. If the ski is leaning to one side, you will have trouble tethering the ski.

**The Foot Tray**

The foot tray provides a platform to secure and protect the lower legs and feet. It should be adjusted to allow for heel movement and a stable position. For an active skier, the knees should be bent enough to help the student maintain an athletic position. A less active student may require the knees to be bent more to keep the student's body from moving too far forward. Also, you may need to adjust the legs of a student prior to quality and the quality runs.

**Hand-Held Outriggers**

If the skier has the ability to hold and use hand-held outriggers, the outriggers will allow the skier to have more control. Bi-ski outriggers are shorter than snow-ski outriggers, but they work in much the same way.

- Hand-held outriggers provide balance. In the crouch position, outriggers are used for maintaining the ski, such as pushing on the feet and standing a chairlift. Never ski with the outriggers in the crouch position.
- In general, fixed outriggers are not used when the skier is using hand-held outriggers. From ski to ski, make sure the fixed outriggers are positioned so they do not interfere with the hand-held outriggers.



**VIDEO RESOURCES**

Video resources covering setup and technique available on the volunteer portal in the NSCD web site.



VOLUNTEER SKI INSTRUCTOR TRAINING | Adaptive Equipment Guide | 11

## SCHEDULE

*Note: this schedule is not aggressive and completion should be prior to projected date*

The NSCD volunteer ski instructor training program will take a full year to develop. This is the proposed schedule required to have new training procedures in place for the 2018 ski season.

**January 25, 2017** – Analysis process begins

**January 25, 2017 and ongoing** – Interviews with NSCD staff and ski instructor volunteers

**February 8, 2017** – Staff meeting/kickoff

**March 3, 2017 and ongoing through close of ski season April 23, 2017** – Informal focus groups with staff and ski instructor volunteers

**April 22, 2017** – Completion of on-mountain video shoots

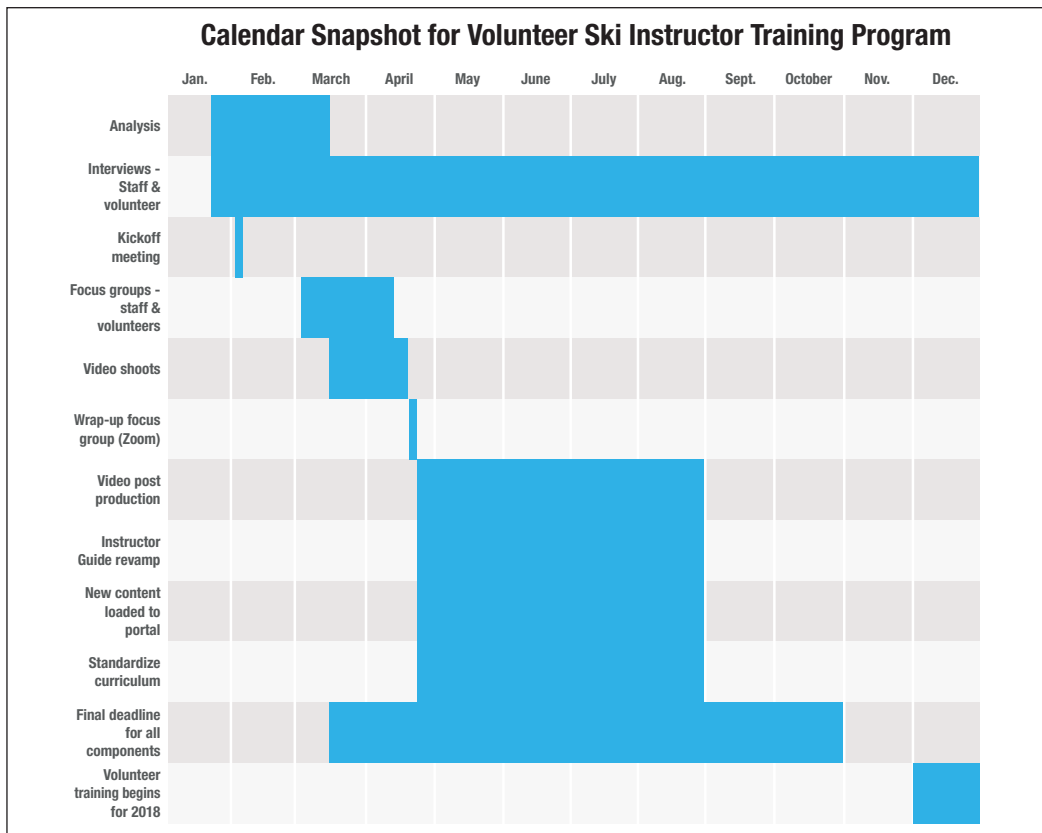
**April 24, 2017** – Staff focus group / season wrap up and learnings using Zoom

**April 25 – August 31, 2017**

- Video post-production
- Instructor Guide revamp
- New content loaded to volunteer portal on NSCD web site
- Analyze lessons for on-site training sessions and standardize them
- Create expectation levels and create assessments for participants to fill out at the end of each session

**October 31, 2017** – Deadline for all components of the volunteer ski instructor training complete

**December 1, 2017** – Volunteer ski instructor training begins for the 2018 ski season



## EVALUATION PLAN

### PURPOSE OF EVALUATING THE NSCD VOLUNTEER SKI INSTRUCTOR LEARNING SOLUTION(S)

The evaluation plan has been part of the overall volunteer ski instructor training project development from the start and is guided by learning principles long enumerated by Gagne and Kirkpatrick. The evaluation strategy receives real time input from multiple sources during the training period. The data collected is used to create a summary and aggregate reporting at the end of the training period. The end-of-training evaluation information forms the basis of adjustment and improvement of the program for the next training cycle and is the initial step in creating a Continuous Improvement Process for the NSCD sit-ski program.

Evaluation of the target learning population in meeting program learning goals and objectives is only one measure of the overall evaluation. Effectiveness of the curriculum and the performance of NSCD Staff impact outcome and are therefore important components in developing a “big picture” view.

### EVALUATION PROCESS

The learning group for NSCD is unusual in that they are all volunteers with strong intrinsic motivation. Their participation requires that they give significant time and financial resources to become a qualified volunteer sit ski instructor. In addition, they must accomplish the knowledge and skills objectives that are necessary. An important part of the instructional design objectives is for volunteers to engage quickly and maintain a high attention level to maintain their intrinsic motivation. The learner’s contribution to evaluating all these elements is a critical part of the evaluation process.

In this training model we are asking the learners to demonstrate knowledge and complex skills. Evaluating knowledge has a number of possible mechanisms, all based in recall and recognition, and are easily measured. Evaluation of complex skills is much more subjective and will be completed by the NSCD staff trainers that are providing the instruction. We will be able to provide a job aid in the form of competency checklist and NSCD staff will be trained on how to use it effectively, however there is still a human interpretation which makes for a degree of ambiguity.

Using Kirkpatrick’s model creates an architecture by which to examine how effective the ID model had worked and where opportunities for improvement lie. (<http://www.kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>)

## WHAT WILL BE EVALUATED

- Learner’s knowledge (volunteer ski instructor)
- Learner’s skill (volunteer ski instructor)
- Online curriculum effectiveness
- NSCD Instructional Staff performance
- Learner’s performance in meeting organizational goals and objectives

## NSCD VOLUNTEER SKI INSTRUCTOR TRAINING PROGRAM ADAPTATION TO KIRKPATRICK'S EVALUATION MODEL

### **REACTION** | How did the participants actually respond to the training?

- Weekly debrief of online assignment – to NSCD Staff
- Weekly debrief of on-site training – to NSCD Staff
- End-of-training focus group and questionnaire – affects online materials, training staff, areas for improvement

### **LEARNING** | The degree to which participants actually learned the material presented during training.

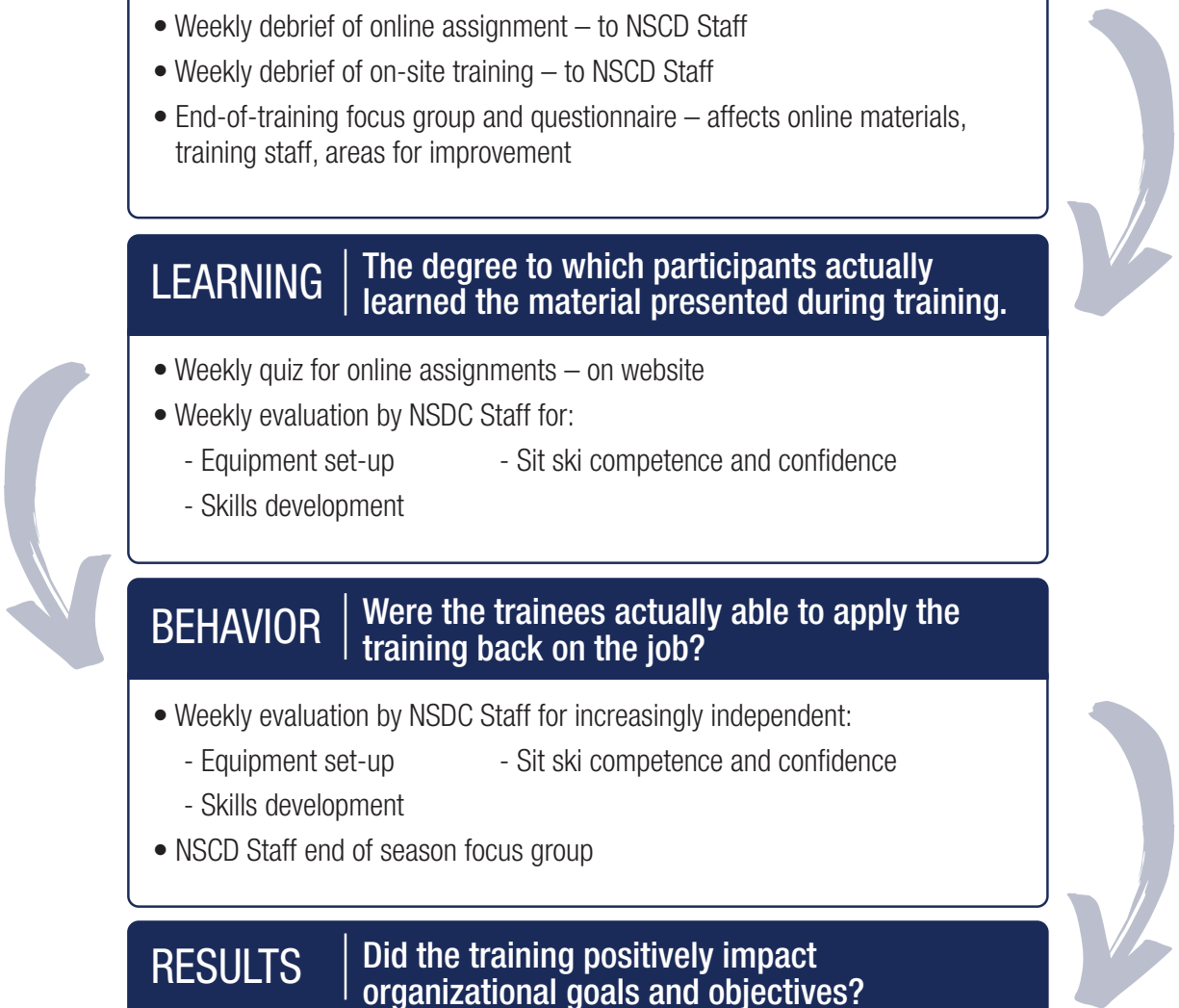
- Weekly quiz for online assignments – on website
- Weekly evaluation by NSDC Staff for:
  - Equipment set-up
  - Sit ski competence and confidence
  - Skills development

### **BEHAVIOR** | Were the trainees actually able to apply the training back on the job?

- Weekly evaluation by NSDC Staff for increasingly independent:
  - Equipment set-up
  - Sit ski competence and confidence
  - Skills development
- NSCD Staff end of season focus group

### **RESULTS** | Did the training positively impact organizational goals and objectives?

- Number of new volunteers able to operate independently
- Number of participants accommodated by new and novice volunteers
- Number of program injuries (volunteer & participant)
- Impact on program participant satisfaction
- Retention of volunteers for next season



## EVALUATION PLAN (continued)

### EVALUATION PLAN FOR VOLUNTEER SKI INSTRUCTORS

Evaluation of volunteer sit ski instructors happens individually as each proceeds through the five modules of training. Evaluation events are part of each learning activity for every module.

LEARNING ACTIVITY	EVALUATION EVENT(S)	DATA COLLECTION
<ul style="list-style-type: none"> <li>• Online Homework</li> <li>- Required reading</li> <li>- Required videos</li> <li>(in each of the 5 modules)</li> </ul>	<ul style="list-style-type: none"> <li>• Quiz to test knowledge</li> <li>• Debrief during on-site training to assess understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Quiz Data from website</li> <li>• Debrief questions or comments on Staff Daily Training Information</li> </ul>
<ul style="list-style-type: none"> <li>• Onsite Hands-on Equipment Set up</li> </ul>	<ul style="list-style-type: none"> <li>• Process and equipment set up proficiency assessment by NSCD Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Recorded by NSCD Staff on Volunteer Training Record Check Sheet for each module</li> </ul>
<ul style="list-style-type: none"> <li>• Participant loading into sit ski</li> <li>• Loading and Unloading sit ski on chairlift</li> </ul>	<ul style="list-style-type: none"> <li>• Process and proficiency assessment by NSCD Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Recorded by NSCD Staff on Volunteer Training Record Check Sheet for each module</li> </ul>
<ul style="list-style-type: none"> <li>• On-mountain techniques and best practices for sit ski use with live individual on-board</li> </ul>	<ul style="list-style-type: none"> <li>• Process and proficiency assessment by NSCD Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Recorded by NSCD Staff on Volunteer Training Record Check Sheet for each module</li> </ul>
<ul style="list-style-type: none"> <li>• On-site Equipment Return and paperwork completion</li> </ul>	<ul style="list-style-type: none"> <li>• Process and equipment set-up proficiency assessment by NSCD Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Recorded by NSCD Staff on Volunteer Training Record Check Sheet for each module</li> </ul>

- Homework and quiz will be evaluated at The Kirkpatrick Model Levels 1 (Reaction) & 2 (Learning) to determine if volunteers may proceed to the on-mountain training portion.
- On-site and on-mountain training will initially be evaluated at The Kirkpatrick Model Levels 1 (Reaction) & 2 (Learning) during each module.
- After completion of the first module, volunteer ski instructors will be additionally be evaluated by NSCD Instructional Staff for Kirkpatrick Level 3 (Behavior) to determine the degree of if instruction is being adapted into use as a skill.

As indicated in the preceding table, in each of the five modules, volunteer ski instructors will be evaluated by NSCD Instructional Staff for on-site or on-mountain skills development. ( Kirkpatrick Level 3 - Behavior) Evaluation of specific skill levels required to meet competency requirements will be accomplished by NSCD Instructional Staff observation of each volunteer.

The on-site and on-mountain skills to be evaluated directly impact attaining overall organizations goals (Kirkpatrick Level 4 – Results) and are as follows:

- |   |   |
|---|---|
| 1. Preparation and set-up of the sit-ski equipment  | 6. Communication with participant while tethering |
| 2. Loading and balancing the participant in sit-ski | 7. Control of speed while tethering               |
| 3. Loading sit-ski onto the chairlift               | 8. Sit-ski turn management while tethering        |
| 4. Use of tethers and hand positioning              | 9. Emergency stopping ability                     |
| 5. Body position while tethering                    | 10. Unloading sit-ski on chairlift                |

(<http://www.kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>)

## EVALUATION PLAN (continued)

### EVALUATION PLAN FOR NSCD STAFF INSTRUCTORS

To increase the effectiveness of NSCD Staff Instructors, at the completion of each on-mountain session, each volunteer will be asked to provide feedback to assess performance. Each volunteer ski instructor will have the opportunity to do an evaluation for his/her NSCD Staff Instructor for each hands-on session.

Using a Staff Instructor evaluation form, a volunteer instructor will rate the NSCD Staff Instructor from 1 to 10 on several specific training and communication topics.

In addition, each NSCD Staff Instructor Evaluation Form asks two long answer questions:

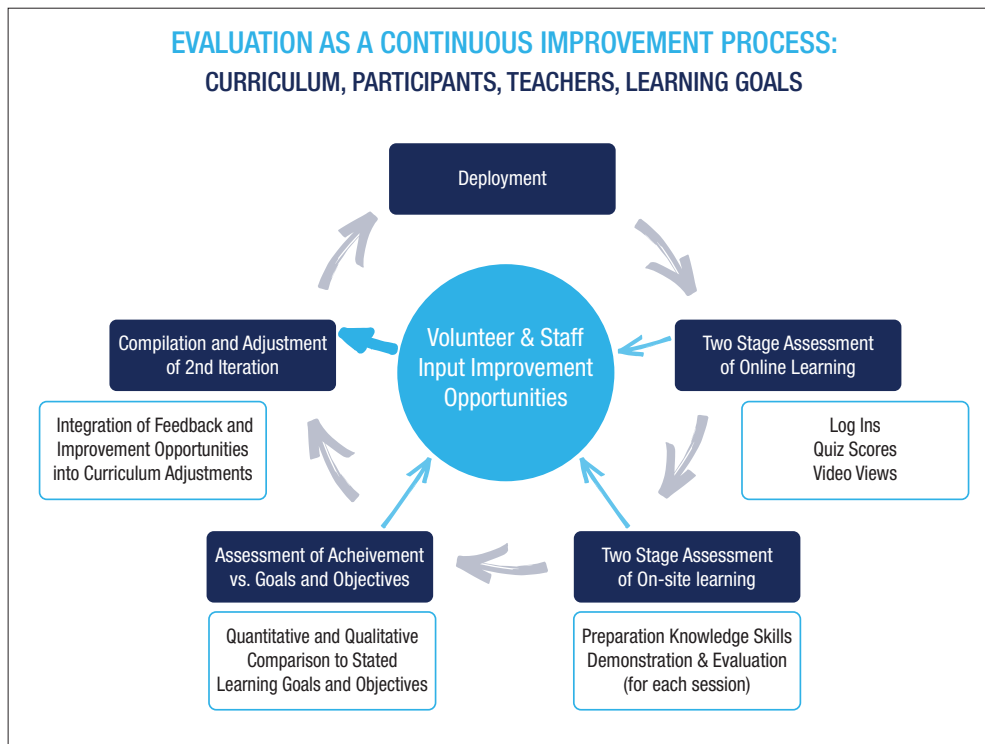
1. What was the most helpful part of today's instruction?
2. What one thing would help make today's instruction more useful?

The NSCD Staff Instructor Evaluation forms are gathered daily over the seven week training period. Compilation of ratings, best practices and suggestions for improvement are done weekly and feedback provided by NSCD Staff Instructors by the NSCD Program Supervisor during the weekly general staff meeting. The feedback and awareness of the learner's in accordance with Kirkpatrick Level 1 (Reaction)

A summary evaluation is compiled by the NSCD Program Supervisor at the end of the seven week training period. This summary report is part of the Continuous Improvement Process used to make necessary adjustments to the overall sit ski program for the following season.

### CONTINUOUS PROCESS IMPROVEMENT CYCLE PLAN

- This new instructional design model will be used for the first time in the 2017-2018 ski season. Continuous monitoring and feedback provides an architecture by which to adjust curriculum and instructional behaviors according to the needs of the target learners. Adjustments can be made along the way and on an ongoing basis and/or compiled to integrate into use for the next season.
- The repetition of the evaluation process for each successive season remains the same and forms the basis of a Continuous Process Improvement Cycle.





## EVALUATION PLAN (continued)

### PLAN FOR COMMUNICATION OF RESULTS

The summary of evaluation results will be presented to all participating stakeholders and NSCD Staff. For all NSCD staff, the summary report and resulting program improvements will be discussed at the first general staff meeting and first staff instructors meeting of the following ski season.

On the NSDC employee and volunteer portals resides the summary report, resulting program improvements. Rationale for the change document will be posted and available the first week of the following volunteer season. Additionally, during new volunteer recruiting and orientation activities, the summary report and resulting program improvements will be discussed to provide an expectation that Continuous Process Improvement is part of the NSCD volunteer experience.

## COMMUNICATION STRATEGY

Weekly emails with progress reports, examples of work progression or completion, and other important information occurs every Friday. Client is notified via email whenever any milestone on the schedule is completed. If issues of any kind including scheduling come up, the client is notified immediately before proceeding with the project. Calls and on-site meetings are scheduled as needed. During the production and editing phases of videos and the instructor guide development, an online tool (TBD) will be used where projects can be uploaded and the team (both instructional design and client) can make comments and edit suggestions in a space where everyone can see and remain updated.

## SUMMARY

This design document provides the framework by which to create a successful training solution for the NSCD volunteer ski instructor program. It includes steps taken in the analysis process, rationale for the ADDIE model to structure the project, proposed learning solutions, instructional objectives, and evaluation methodologies. Assumptions being correct, the project managers/designers and client will continue to communicate regularly and stick to the schedule. New training process, procedures, information and tools will be in place by October 31, 2017 in plenty of time before the 2018 volunteer ski season begins.

Rome wasn't built in a day, and Dirksen (2106) discusses approaching learning design "with the longer view in mind, acknowledging what we can and cannot accomplish, we can create better ways to help people and ensure that there is a long-term plan" (p. 77). NSCD's programming for the disabled spans much further than just skiing. Starting with the ski program, working with NSCD staff and volunteers fully and thoroughly to develop this instructional design model and methodology has the potential to lay ground work for upgrading other training opportunities within the NSCD program. A successful outcome in the raising the performance levels of NSCD volunteer ski instructors could lead to a broader adoption of this model for other NSCD recreational sports programs. This adaptation could reduce time and money spent on future volunteer instructor development, provide a safer more enjoyable experience for the disabled participants served by NSCD, and create longer lasting more satisfying relationships for all those involved.

## REFERENCES


Dirksen, J (2016). *Design for how people learn*. San Francisco, CA: New Riders

The Kirkpatrick Model. (2017, April 13). Retrieved from <http://www.kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>

APPENDIX A


LEARNER PERSONA - PAGE 1

LEARNER PERSONA PROFILE 1



## John

Volunteer Ski Instructor  
Organization: NSCD



**PROFILE SNAPSHOT**

**Age:** 55

**Location:** Denver, CO

**Occupation:**  
Civil Engineer

**Motivators:**

- Enjoys skiing
- Desire to give back to the community
- Personal experience

**Personality**

Introvert

Extrovert

**Ski Ability**

Beginner

Expert

**Experience w/Disabled**

None

High level

**Tech Savvy**

Internet	
Email	
Mobile Apps	
Social Networking	

**DISCOVERY**

John is successful and advanced in his career as a Civil Engineer. He is not ready to retire yet, but after many years of focusing on his career he has some flexibility in his schedule. John's children are grown and his wife is happy in her own career. He has a strong desire make a contribution to the community and give back in a tangible way. John has skied for many years, loves to do it and is very good at it. Skiing was a family activity while his children were growing up and he always enjoyed the time they spent together skiing. He begins to think about ways that he might be able to apply his abilities and skills as a skier to help others.

John's 28 year old niece, Joni, was born with spina bifida. This has caused paralysis of her lower limbs and developmental delays in cognition. John knows that Joni participates in and enjoys a skiing program for the disabled with the National Sports Center for the Disabled (NSCD) He know that she looks forward to it every year and that is makes a positive difference in her life. John has been curious about the NSCD program for a while and wondered if there may be a place for him help others enjoy the experience as much as he does. The new flexibility in his schedule lead him investigate the NSCD volunteer program and learned that there is an opportunity for him to volunteer as a ski instructor for the disabled.

**IMMERSION**

John's duties as a senior Civil Engineer at his firm are mostly as a project manager, team leader, coach and subject matter expert. He enjoys the mentoring of younger people on his teams and sees himself as a "coach" who brings people together and helps everyone stay on track. The expertise he provides and the manner in which he provides it is usually very well received and he enjoys the respect of subordinates and superiors alike.

The departure of his children for higher education and their own careers left John feeling proud but strangely unsatisfied. He's had a very good life with

his wife, Prudence, but still feels that there is something more he can do. He believed, and taught his children, that each person should make a contribution that makes the world a little bit better.

Prudence is understanding and supportive of John's desire to get involved and make some sort of contribution. She and John have had a nice life for 30 years, and she encourages him to find something in which he would like to participate and be fulfilled.

**CONNECTION**

Knowledge and skills are both learning gaps for John. He is excited about the opportunity to volunteer as a ski instructor for the disabled with NSCD. Over the years he has seen some of the specially adapted equipment used by disabled skiers at a number of ski resorts. He understands there will be a learning curve in developing the skills necessary to learn to use new equipment. John has little experience dealing with people who are profoundly disabled. He wonders if this might be more challenging than the actual skiing part of the program.


He is unsure what is required and has many questions about commitment, operations, necessary skills and training. He is internet-savvy so he starts by searching through the NSCD web site. He finds at least basic answers to many questions. What kind and how much training is required of him, what equipment he is expected to provide, if he is required to pay any fees, how often he is expected to volunteer, and if he should have prior experience in working with the disabled. John is a great skier however he is still concerned about the skill gaps he will need to fill regarding levels of disability, dealing with people who are cognitively disabled, as well as the various kinds of equipment used and how you teach.


John is sufficiently motivated and interested by what he has discovered and by the experience of his niece that he attends a perspective volunteer meeting on a Saturday morning in mid October. The program director speaks about the history of the program, the levels of contribution, some of the challenges and the

APPENDIX A

LEARNER PERSONA - PAGE 2

LEARNER PERSONA PROFILE 1





## John

Volunteer Ski Instructor  
Organization: NSCD

**PROFILE SNAPSHOT**

**Age:** 55


**Location:** Denver, CO

**Occupation:**  
Civil Engineer


**Motivators:**

- Enjoys skiing
- Desire to give back to the community
- Personal experience


**Personality**







**Ski Ability**



**Experience w/Disabled**



**Tech Savvy**

Internet	
Email	
Mobile Apps	
Social Networking	

opportunity. He also meets and speaks with new and long time NSCD volunteers, NSCD program participants, and gets to see some of the devices used by disabled skiers. He likes the program and thinks the skills necessary are things he can learn.

**DETACHMENT**

The NSCD web site has good information. The “Volunteer” tab however covers information about many different ways to volunteer, not only skiing, and the information pertaining specifically to becoming a volunteer ski instructor is not identified quickly nor easily. The New Volunteer meeting fills many of this gaps.

Once John decides to volunteer, the ski volunteer trainers must begin an electronic on-boarding process. This should not present a challenge to John, his background and business skills are more than sufficient. Next is the education process, which begins after receiving a user name and log-in to the NSCD Volunteer web site. On the site is scheduling information and dates regarding the four training classes he must complete at the NSCD Winter Park, Colorado facility prior to the first week in January. There is also information about parking, where the classes will be held, what equipment to bring, what to wear, contact information, and what they need to complete before arriving at training. An email will provide necessary links to other information that may be needed prior to training.

To provide clarity, new volunteer ski instructor should have a “first day” checklist to help guide the first day of training. As homework prior to attending each lesson NSCD should a clear set of expectations, learning objectives and what kind of information will be covered. Each lesson should be supported by a brief video clip to model and provide visual cues for the skills and techniques to be learned.

Since most training occurs on the mountain, prior to getting on skis volunteers should review, discuss, ask questions and be quizzed on the homework information and previous weeks learning. Homework offers

a good preview to what’s to come, set expectations and prepares volunteers for their training sessions. Preparation, defined objectives and visual cues will make volunteers feel more confident with regard to expectations and progress. The videos can also serve as tool for any volunteers who may be having a difficulty or would like a visual review of what they do accomplish.

## APPENDIX B

### LEARNING ROADMAP

# LEARNING ROADMAP

## Volunteer Ski Instructors

Organization: NSCD

#### THE LEARNERS

**Volunteer Ski Instructors**

**Ages:** 18-75

**Gender:** 73% Male, 25% Female, 2% Undecided

**Years Experience at NSCD:** 0-25

**Motivators:**

- Enjoys skiing
- Desire to give back to the community

**Personality**

Introvert Extrovert

**Ski Ability**

Beginner Expert

**Experience w/Disabled**

None High level

**Tech Savvy**

Internet	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #ccc, #007bff);"></div>
Email	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #ccc, #007bff);"></div>
Mobile Apps	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #ccc, #007bff);"></div>
Social Networking	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #ccc, #007bff);"></div>

#### THE PROBLEM

New volunteer ski instructors for disabled skiers at the National Sports Center for the Disabled have inconsistent degrees of performance in areas of on-mountain skills, safety, adaptive equipment preparation and process management.

#### POSSIBLE SOLUTIONS

- Preparatory homework online prior to each of the five on-site “hands on” training sessions
- Brief, online instructional videos for use pre and post training sessions to develop visual familiarity, cues and awareness
- Formalized, standardized and updated teaching curriculum with specific learning objectives for use by all NSCD staff who train volunteer ski instructors in order to develop consistent high levels of performance in critical skills
- Online knowledge assessments for NSDC process, safety and equipment set up
- Documented on-mountain performance and safety skills evaluation performed by NSCD teaching staff

#### LEARNING GOAL

NSCD Volunteer Ski Instructors will be able to more safely, competently and confidently use adaptive ski equipment providing a safer, more enjoyable experience for NSCD disabled skier program participants.

#### LEARNING OBJECTIVES

- Complete online safety assessment with a passing evaluation (determined by the instructor).
- Complete online process assessment passing evaluation (determined by the instructor).
- Demonstrate ability to set-up and prepare specific adaptive ski equipment.
- Demonstrate ability and competency to load and unload adaptive ski equipment from ski lifts with a live participant substitute.
- Demonstrate ability and competency using adaptive ski equipment on the mountain with live participant substitute.

## APPENDIX C - STORYBOARD OVERVIEW

### PURPOSE

The National Sports Center for the Disabled (NSCD) in Winter Park, Colorado seeks to provide a safer and more enjoyable skiing experience for their disabled skiers. NSCD seeks to accomplish this by improving the effectiveness of their training for their 234 NSCD volunteer ski instructors. The use of specialized equipment and/or instruction to enable individuals with disabilities to ski is referred to as “adaptive skiing.”

This storyboard document describes the shot list and sequence for module 3 videos. It will be used for client approval before shooting of the videos begin and will serve as a guide to the videographer and video editor. In addition, this document provides information for programming the online quiz.

### TITLE OF LEARNING SOLUTION

NSCD Volunteer Adaptive Ski Instructor Training and Education Project - Phase 1, Sit Ski

### TARGET AUDIENCE

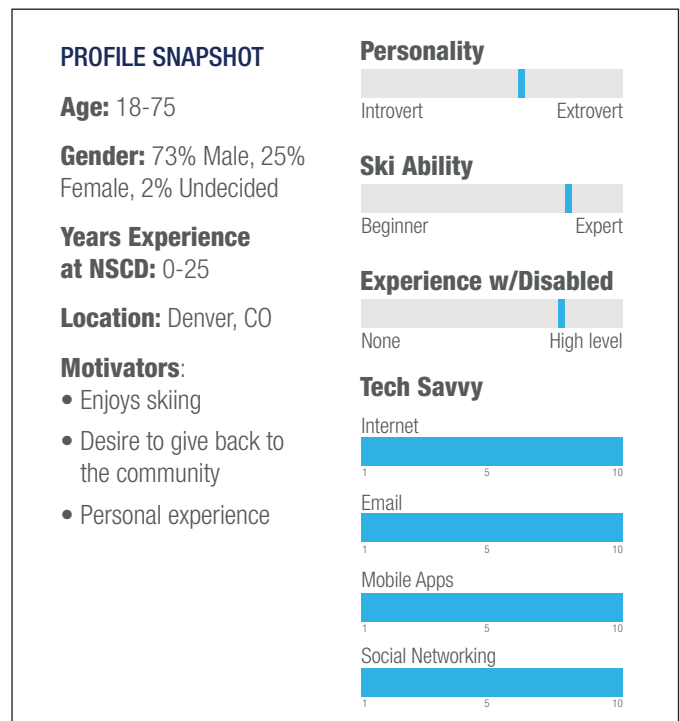
There are several categories of NSCD volunteer adaptive ski instructors determined by the adaptive ski equipment being used. The basic group divisions are “sit” ski instructor, “stand” ski instructor and “blind” ski instructor. Although there are great similarities amongst the skills necessary for NSCD volunteer adaptive ski instructors, this learning model will focus on only the first group, “sit” ski instructor. If successful, this model will serve as a template for improving effectiveness for the other two groups.

The target audience is made up of new and novice NSCD Volunteer “Sit” Ski Instructors. These are NSCD volunteer ski instructors who work with disabled skiers that are not ambulatory. They are a demographically diverse target audience:

- Ages range from 18-75 years old
- 75% male, 23% female and 2% undecided
- 0-25 years experience with NSCD
- Almost all having had some personal interaction with an NSCD disabled program participant (immediate or extended family, or friends)
- Almost all are experienced, skilled skiers
- Generally speaking, differences in use and adaptation of technology is inversely proportional to the age of the volunteer
- Almost all are intrinsically motivated

In considering learning solutions it is worthy to note that a disproportionately large percentage of the volunteers, 67% of the women and 73% of the men, are over the age of 50.

*To the right is a profile snapshot of a typical NSCD volunteer ski instructor. A full Learner Persona about John is shown in the Design Document*



## APPENDIX C - STORYBOARD OVERVIEW (continued)

### DESCRIPTION OF LEARNING SOLUTION

This will be a hybrid learning solution using different channels to teach information, processes and complex skills. On-line, sequential small group classes, and live on-mountain skills training will all be utilized to provide a comprehensive learning solution. The on-line portion of the curriculum is entirely self-paced with a timeline of objectives which must be met in order to attend the related small group class lessons and on-mountain skills training.

### MATERIALS REQUIRED

- Computer with internet
- Ski equipment
- NSCD Volunteer Website for informational text, videos and knowledge assessments
- NSCD Staff train-the-volunteer instruction guide
- NSCD Staff train-the-trainer meeting leader's guide
- NSCD Staff evaluation documents and file for each new and novice volunteer sit ski instructor

### DURATION OF ENTIRE LEARNING SOLUTION

The entire learning solution may take up to seven weeks. NSCD volunteer sit ski instructors will be able to access on-line materials beginning on the Friday after Thanksgiving. There are five sequential small group classes and five on-mountain skills training session that will be offered on multiple days throughout late November, December and early January. A minimum of the first 4 classes and first 4 on-mountain training sessions must be completed by the start of the third full week of January. The fifth class and training session may be completed in the following ski season prior to the third full week of January.

## APPENDIX C

### STORYBOARD ALIGNMENT TABLE

LEARNING OBJECTIVES	INSTRUCTIONAL APPROACH	PRACTICE OPPORTUNITY	ASSESSMENT
Measurably increase knowledge of safety, processes and procedures	<ul style="list-style-type: none"> <li>• Online homework to be completed prior to each on-site training session.                             <ul style="list-style-type: none"> <li>- Reading from Volunteer ski instructor guide related to safety</li> <li>- Review of case study related to safety</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review of videos (mobile-friendly) accessible 24/7 through NSCD volunteer portal on NSCD web site</li> <li>• Review of Volunteer Ski Instructor Guide accessible 24/7 to volunteers on NSCD web site</li> </ul>	<ul style="list-style-type: none"> <li>• Pass online quiz based on safety assignment materials at predetermined passing levels</li> </ul>
Measurably increase knowledge of NSCD processes and procedures used with sit ski participants	<ul style="list-style-type: none"> <li>• Online homework to be completed prior to each on-site training session                             <ul style="list-style-type: none"> <li>- Reading from Volunteer ski instructor guide related to process and paperwork</li> <li>- Review of case study related to process and paperwork</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review of videos (mobile-friendly) accessible 24/7 through NSCD volunteer portal on NSCD web site</li> <li>• Review of Volunteer Ski Instructor Guide accessible 24/7 to volunteers on NSCD web site</li> <li>• Homework case study assigned for use in filling out all forms and reports</li> <li>• On-site practice with NSCD staff</li> </ul>	<ul style="list-style-type: none"> <li>• Pass online quiz related to NSCD process and procedures based on assignment materials at predetermined passing levels</li> <li>• NSCD Staff evaluation/ feedback of knowledge during each on-site training session</li> </ul>
Demonstrate ability to set-up and prepare each of the three types of adaptive sit skis	<p><i>Online and onsite hybrid ID approach</i></p> <ul style="list-style-type: none"> <li>• Prior to on-site session, watch four minute video online showing the set up of the assigned type of sit ski devices</li> <li>• On-site NSCD Staff instruction, demonstration and training on set-up/ preparation of the assigned sit ski</li> <li>• Volunteer practice of set-up with coaching and feedback, repeating areas of needed improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Review video of sit ski set-up accessible 24/7 through NSCD volunteer portal on NSCD web site</li> <li>• Real time on-site individual volunteer practice and demonstration of skills during each training module</li> <li>• Additional hands-on practice time may be arranged by volunteer sit ski instructors 7 days a week upon request to NSCD program coordinator</li> </ul>	<ul style="list-style-type: none"> <li>• NSCD Staff evaluation and immediate feedback</li> </ul>



**APPENDIX C - STORYBOARD ALIGNMENT TABLE (continued)**

LEARNING OBJECTIVES	INSTRUCTIONAL APPROACH	PRACTICE OPPORTUNITY	ASSESSMENT
<p>Demonstrate ability and competence to load and unload each of the three types of adaptive sit skis from ski lifts with live individual on-board</p>	<p><i>Online and on-mountain hybrid ID approach</i></p> <ul style="list-style-type: none"> <li>• Online prior to on-site session, watch four minute NSCD video showing how to load and unload the assigned sit ski device to provide visualization and modeling</li> <li>• On-mountain                             <ul style="list-style-type: none"> <li>- Review of expectations and goals for skills by NSCD Staff</li> <li>- NSCD Staff instruction of best practices as transition at the end of each “Equipment Set-up and Preparation” session</li> <li>- Real time hands-on static practice instruction with live individual during on-mountain session</li> <li>- Real time participation with NSCD Staff on-mountain loading and unloading sit ski with live individual on-board. Immediate coaching and feedback</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review video of assigned sit ski loading and unloading of accessible 24/7 through NSCD volunteer portal on NSCD web site</li> <li>• Real time on-site individual volunteer practice loading and unloading assigned sit ski during each training module</li> <li>• Additional hands-on practice time may be arranged by volunteer sit ski instructors 7 days a week upon request to NSCD program coordinator</li> </ul>	<ul style="list-style-type: none"> <li>• NSCD Staff evaluation and immediate feedback</li> <li>• Successful loading and unloading of assigned sit ski from chairlift</li> </ul>
<p>Demonstrate ability and competence in using each of the three adaptive sit skis on the mountain with a live individual on-board</p>	<p><i>Online and on-mountain hybrid ID</i></p> <ul style="list-style-type: none"> <li>• Online prior to on-site session, watch four minute NSCD video showing the proper techniques and best practices for using the assigned sit ski device to provide visualization and modeling</li> <li>• On-site                             <ul style="list-style-type: none"> <li>- Review of expectations and goals for skills by NSCD Staff prior to going on-mountain</li> <li>- NSCD Staff on-mountain instruction and demonstration of best techniques and best practices</li> <li>- Real time hands-on practice with live individual on-board and NSCD Staff during on-mountain session. Immediate coaching and feedback</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review video of assigned sit ski showing the proper use techniques and best practices accessible 24/7 through NSCD volunteer portal on NSCD web site</li> <li>• Real time on-mountain individual volunteer practice using assigned sit ski with live individual on-board and NSCD Staff during each training module</li> <li>• Additional hands-on practice time may be arranged by volunteer sit ski instructors 7 days a week upon request to NSCD program coordinator</li> </ul>	<ul style="list-style-type: none"> <li>• NSCD Staff observation and evaluation of each volunteer to determine readiness to proceed to the next module or into volunteer service</li> <li>• Successful on-mountain use of assigned sit ski</li> </ul>

## APPENDIX C

### NSCD VOLUNTEER SIT SKI INSTRUCTOR ON-SITE TRAINING MODULES 1-5 DAILY TRAINING EVENT TIMETABLE

MODULE	TIME	WHO TEACHES	LEARNING ACTIVITY	PURPOSE	LOCATION
1,2, 3, 4, 5	8:30 - 10:00 AM	<ul style="list-style-type: none"> <li>• NSCD Staff</li> <li>• NSCD Equipment Staff</li> <li>• NSCD Staff</li> </ul>	<p><i>(small group &amp; paired discussion)</i></p> <ul style="list-style-type: none"> <li>• Review participant file</li> </ul> <p><i>(small group)</i></p> <ul style="list-style-type: none"> <li>• Sit ski setup and training</li> </ul> <p><i>(small group)</i></p> <ul style="list-style-type: none"> <li>• Review and practice paperwork</li> </ul>	<ul style="list-style-type: none"> <li>• Understand participant history and disability</li> <li>• Learn how to properly set-up and prepare sit ski for use with participant</li> <li>• Understand paperwork process and essential legal forms</li> </ul>	<ul style="list-style-type: none"> <li>• NSCD Meeting Tables at Winter Park</li> <li>• NSCD Equipment room</li> <li>• NSCD Equipment room</li> </ul>
1,2, 3, 4, 5	10:00 AM - Noon	<ul style="list-style-type: none"> <li>• NSCD Staff Ski Instructor</li> </ul>	<p><i>(small group)</i></p> <ul style="list-style-type: none"> <li>• On-mountain Staff demonstration and coaching of how to:                             <ul style="list-style-type: none"> <li>- Load Participant into sit ski</li> <li>- Load/Unload chairlift</li> <li>- Best practices for using sit ski</li> </ul> </li> <li>• On- mountain practice for each individual volunteer:                             <ul style="list-style-type: none"> <li>- Load Participant into sit ski</li> <li>- Load/Unload chairlift</li> <li>- Practices for using sit ski</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate and model sit ski skills needed to work with participants</li> <li>• Provide new volunteer sit ski instructors hands-on real time practice opportunities and feedback in order to develop and demonstrate necessary skills for using a sit ski</li> </ul>	On Winter Park mountain
1,2, 3, 4, 5	Noon - 1:00 PM		Lunch		

APPENDIX C

NSCD VOLUNTEER SIT SKI INSTRUCTOR ON-SITE TRAINING MODULES 1-5 DAILY TRAINING EVENT TIMETABLE (continued)

MODULE	TIME	WHO TEACHES	LEARNING ACTIVITY	PURPOSE	LOCATION
1,2, 3, 4, 5	1:00 - 3:30 PM	<ul style="list-style-type: none"> <li>• NSCD Staff Ski Instructor</li> </ul>	<p><i>(small group)</i></p> <ul style="list-style-type: none"> <li>• On-mountain Staff coaching of how to and morning activity review of:                             <ul style="list-style-type: none"> <li>- Load Participant into sit ski</li> <li>- Load/Unload chairlift</li> <li>- Best practices for using sit ski</li> </ul> </li> <li>• On- mountain practice for each individual volunteer:                             <ul style="list-style-type: none"> <li>- Load Participant into sit ski</li> <li>- Load/Unload Chairlift</li> <li>- Practices for using sit ski</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review morning activities and progress of volunteer sit ski instructors</li> <li>• Provide volunteer sit ski instructors more hands-on real time practice opportunities and feedback in order to develop and demonstrate necessary skills for using a sit ski</li> </ul>	On Winter Park mountain
1,2, 3, 4, 5	3:30 - 4:15 PM	<ul style="list-style-type: none"> <li>• NSCD Staff Ski Instructor</li> </ul>	<p><i>(small group)</i></p> <ul style="list-style-type: none"> <li>• Sit ski preparation for return and storage process</li> <li>• Completion and filing of NSCD forms</li> <li>• Debrief of day's activities, individual progress and opportunities for improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Learn how to properly prepare sit ski for return and storage</li> <li>• Understand paperwork process and essential legal forms</li> <li>• Review progress, identify opportunities for improvement, and provide closure</li> </ul>	<ul style="list-style-type: none"> <li>• NSCD Meeting Tables at Winter Park</li> <li>• NSCD Equipment room</li> </ul>

## APPENDIX C - STORYBOARD 01 - SIT SKI SETUP VIDEO

### PURPOSE

This storyboard describes what will happen in the setup video for module 3. The video takes place in the NSCD Equipment room. There is an enormous amount of information to convey in a very short amount of time as it is not a comprehensive process. The highlights in this video are for the purpose of familiarization and exposure. The real process is at best, 20–25 minutes. Time does not allow more than the subject matter expert to do the set-up for our training purposes. This storyboard will be used for client approval before shooting the video. It will also be used as a guide for the videographer and video editor.

### NOTES

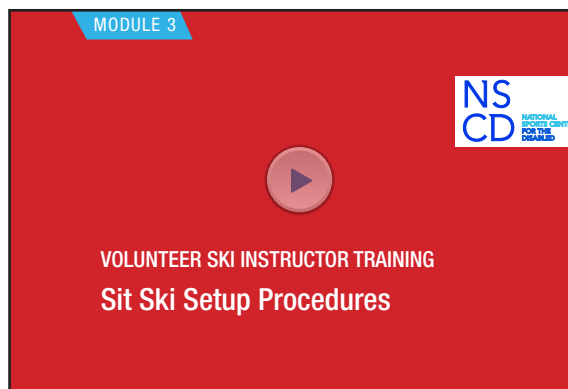
#### 01 - Opening title screen

Animation details:

- Title fades in “Sit Ski Setup Procedures”
- Screen stays up for 5 seconds

Design details:

- Background matches Module 3 NSCD Volunteer Ski Instructor Guide
- Use corporate branded font and colors (throughout the module)
- See brand standards document for logo usage rules (throughout the module)
- Add “play” button



### NOTES

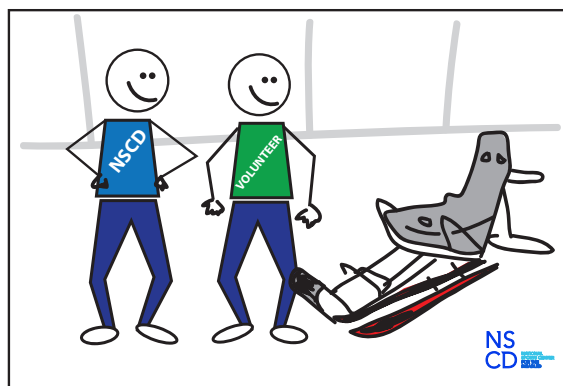
#### 02 - Introduction

Shot details:

- Instructor introduces specific adaptive sit ski device and reviews what type of individuals and which disabilities would be most likely to use this type of sit ski
- (30 seconds)

Design details:

- NSCD logo stays in lower right corner throughout video
- See brand standards document for logo usage rules (throughout the module)



**APPENDIX C - STORYBOARD 01 - SIT SKI SETUP VIDEO (continued)**

NOTES

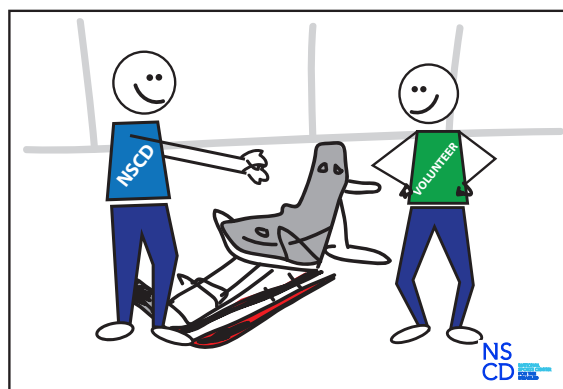
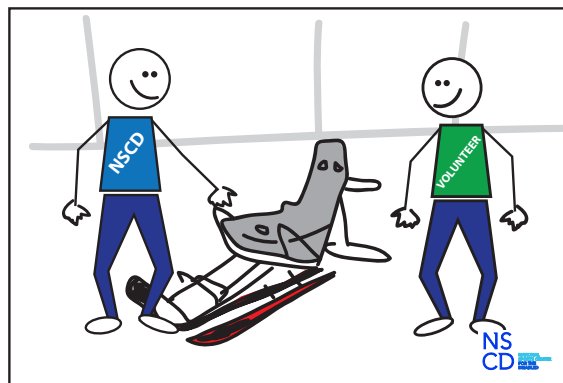
**03 - Instructor explains sit ski setup sequence**

Shot details:

- Instructor briefly explains proper set-up sequence
- (30 seconds)

Design details:

- NSCD logo stays in lower right corner throughout video



NOTES

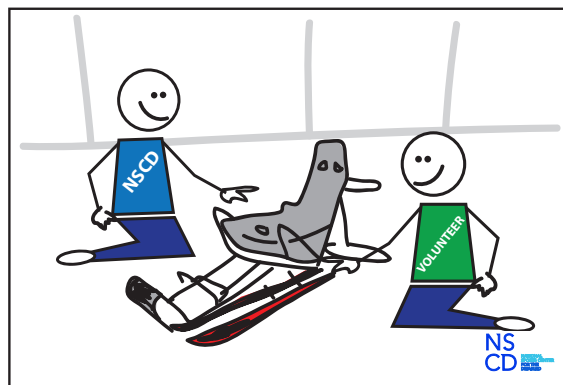
**04 - Instructor explains sit ski components**

Shot details:

- Instructor demonstrates proper set-up and preparation critical components
- (3:30)

Design details:

- NSCD logo stays in lower right corner throughout video



## APPENDIX C - STORYBOARD 01 - SIT SKI SETUP VIDEO (continued)

### NOTES

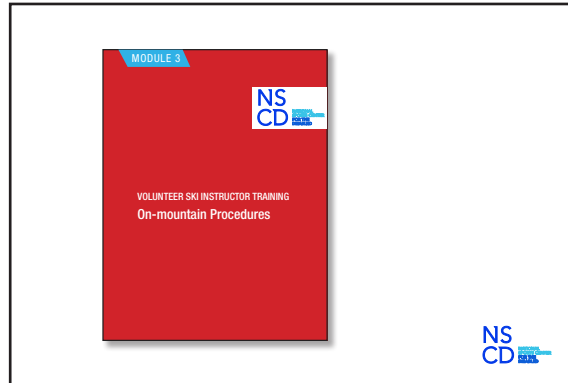
#### 06 - Volunteer Ski Instructors Guide

##### Shot details:

- Fade to screen with a reference to pages in NSCD Volunteer Instructors Guide

##### Design details:

- NSCD logo stays in lower right corner throughout video



## APPENDIX C - STORYBOARD 02 - SIT SKI TECHNIQUE VIDEO

### PURPOSE

This storyboard describes what will happen in the technique video for module 3. The video will take place in two locations. Location 1 is at the base of Winter Park ski resort. Location 2 will take place at the GEMINI chairlift at the base of Winter Park ski resort. This storyboard will be used for client approval before shooting the video. It will also be used as a guide for the videographer and video editor.

### NOTES

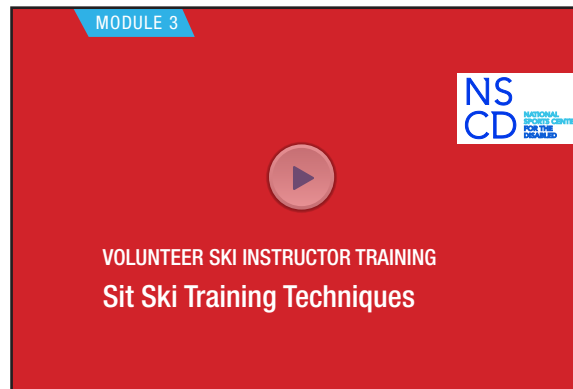
#### 01 - Opening title screen

Animation details:

- Title fades in “Sit Ski Training Techniques”
- Screen stays up for 5 seconds

Design details:

- Background matches Module 3 NSCD Volunteer Ski Instructor Guide
- Use corporate branded font and colors (throughout the module)
- See brand standards document for logo usage rules (throughout the module)
- Add “play” button



### NOTES

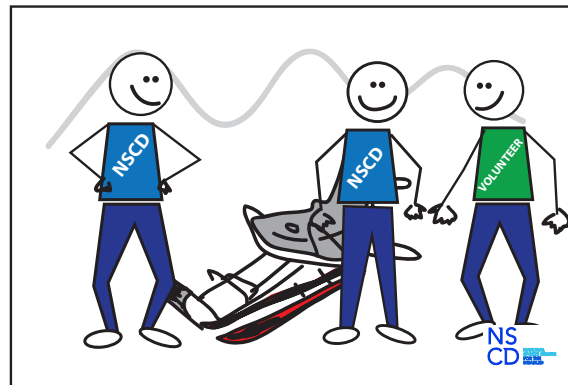
#### 02 - Shot opens to instructor, volunteer, live participant volunteer and sit ski

Shot details:

- Location 1, Winter Park base
- Instructor introduces volunteer and explains that the video will be about how to load a specific sit ski onto a chair lift
- (15 seconds)

Design details:

- NSCD logo stays in lower right corner throughout video



**APPENDIX C - STORYBOARD 02 - SIT SKI TECHNIQUE VIDEO (continued)**

NOTES

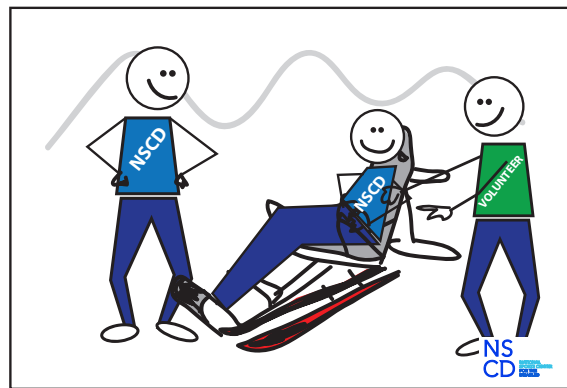
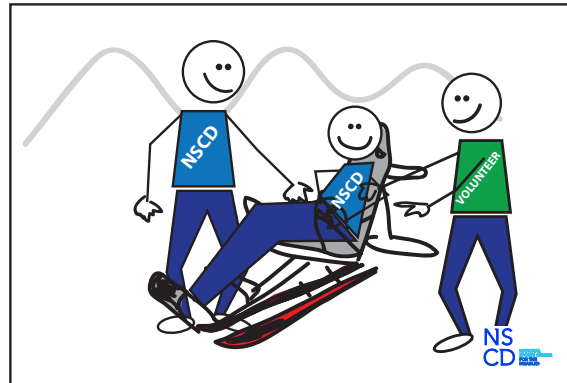
**03 - Instructor explains how to load sit ski onto chairlift**

Shot details:

- Location 1, Winter Park base
- Instructor introduces the loading steps, S.T.O.P. acronym, proper lift points, why you need a counter and a count, how to lift properly and using the safety leash
- (1:45)

Design details:

- NSCD logo stays in lower right corner throughout video



NOTES

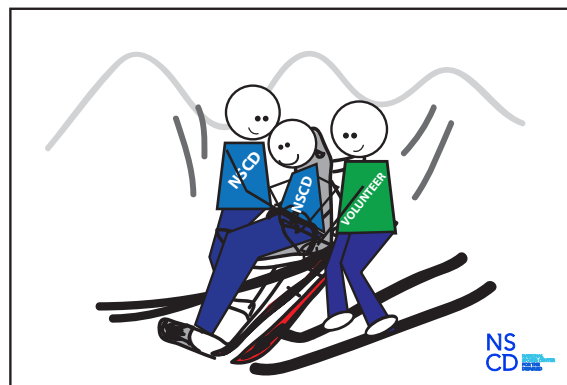
**04 -Instructor and volunteer do practice lift**

Shot details:

- Location 1, Winter Park base
- Instructor and volunteer do a still static lift with a live individual in the sit ski to model the proper way to load the sit ski onto a chair lift (see script)
- (30 seconds)

Design details:

- NSCD logo stays in lower right corner throughout video





**APPENDIX C - STORYBOARD 02 - SIT SKI TECHNIQUE VIDEO (continued)**

NOTES

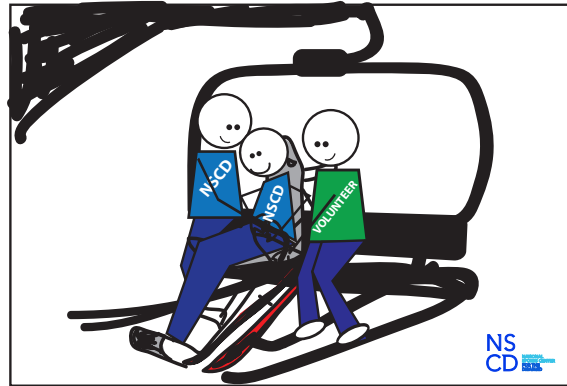
**05 - Live action slow motion loading sit ski on chair lift**

Shot details:

- Location 2, GEMINI lift
- Live action slow motion shot of sit ski approaching and being loaded onto a chair lift
- (1:05 seconds)

Design details:

- NSCD logo stays in lower right corner throughout video
- See brand standards document for logo usage rules (throughout the module)



NOTES

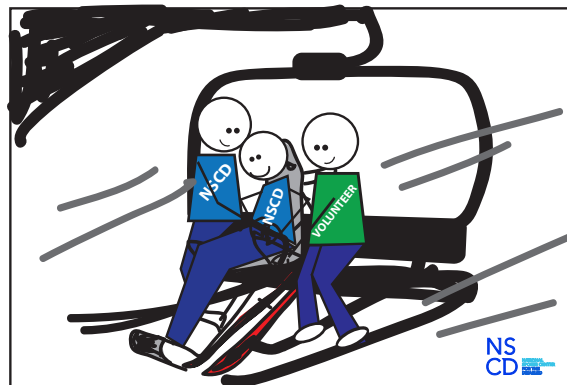
**06 - Live action real time loading sit ski on chair lift**

Shot details:

- Location 2, GEMINI lift
- Live action real time shot of sit ski approaching and being loaded onto a chair lift
- (20 seconds)

Design details:

- NSCD logo stays in lower right corner throughout video



## APPENDIX C - STORYBOARD 02 - SIT SKI TECHNIQUE VIDEO (continued)

### NOTES

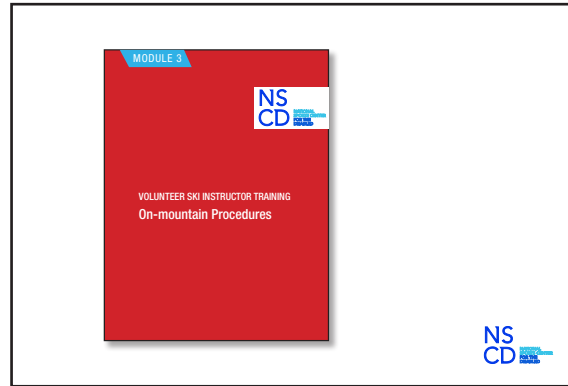
#### 07 - Volunteer Ski Instructors Guide

##### Shot details:

- Fade to screen with a reference to pages in NSCD Volunteer Instructors Guide

##### Design details:

- NSCD logo stays in lower right corner throughout video



## APPENDIX C - STORYBOARD 03 - ONLINE QUIZ

### PURPOSE

This storyboard shows a scenario of a volunteer taking an online quiz before attending on-site training. The quiz will be an assessment tool that will aid in identifying if volunteers going through training are ready to progress to the next module. A quiz will be taken in each of the 5 modules. Volunteers must have a passing score to proceed to on-site training. The quiz may be taken as many times as necessary.

### NOTES

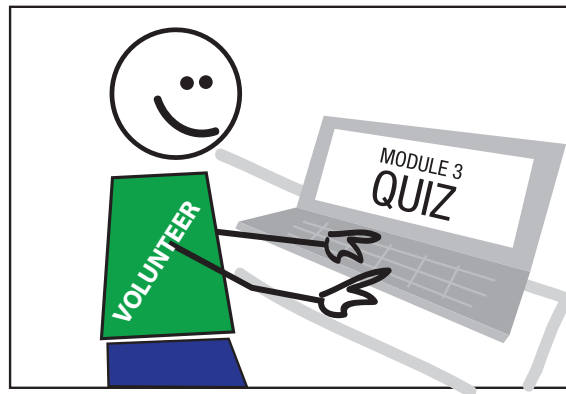
#### 01 - Online quiz

##### Explanation:

- Volunteer takes online quiz after completing required homework readings and videos
- Volunteer must pass the quiz before proceeding to on-site training
- Volunteer may take the quiz as many times as needed to get a passing score

##### Programmer details:

- This will be housed in module 3 on the volunteer portal for volunteer ski instructors
- Questions will be supplied
- Randomize the order of questions
- After question 1, add “next” button
- Questions 2 through the end should have “next” and “previous” buttons
- Quiz score is shown after the last question is answered
- Add “submit the quiz” button at the end
- Add “retake the quiz” button at the end



## APPENDIX C - STORYBOARD 04 - ON-MOUNTAIN ASSESSMENT

### PURPOSE

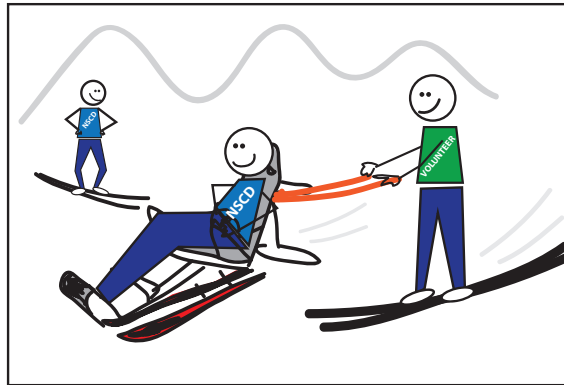
This storyboard shows how the on-mountain assessment will take place in each module. NSCD training staff will conduct live assessments that will aid in identifying if volunteers going through training are ready to progress to the next module. This storyboard will aid in client approval of on-mountain training.

### NOTES

#### 01 - On-mountain assessment (live)

Explanation:

- Volunteer will demonstrate skills and procedures with a live participant
- NSCD training staff observes

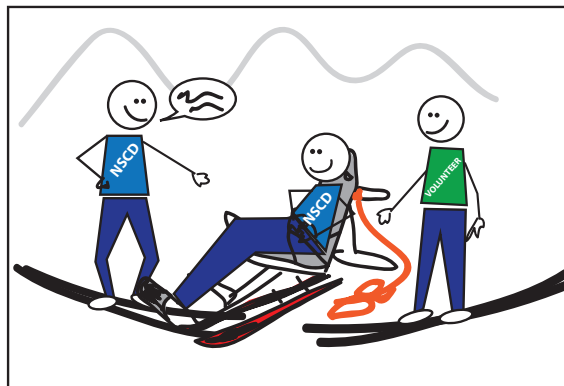


### NOTES

#### 02 - On-mountain assessment (live)

Explanation:

- NSCD training staff provides feedback and coaching to volunteer
- NSCD training staff determines if volunteer is ready to proceed to the next module



NSCD's programming for the disabled spans much further than just skiing. Starting with the ski program, working with NSCD staff and volunteers fully and thoroughly to develop this instructional design model and methodology has the potential to lay ground work for upgrading other training opportunities within the NSCD program.

**THANK YOU.**